



## Mazda FD3S RX-7 Water-Methanol Injection Tank Installation Guide

---



Thank you for purchasing a SakeBomb Garage Water/Methanol tank! We have included a number of bungs for pickup ports and sensors for various applications. Please choose the location(s) that best fit your use case.

We recommend the bottom of the lower sump for a pickup point to feed a Water/Meth pump, and the sensor point above the sump for an early low-level warning, however other locations can be selected based on application. Other uses include intercooler sprayers, feeding front or rear window washers, etc. With nearly 2 gallons of capacity, the tank can be used in many ways. Use the included cap, or the OEM rear washer tank cap interchangeably. Enjoy!

## Tools Needed:

---

- Blue lock-tite
  - Thread sealant or teflon tape (if required)
  - 10mm socket and wrench
  - Allen key set
  - Interior pull tools
  - Tap and drill bit for level sensor, pickup port, etc. (if not supplied)
  - Forstner bit + bottoming bit, or wide-step bit + flat file (see sensor/pickup section of manual)
- 

**WARNING: Use of Water-Methanol mixture Requires that your engine be tuned specifically for this injection! Do not attempt to utilize water-meth injection (boost juice) on a tune not designed for it! Water-meth replaces a portion of fuel, creating a dangerous lean condition if the tank runs dry or another issue prevents injection of the mixture, - monitor your tank level, and flow. For an alternative not requiring a tune and such stringent monitoring, distilled water can be used as an alternative. As always, use at your own risk. For offroad use only.**

### **Step 1:** Choose your sensor and pickup point locations (if not installed)

-Drill and tap your tank for your desired pickup and level sensors. We recommend the bottom of the sump for a pickup point for a pump-feed, and the area above the sump for a level sensor (for early low-level warning). If not already purchased / installed, we offer a 1/8 NPT push lock pickup.

-If installing a SakeBomb Garage supplied lower pickup, you will need a 1/8 NPT tap and drill bit. Tap slightly on the shallow side for a tighter fit. We recommend thread sealant, teflon tape, etc for sealing. **DO NOT OVER-TIGHTEN THE FITTING ONCE SEATED...** the material is a soft plastic and can strip with too much force.

## SakeBomb Garage – Water Methanol Injection Tank Installation Guide (FD RX-7)

-We recommend a level sensor to monitor for a low-level condition, if not purchased/installed we offer a level sensor kit. If not already installed, you will need to drill an appropriately sized hole in the tank, and then deck the bung to the required thickness for the grommet (the optional SakeBomb Garage sensor/grommet requires a 4mm thick flange to seal properly). For the SBG sensor, we recommend using a forstner bit to cut the hole (Steelex D2852 1-1/16-Inch Forstner Bit - available affordably online) and a 1-3/4" planing bit (1-3/4-Inch Cutting Diameter Cleaning Bottom Bit - available affordably online) to deck the flange to 4mm for the grommet. Alternatively, a wide step bit (Harbor Freight has an affordable wide-step bit) which will not punch through the back wall of the tank, and a flat file to deck the flange will work in a pinch.



-Ensure that the tank and fittings are leak free before installation.

-Rinse the tank thoroughly with clean water before installing to remove any debris or foreign material from inside the tank.

\*Epoxy or gasket maker can be used in a pinch to make repairs for leaks or if you strip threads in the tank.

