RX-8 Gauge Pod Kit
Installation Instructions
Part No. 11816

Time Required: 1.5 hrs
People Required: 1
Tools Required:
1/4” or 3/8” Drive Ratchet
Deep 10mm socket

INSTRUCTION INSTRUCTIONS

NOTE: Install the oil and water sensor adaptor units before installing the gauge pod.

NOTE: To prevent damage to the gauge pod, do not push on the gauge pod along the gauge centerlines or put excess loads on the mounting legs.

1. Pull up on the emergency brake handle firmly. Place the front of the car on jack stands with sufficient room under the car to allow access to the transmission tunnel area.

2. Unscrew the shift knob from the lever, then slide center console lid rearward as shown in Fig. A.

3. Grip the plastic shift boot surround as in Fig. B and pull up with moderate effort until the plastic retaining clips underneath the plastic shift boot surround are free. If the initial pulling does not disengage the rear clips, remove them individually, making sure to pull directly upward to prevent breaking the clips. Next, remove the felt cone from the shift lever and set it aside. NOTE: If your car is equipped with seat warmers do not pull the cover off completely as there are wires connected to the underside.

4. Unscrew the two Phillips head screws holding the ashtray in position (Fig. C) and retain for re-use. After these screws are removed, the ashtray assembly can be disengaged from the dash by pulling toward the rear of the car to release the holding snaps at the front of the ashtray. DO NOT PULL OUT COMPLETELY! There are three wire connections on the backside (Fig. D).

5. Disconnect the cigarette lighter, light ring connectors, and ashtray light bulb as shown in Fig. E, and remove the ashtray assembly.
6. Remove the white plastic wire-retaining clip attached to the passenger side front driver's side (Fig. F) and rear shift boot (Fig. G) studs by placing two small scribes or needles into the retainer and pulling the “springy” teeth away from the stud and simultaneously working the retainer back and forth until it is free from the stud.

7. Remove the four nuts that hold the shift boot flange in place (Fig. H) and pull it up (Fig. I), turning it completely inside (Fig. J) out to obtain the room necessary to work. Do not remove it from the shift lever.

8. The following steps are intended to prevent the gauge sensor lines from being “kinked” or “crushed”.

Take the 3 3/4” long adhesive foam strip provided and place it directly between the front shift boot studs with the adhesive side down. (Fig. K - see arrow) Next, place the three 5 1/2” long pieces of foam directly behind the 3 3/4” long piece, leaving no gap between the pieces. The last piece of foam, which is 2 3/4” long is to be placed on the bottom edge of the shift boot flange (Fig. L), between the mounting holes.
9. Locate the connector to the ashtray light ring that was removed in step 5. Separate the two wires, one white/red and the other red/yellow (Fig. M), and unwrap them completely, exposing roughly 4" of the insulation. Use the wire “T” splicers provided to “tap” into each of the wires, use pliers to clamp the “T” splicers to ensure a good connection. See Fig N & O for splicing photos. Fig P shows the completed process.

10. In order to route the gauge sending lines to the engine compartment, lift up the front edge of the lower shift lever rubber insulator to gain access to the tunnel (Fig. Q) (It is not necessary to remove it completely, only pull up enough to pass the gauge sending lines through).

Push the sensors through the opening slowly, making sure not to kink or damage the tubes as you push them downward. If you encounter a problem feeding the lines through the opening, stop and “free” the lines under the vehicle before continuing. Leave roughly 8 inches of the sending lines exposed so that the gauge connectors can be plugged into the “T” splicers.

11. Plug the two male spade connectors attached to the gauge lights into the two female connectors installed into the light ring wires earlier in step 9. (Fig. R) Test the lights by turning light switch to the “first” position. If the lights do not illuminate, check the connections you made earlier.

12. Locate white tape/mark on the gauge sending lines (Fig. S) (about 6’ behind the gauges) and position it is just forward of the shift boot flange. When routing the wires between the front two mounting studs, do not let the tubes cross over one another. Keep them spaced apart and parallel as they pass between the studs.

13. Tighten down all four nuts on the shift boot flange lightly. DO NOT TORQUE DOWN ON THE FRONT TWO NUTS, IT WILL DAMAGE THE CAPILLARY TUBES! Re-install both white wire-retaining clips onto their appropriate shift boot studs.

14. Carefully route all wires and tubes into the cavity behind the gauge pod, making sure not to damage anything, and push the front two arms of the pod into their slots at the back of the ashtray cavity. Push only on the locations shown in Fig. T & U pushing on other locations may damage the panel. Once the pod is in the correct position, the holes in the lower legs should line up with the appropriate ashtray mounting holes.
15. Install the two screws into the appropriate ashtray mounting holes through the gauge pod legs. Only screw them in partially, then push on the pod as in Fig. V with moderate effort and run the screws down until tight. DO NOT OVERTIGHTEN THE SCREWS, DAMAGE MAY OCCUR TO THE GAUGE POD.

16. Go under vehicle and route the sending lines along the DRIVER’S side of the transmission, away from the exhaust. Use the tie wraps supplied to attach the lines to the clip on the driver’s side of the transmission as in Fig W. DON’T CLOSE TIE WRAP COMPLETELY YET!

17. Continue routing the lines to the front of the car and use the second tie wrap to attach the sending lines to the wire loom running down the top spine of the bell housing above the clutch slave cylinder. DON’T CLOSE TIE WRAP COMPLETELY YET!

18. Route the water temperature gauge sender (the probe with the tie wrap above the nut) across the firewall along the white retaining clips to the passenger side of the engine bay as in Fig X. Make sure enough slack is in the water sending line to prevent kinks. Install the probe into the adapter and inspect the routing to ensure it will not be damaged by vibration.

19. The oil pressure and temperature tubes must come up into the driver’s side engine bay and loop around the rubber lines and back into the adapter block on the engine, maintaining enough slack to prevent kinks and scuffing against other objects. Install the probe and pressure line into the adapter. Refer to the instructions for installation of oil pressure/temperature and water temperature adapters, to install the gauge probes properly.

20. Once everything has been tightened, go back and close the tie wraps completely, making sure there is enough slack in the lines to prevent any damage. With everything installed correctly, start the engine and look for leaks in all areas that have been modified. Be sure to check the backside of the oil pressure gauge for leaks.

21. If no leaks are found, re-install the felt cone, then re-install the plastic shifter cover by snapping both rear positions in and working down the middle ones and finally the fronts. Make sure all six snaps are engaged properly. Close center console lid. Re-install the shift knob. (Fig. Y)

22. Finally lower the car back down to the ground.

RECOMMENDATIONS FOR OPERATION

- Water thermostat operating range: 180°F to 189°F
- Max water temperature for high power (heavy throttle & high RPM): 200°F
- Oil pressure at operating temperature: 15psi – 80psi
- Oil temperature for high power: Min: 140°F, Max: 210°F