Installation Instructions For Derwankel RX-8 Puddle Lamps

Installation of the puddle lamps should take approximately 45-60 minutes per side to complete following these simple instructions. Allow yourself plenty of time. There is no need to rush and potentially make mistakes that could lead to additional work or worse, damage to your new puddle lamps. Please read through these instructions entirely before beginning the installation so you are familiar with the installation steps.

We strongly recommend you place a towel on the floor immediately under your car’s mirror while installing these lamps. If you accidentally drop an item, it is less likely to be damaged if it falls on the towel.

List of packing materials that shipped with your puddle lamp order. If any item is missing, please contact us immediately for replacement.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Right Side Puddle lamp housing and lens</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Left Side Puddle lamp housing and lens</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Attachment Screws</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>Wiring assembly including lamp socket and lamp</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>Wire ties</td>
<td>12</td>
</tr>
<tr>
<td>6</td>
<td>Wire taps</td>
<td>4</td>
</tr>
</tbody>
</table>

Tools you will need to complete the installation:

1. Small phillips head screwdriver
2. Medium phillips head screwdriver
3. Medium slotted screwdriver
4. 8mm Nut driver
5. A large clean towel
6. A small clean shop rag

NOTE: Prepare an area where you can place various panels and parts to be removed from the doors. This makes it easier to keep track of the parts and the whole process goes much easier.

These instructions detail installation of a puddle lamp assembly in the U.S. passenger side mirror. The same instructions can be used to install the puddle lamp assembly in the U.S. driver side door as well.
1. Here is a shot of the bottom of the U.S. passenger side mirror. The small quarter-circle panel is where you will be installing the puddle lamp.

2. Start by pushing/rotating the mirror assembly back towards the front of the car to make it easier to get at the inside.
3. Push the outer edge of the mirror (the glass area) all the way in on the outside so you can get your fingers behind the mirror as shown. Pull on the mirror with steady pressure until it pops loose. You must be brave and don’t be concerned about breaking it … this is the way it is done.

4. Three ball/socket connectors packed in grease hold on the mirror. You must continue pulling on the mirror to extract it from all three sockets. If you have heated mirrors you will need to disconnect the two leads (not shown).
5. Once the mirror is removed from the sockets (easily seen here), the clips retaining the painted cover need to be released with a medium screwdriver to allow the cover to come off.

6. Once the clips are released the cover pops off easily. CAUTION: The cover pops off rather easily if all the clips are released … if it is not popping off easily, double check that you have released all the clips
7. Next move to inside the door and using your fingers behind the small speaker panel, pop this cover off. To get access to the screws which hold on the mirror assembly.

8. There is a wire and connector (see arrow) running to the speaker. You’ll need to disconnect the connector to release the speaker housing and assembly.
9. Next you’ll want to remove the inner door panel, which is held on by 3 screws and several clips. In the door handle is a small round cover where the first screw can be found. Use a small screwdriver to pry the little round cover off.

10. Then use a medium phillips screwdriver to remove the screw
11. You can then remove the cover. You may need/want to pull on the handle just a bit to aid in removing this small cover. Note there are small plastic tabs used to hold the cover in place from behind, be gentle when removing the cover.

12. Next, you need to pry out the bottom of the window switch/door lock panel. Use a screwdriver covered with a small amount of masking tape to avoid scratching the piano black finish. Carefully pry the base away from the arm rest/handle panel.
13. Once the panel is free at the bottom, carefully pull it out. NOTE: There is a small plastic clip at the top of this panel. Be sure to carefully pull the panel away to avoid snapping the clip.

14. Once the panel is free, release the electrical connectors for the locks and window. The arrow indicates the location of the second screw that needs to be removed to get the door panel off.
15. The third screw that needs to be removed is at the back of the inner door handle well near the armrest. Use a medium screwdriver to get this last screw out.

16. With all three screws now removed, you are ready to pull the inner door panel loose. There are nine (9) clips that hold the door panel. Working your way around the perimeter of the door, pull the panel to pop out the clips. CAUTION: DO NOT TRY TO COMPLETELY REMOVE THE PANEL AT THIS TIME. YOU ONLY WANT TO RELEASE THE NINE CLIPS.
17. Once the nine clips are released, the door panel can be pulled off the door by lifting it straight up. The door panel “hangs” on the window opening so it needs to be lifted off the window opening to come free. **CAUTION:** There are still two wire assemblies that need to be disconnected before the door panel will be completely free. You just want to lift the door panel off the door.

18. Two additional wire connectors still need to be released to get the door panel off of the door so you can continue with the installation.
19. There is a small LED light that illuminates the door switches at night. You need to disconnect this wire assembly at the connector indicated by the arrow.