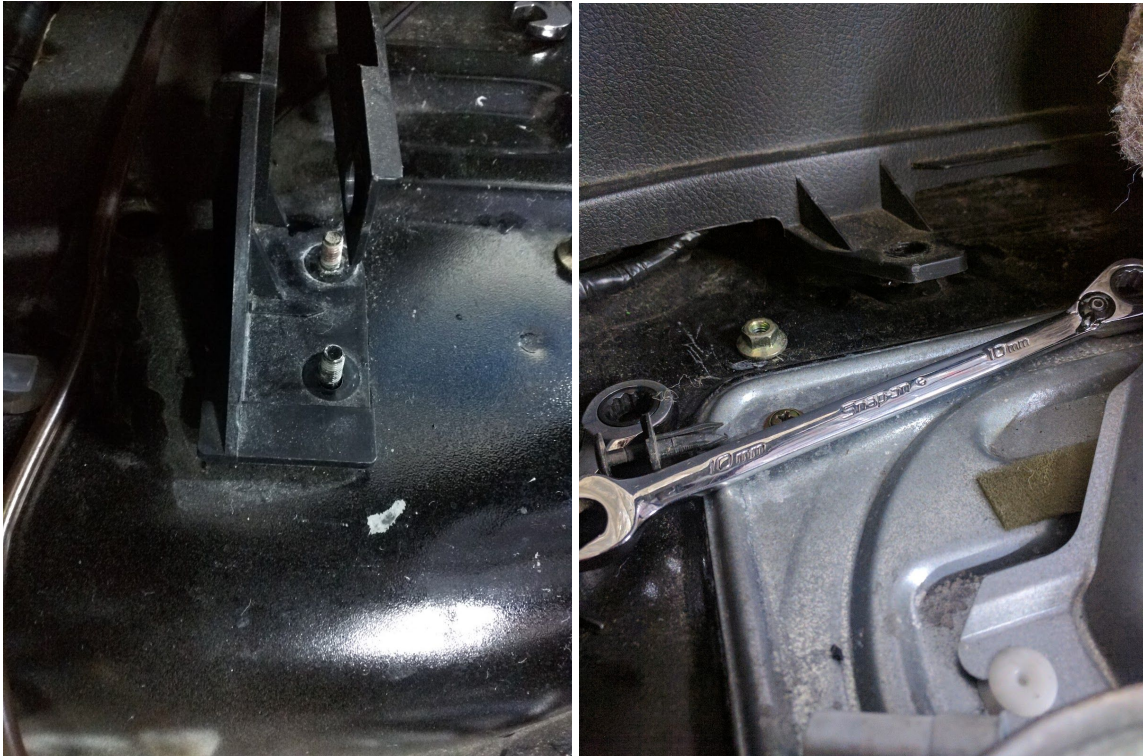


## Step 2: Prepare Trunk for Installation

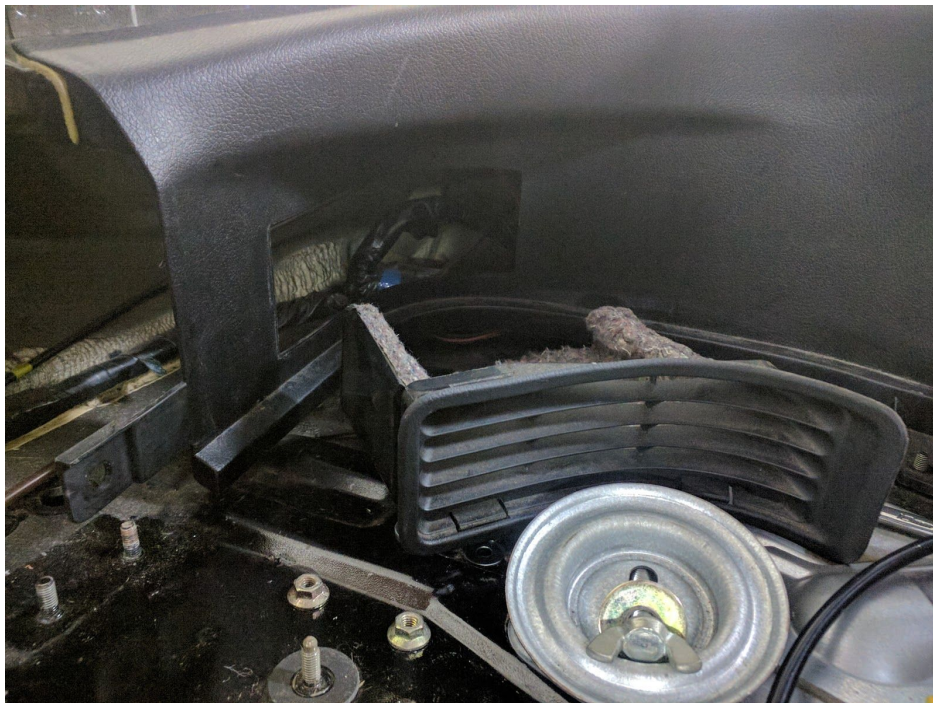
- Remove Bose sound tube if fitted for access (see Mazda manual for how).
- Begin by peeling up the hatch weather-stripping and pulling back the trunk carpet. Remove the OEM washer cap (if fitted) and carefully pop the rear trunk panel towards the front of the car to disengage the clips. Lift it up and out of the way.
- Remove various fasteners, clips, and brackets holding the side panels down as shown to allow the side panels to move enough to aid in installing the tank. Take care in bending them if needed to avoid damaging the side trunk panels. After the trunk area is bare, proceed in removing the various nuts and clips which hold the interior pieces in place.



