



PTUNING
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INSTALLATION MANUAL

PTUNING FR-S/BRZ Windshield Washer Reservoir Kit

2013+ Scion FR-S | 2013+ Subaru BRZ

Part#: PTP-ENG-90075





READ THIS FIRST: Please read the entire installation manual before proceeding. This installation should only be performed by a trained specialist who is familiar with the automobile's mechanical system. Performance Tuning, Inc. (PTUNING) or any of its distributors cannot be held responsible for damages as a result of negligent or improper installation. This windshield washer reservoir can be installed using common tools and automotive procedures. If in doubt, please contact PTUNING's technical support staff at 703-257-1728, between the hours of 10:00AM and 5:00PM EST, Monday through Friday.

Remove the windshield washer reservoir kit from its packaging and inspect for any obvious physical damage. All kit components are thoroughly inspected and carefully packaged prior to shipment from the factory. If any shipping damage is evident, contact your supplier and request that they process a claim with the shipper involved. Be sure to review the parts list on page three to verify that you have all necessary system components to proceed. If any components in the parts list are missing, contact PTUNING's customer service staff.

The information contained in this publication was accurate and in effect at the time the publication was approved for printing and is subject to change without notice or liability. PTUNING reserves the right to revise the information presented herein or to discontinue the production of parts described at any time.

IMPORTANT: Please refer to the factory service manual for instructions on how to remove the factory bumper cover and factory windshield washer reservoir.

SAFETY REQUIREMENTS: It is recommended to follow these precautions.

- Always wear safety glasses & gloves.
- Turn the ignition switch to the OFF position & disconnect the battery.
- Always use properly rated jack stands when working under the vehicle.
- Prevent unexpected vehicle movement by using wheel chocks and/or parking brake.
- Operate the vehicle only in well ventilated areas.
- Do not smoke or use flammable items near or around the vehicle's fuel system.
- Keep hands, clothing and other objects away from moving parts when engine is running.

SUPPLIES: It is recommended to have the following items before beginning installation.

- Scion FR-S or Subaru BRZ factory service manual, for your model year vehicle.
- A large table or bench, and plenty of adjacent available workspace.
- Standard selection of automotive tools, primarily metric sizes.
- The ability to securely lift the vehicle at least a few feet off the ground.
- 1 gallons of factory or aftermarket windshield washer fluid.



TORQUE RECOMMENDATION: When removing and re-installing factory fasteners, refer to the Scion or Subaru service manual for torque values. When installing fasteners included in this kit, refer to the following chart:

FASTENER SIZE	TORQUE (FOOT POUND)
M6	12
M8	22

WINDSHIELD WASHER RESERVOIR PARTS LIST (Included with Part# PTP-ENG-90075):

<u>PACKAGE PART #:</u>	<u>PART #:</u>	<u>Qty/Pkg</u>	<u>DESCRIPTION</u>
PKG-PTP-ENG-90075-1	PTP-ENG-90075-BOT	1	PTUNING FR-S/BRZ Windshield washer Reservoir (Aluminum)

PKG-PTP-ENG-90075-2	PTP-HSE-90075-24	1	1-1/18" X 24"L Plastic Reservoir Fill Tube w/rubber grommet (White)
	PTP-FAS-90030-16	1	M8-1.25x16mm Flange Hex Bolt (Zinc)
	PTP-FAS-90100-M8	2	M8 -1.25 Hex Serrated Flange Nut (JIS B1190-10 Class 10.9) (Zinc)
	PTP-CLP-90005-1732	1	17-32mm Worm-drive Hose Clamp (11/16" to 1-1/4" Clamp Diameter Range, 5/16" Band Width)
	PTP-FAS-90011	1	1/8" x 7.5" Nylon Cable Tie (Black)
	PTP-ENG-90075-MAN	1	PTUNING FR-S/BRZ Windshield washer Reservoir Installation Manual (2013+ FR-S/BRZ)
	PTDECALCOMP_LE_WHI	2	PTUNING - tuned_for: competition (8.5" x 1.5" - Window Decal) - WHITE Limited Edition

PKG-PTP-ENG-90075-1



PKG-PTP-ENG-90075-2



1 – PREPPING THE VEHICLE FOR THE WINDSHIELD WASHER RESERVOIR INSTALLATION

1. Using a 10mm socket or wrench, remove the negative and positive battery terminals.
2. Have at least 1 gallon of windshield washer fluid on hand to fill the reservoir after the installation of the windshield washer reservoir.
3. Layout all the installation packages on a workbench and verify that you have received all the packages listed at the beginning of this manual. The instructions will refer to the individual packages throughout the manual.
4. Jack up the vehicle to a workable height and secure vehicle with jack stands if not using a vehicle lift. See FIGURE 1.1