20. At the rear of the door is the courtesy lamp that needs to be pulled from the housing.
21. Now the inner door panel is free and can be set aside until you are ready to put it back together. Note the courtesy light dangling in the bottom right corner of the picture. This is where you will tap into the circuit to power your puddle lamps.

22. Disconnect the mirror wiring harness shown here located just below where you removed the speaker panel in step 6.
23. To remove the mirror assembly from the car you need to remove the three (3) 8mm screws located behind the speaker panel in Step 6. As you loosen the third screw, be sure to hold the mirror assembly so it does not accidentally fall to the floor. Carefully remove the mirror assembly from the door. CAUTION: There are plastic pins in the mirror housing used to locate the mirror assembly on the door. These pins can break if you are not careful removing the mirror assembly.

24. With the mirror assembly now free and in your hands, it is time to install the puddle lamp. Shown here are three points of interest inside the mirror. The tab on the puddle lamp assembly slides into the recess indicated by arrow 1. Arrow 2 marks the location where the puddle lamp assembly is screwed to the mirror housing. Arrow 3 shows the slot through which the bulb and wire assembly pass to plug into the puddle lamp housing.
25. Insert the wire assembly through the slot as shown.

26. Next, place the puddle lamp assembly into the mirror as shown. Note the tab in the recess to the left and the way the mounting hole matches up on the right.
27. Before securing the puddle lamp housing, insert the bulb socket assembly into the housing and turn the plug 1/8th of a turn to secure it in the housing. Note the orientation of the socket in the picture below. This is what it should look like to fit in the limited available space beneath the mirror motor assembly. Use the screw provided to secure the puddle lamp housing inside the mirror as shown.

![Image of puddle lamp housing](image1.png)

28. With the puddle lamp housing secured, turn your attention to the back of the mirror assembly. Route the wires under the clip as shown below.

![Image of wire routing](image2.png)
29. Remove the panel show below underneath the mirror to get access to the cable run. CAUTION: This cover pops off with a small screwdriver. The cover is held on by several small tabs that can break if you do not use caution.

30. Run the two wires from the puddle lamp down the cable run and out the other side.
31. Following the path of the arrows shown, route the wires through the housing and under the foam insulation. You’ll want to carefully peel back the foam insulation (as shown) to gain access to the hidden channel in the mirror mount plate.

32. Continue routing the wires under the foam following the path of the arrows indicated. You’ll need to peel back the second foam insulation pad to allow the wire to protrude through the center hole. You will see where the pre-existing wiring harness already travels this path, so just follow it with the puddle lamp wiring harness.
33. Once the wires have been run as indicated, the panel under the mirror assembly can be replaced.

34. There is a retaining screw in the center of the mount panel. Loosen this screw and run the wires under the flat washer and re-tighten the screw. CAUTION: DO NOT OVERTIGHTEN THE SCREW AND CRUSH THE WIRES. Just make it snug to hold the wires in place.
35. Replace the mirror on the doorframe using the three 8mm bolts previously removed. Plug the mirror wiring harness back into the socket from step 22. Run the puddle lamp wire assembly through the access hole and along the path shown to the courtesy lamp at the back of the door.

36. Using two of the wire taps provided, tap into the two wires running to the courtesy lamp as shown.
37. Using the wire ties provided, secure the puddle lamp wire harness to the existing wire harness at the points indicated by the arrows. Once the wires are secured, you can cut the excess tab from each wire tie for a clean look.

38. Some notes regarding re-assembly. All of the pictures regarding disassembly of the door panel show you how to put the door panel back together. Before hanging the door panel on the window opening, plug the courtesy light back into the courtesy lamp housing from step 20. Also be sure to connect the LED lamp assembly from step 19. Hang the door on the window. Make sure the wiring harness for the speaker from step 8 is out from under the door panel for easy access. Align the clips before popping the panel back into place. See the clip locations below.
39. Once the door panel is back on, replace screw number 3 from the door handle in step 15. Then replace screw number 2 located behind the window/lock panel in step 14. Plug in the two plugs for the power windows and locks into the window/lock panel. Slip the top tab under the top of the window/lock panel opening and pop the window/lock panel back into place from step 13.

40. Replace the door latch cover panel from step 11 (you may want to pull the latch handle a bit to easy the installation. Replace screw number 1 from step 10 and pop the little circular cover into place in the door handle cover from step 9.

41. Pop the mirror back into place by pressing firmly with the palm of your hand on the center of the mirror from step 3. The idea is to engage the large center pivot socket first. Then, by pressing to the outside of the mirror face engage the outside socket and finally by pressing on the bottom of the mirror face engage the lower socket. You will feel and fear a loud “pop” when each socket engages. Once the mirror is in place it should not wobble when pressed. If it does, one or more sockets are not properly engaged.

42. Swing the mirror assembly forward to its proper location (opposite of step 3). And then pop the painted cover back into place.

Enjoy your totally cool puddle lamps.