## SakeBomb Garage – Water Methanol Injection Tank Installation Guide (FD RX-7)



-Carefully remove the side vent as shown by releasing the clips attaching it to the side panel. '93 vents have a deeper structure and will need to be trimmed slightly to not interfere with the tank (some '94+ vents appear to fit as is). Trim as needed before reinstalling, after tank is fitted.



-Unbolt and remove OEM rear washer tank (if fitted).

### **Step 3: Mounting the tank**

-Included with your tank are two m6 bolts, one m6 stud and nut, and three fender washers. The top two tank mounts will use the bolts, while the third mounting point will require the stud and nut.

-Locate the threaded mount that the center tank mount will engage, add a dab of blue loctite to the threads of the stud, and insert it with an allen key in the head. You will want to adjust the depth of this stud to give enough thread engagement on the nut/washer with the tank installed. This is a bit tricky, to access, take your time and use the flat 10mm wrench (a ratcheting flat wrench will come in handy when you are ready to tighten this down).

-Gently pull back the right side panel and sneak the tank into the cavity on an angle.





## SakeBomb Garage – Water Methanol Injection Tank Installation Guide (FD RX-7)

-Next, gently maneuver the left side trunk panel to place the tank in back of this panel.



-The tank has been designed to fit snugly in the exposed cavity. Carefully fit the tank into place. Place the m6 bolts with washers through the top mounting points, and the nut with washer through the middle (back) mounting point. Snug the bolts down to secure the tank. Access to these bolts is tricky with the rear panels in place,



## SakeBomb Garage – Water Methanol Injection Tank Installation Guide ( FD RX-7 )

-Take your time and use care to not damage the plastics while tightening down the fasteners.



-With the tank fitted properly in the trunk, you can now route your push lock line to the output fitting (if included). Take care when routing the line to prevent abrasion, or pinching the line with the spare tire etc. You can route the wires to your level sensor and hook it up at this stage if used. If you have purchased an AEM pump and harness kit from SakeBomb Garage, this is the time to route all of your wiring and controller. We recommend the rear trunk cubbies (in the plastic panels) to mount your controller and harness for easy access.

-You are now ready to reinstall your interior! Replace the nuts, bolts, brackets, fasteners etc. that you removed to free the side panels. Pop on the center panel and ensure no contact with the level sensor. Reinstall the vent (trim if needed to prevent contact with tank). Replace the weatherstripping.