FIGURE 1.1



2 – REMOVING THE FRONT FASCIA AND ENGINE UNDER TRAY

1. Using a 10mm socket and flat head screwdriver remove bolts and clips attaching the front bumper. SEE FIGURE 2.1 & 2.2

FIGURE 2.1



Figure 2.2



2. Unplug and remove the side marker lights. Using a Phillips screwdriver, remove the 4 body clips that attaches the front bumper cover to the splash shield on each side of the bumper cover. Remove the two retaining clips under the marker lights attaching bumper to fender using a flat head screw driver. SEE FIGURE 2.3 & 2.4

FIGURE 2.3



FIGURE 2.4



3. Gently pull each side of the bumper towards the outside. The bumper should “pop” out of its connections. Pull bumper forward enough to disconnect front turn signals and/or fog lights.
4. The bumper should now be free. Gently pull the bumper straight forward away from the car.

3 – INSTALLING THE WINDSHIELD WASHER RESERVOIR

1. Remove the factory windshield washer reservoir from the vehicle if not already removed. This step should have been performed during the installation of the PTUNING turbo system installation.
2. Layout all components of the windshield washer reservoir kit and the factory windshield washer reservoir on a workbench. SEE FIGURES 3.1, 3.2

FIGURE 3.1



FIGURE 3.2



3. Remove the following components from the factory reservoir. SEE FIGURE 3.3

- Fill Neck
- Pump and sealing grommet
- Level Indicator (optional)

FIGURE 3.3



4. Locate installation package **PTP-PKG-ENG-90075-1**. Install the factory pump's sealing grommet onto the new reservoir with the smaller-diameter end in first as shown. Make sure the bottom of the outer grommet is sitting flush with the reservoir bottle opening. SEE FIGURE 3.4 & 3.5

FIGURE 3.4

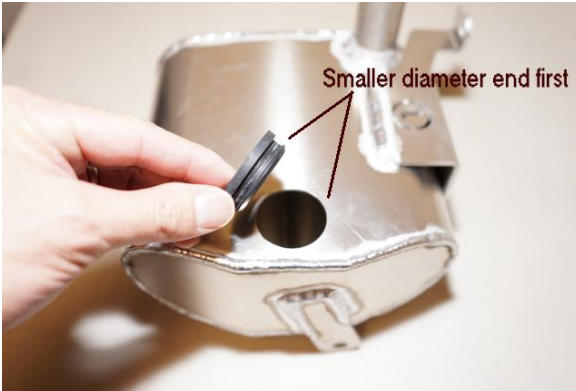


FIGURE 3.5



5. Spray a small amount of WD40 to the inner lip of the grommet and push/twist the factory pump into the grommet opening. Make sure the pump sits flush between the outside face of the grommet and reservoir. Finally rotate the pump so that the plug-end is pointing towards the top of the reservoir. SEE FIGURE 3.6, 3.7

FIGURE 3.6



FIGURE 3.7



6. Locate installation package **PTP-PKG-ENG-90075-2**. Spray a small amount of WD40 to the rubber grommet on the reservoir fill tube and coat the entire outside surface of the grommet—this will help ease the installation of the fill neck. Install the factory reservoir fill neck onto the grommet-end of the fill tube as shown. Push the fill neck onto the tube while rotating the fill neck in a clock-wise motion. Install the level indicator (optional) and adjust the fill neck so that the mounting tab is pointing towards the other end of the fill tube. SEE FIGURES 3.8 , 3.9 & 3.10

FIGURE 3.8



FIGURE 3.9



FIGURE 3.10



- Using a 12mm socket or wrench, remove the lower outer M8 bolt from the driver-side crash beam support. Position the new reservoir so that the upper mounting bracket sits flush against the bumper beam mounting hole and the lower bracket sits above the front lower frame gusset. Install the factory M8 bolt back into the bumper support. Using the supplied M8 bolt and flange nut, secure the bottom bracket on the reservoir to the frame gusset. SEE FIGURES 3.11, 3.12, 3.13 & 3.14

FIGURE 3.11



FIGURE 3.12

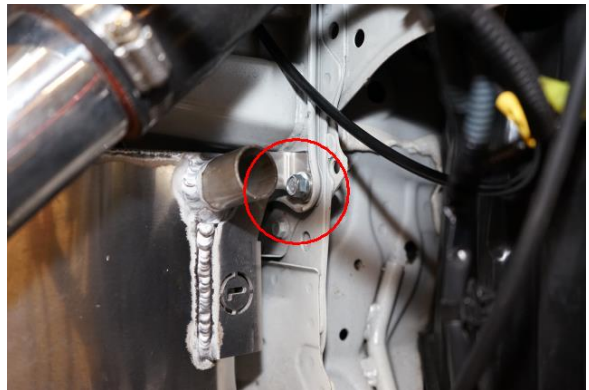
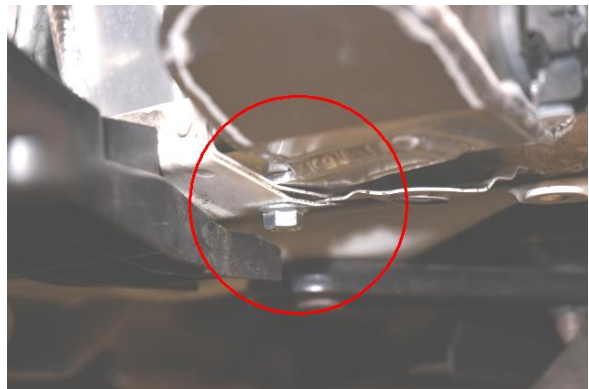


FIGURE 3.13



FIGURE 3.14

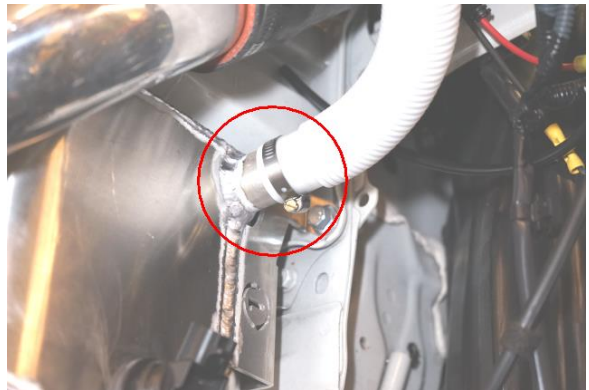


8. Route the reservoir fill tube between the driver-side vehicle frame rail and the back of the headlight. Apply some WD40 to the outside of the reservoir bottle's aluminum fill neck to help ease the installation of the fill tube. Connect the bottom-end of the reservoir fill tube to the reservoir bottle's fill neck by pushing and simultaneously twisting the fill tube in a clockwise/counter-clockwise motion. Once the tube is pressed in about $\frac{3}{4}$ " inch, secure the fill tube with the supplied worm-clamp. SEE FIGURE 3.15 & 3.16

FIGURE 3.15



FIGURE 3.16

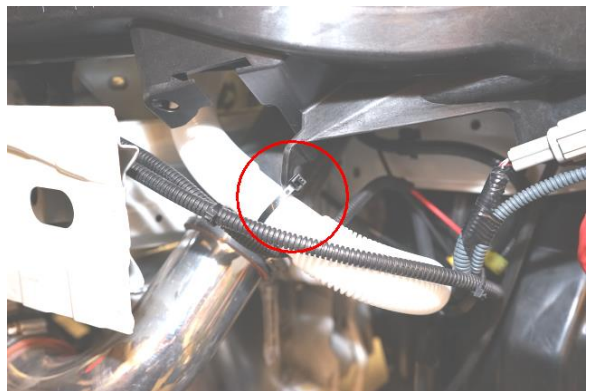


9. Secure the mounting tab on the factory reservoir fill neck to its original location with the factory mounting clip as shown. Adjust the position of the curved fill tube to remove unnecessary preload on the fill neck mounting bracket. Secure the fill tube to the bottom of the driver-side headlight support with the supplied nylon cable-tie. SEE FIGURES 3.17 & 3.18

FIGURE 3.17



FIGURE 3.18



10. Plug in the windshield reservoir pump harness and attach the windshield washer supply line. SEE FIGURES 3.19 & 3.20

FIGURE 3.19



FIGURE 3.20



11. Fill the reservoir with approximately 1/2 gallons of windshield washer fluid.
12. Verify that there are no leaks.
13. Installation of the windshield washer reservoir is now complete.