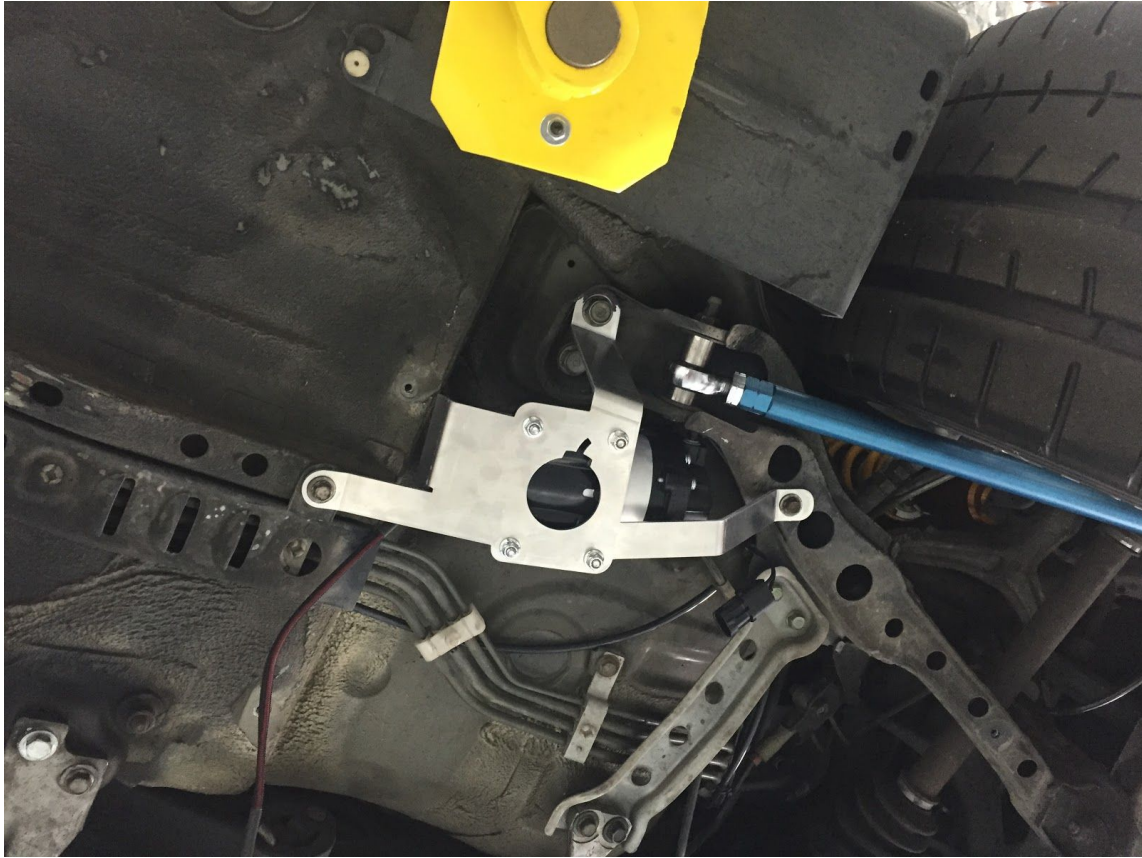


## SakeBomb Garage – Water Methanol Injection Tank Installation Guide (FD RX-7)

-If your pump and controller are already setup you are finished! Once reassembled, the only indication of the tank is the fill cap which peaks out innocuously into the trunk. The SakeBomb Garage cap is interchangeable with the OEM cap if desired.



-If you have purchased an under-car pump mounting kit from SakeBomb Garage, you will leave the carpet peeled back and follow the additional instructions for the pump mount and hose routing which passes through the rubber grommet in the trunk for the fuel-pump-cover. Please see further instructions for remote pump mount bracket if purchased.



## **Congratulations! You are finished with the installation**

For any questions/comments please feel free to contact us, we're happy to hear from you!

Web: [sakebombgarage.com](http://sakebombgarage.com)  
Email: [info@sakebombgarage.com](mailto:info@sakebombgarage.com)  
Facebook: [facebook.com/sakebombgarage](https://facebook.com/sakebombgarage)

