

# INSTALLATION INSTRUCTIONS



# CORKSPORT Coolant Reservoir

2010-2013 Mazdaspeed 3, 2004-2013 Mazda 3

PART #: **AXL-6-831-10** 



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CORKSPORT.COM

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## CORKSPORT Coolant Reservoir

2010-2013 Mazdaspeed 3, 2004-2013 Mazda 3

#### **PRODUCT DESCRIPTION:**

Many years ago, CorkSport released a coolant reservoir that we ended up discontinuing. But you asked we listened! Say hello to the new and improved coolant reservoir for the Gen 1 / Gen 2 Mazda 3, and the Gen 2 Mazdaspeed 3. We went back to the drawing board a bit to optimize the design. With a proper internal baffling system, and durable aluminum structure, it is a welcomed replacement to your yellowing, rotting plastic tank. Finished in a wrinkle black powder coat, it will hold up to the test of time and look great while doing it!

Please let us know your feedback of the by submitting a review

**at:** https://corksport.com/coolant-tank-for-2010-2013-mazdaspeed-3.html

#### **PRE-INSTALLATION NOTES:**



Make sure your vehicle is completely cooled down prior to starting installation. If you are going to work on you car within an hour or two of having driven it, use a fan to cool off the car.



These instructions were written for reference only and the use of a factory service manual is recommended.



How our instructions work: To best cover all of our customers experience levels, we have included a table of contents/order of operations along with step-by-step instructions.



A 2013 Mazdaspeed 3 was used for installation images. Other years of MS3 and all Mazda 3 will be similar.

#### **MATERIALS & TIME:**

**GENERAL INFO:** 









Time Est: 30mins.

Difficulty: 2/5

No

Warranty: 2-Year

#### **PARTS LIST:**

- One (1) CorkSport Assembled CoolantTank
- One (1) M6 U-Nut
- Two (2) M6x1.0x16mm
  Flange Bolt
- One (1) M6 18m OD
   Washer

#### **ADDITIONAL PARTS:**

FL-22 Engine Coolant

#### **TOOLING LIST:**

- 10mm Socket
- 1/4" drive Ratchet
- Misc. Socket/Ratchet Extensions
- Pliers
- Flathead Screwdriver
- Phillips Screwdriver
  - Magnet Tool



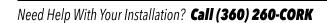
# ORDER OF OPERATIONS & TABLE OF CONTENTS:

0	<b>VEHICLE D</b>	ISASSEMBLY	
	Section 1: Re	moving the OEM Co	olant Reservoi

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Section 2: Installing the CorkSport Coolant Reservoir

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#### 1. Removing the OEM Coolant Reservoir

Verify that the car is on a level surface before proceeding. Use appropriate load rated hydraulic jack and jack stands to support the vehicle.

a) Engage the parking brake and raise the front of the vehicle with a hydraulic floor jack, then support with jack stands. This is to drain some coolant from the radiator.



Please refer to the owners manual for proper jack stand location.

- b) Loosen the drain plug on the lower driver side of the radiator. Use a Philips head screw driver to loosen the drain plug. You do not have to remove it to drain fluid. Shown in Figure 1a from below but can be accessed from inside the engine bay. Drain the fluid until it is emptied from the coolant reservoir shown in Figure 1b.
- c) Free the OEM coolant reservoir located at the passenger side of the engine. Shown in Figure 1b. There are two tabs shown in red in Figure 1b and that hold the reservoir in place. Simply pull up and the reservoir will come loose. Over time the plastic becomes hard and brittle and might require prying on the metal tabs of the chassis with a flathead screwdriver to remove.



Figure 1a



Figure 1b



#### 1. Removing the OEM Coolant Reservoir (cont.)

- d) Loosen the three spring clamps that hold the factory coolant lines on the coolant reservoir. Shown with red arrows in Figure 1c. Use pliers to squeeze the two tabs of the clamp and slide them up the hose out of the way.
- e) Remove the hoses from the OEM coolant reservoir.
- f) Remove the OEM coolant reservoir from the vehicle.



Ensure your hoses removed from the coolant reservoir do not leak excess coolant during OEM reservoir removal. Excess leaking will result in a big mess and can result in air bubbles in the cooling system.



Figure 1c

### 2. Installing the CorkSport Coolant Reservoir

- a) Remove the 10mm bolt that attaches the A/C line to the strut tower. Shown circled in green in Figure 2a. Some Mazda 3 will not have the A/C line mounted in this location and no bolt will need to be removed.
- b) Install the supplied U-nut onto the tab with the hole near the OEM mounting tab. Location shown with blue arrow in Figure 2a and with blue circle in Figure 2b. Ensure the U-nut matches the alignment shown in Figure 2b and the center of the U-nut is aligned with the hole.



Some Mazda 3 will have a wiring harness clip in this hole. Relocate this to the hole shown with a green arrow in Figure 2b.

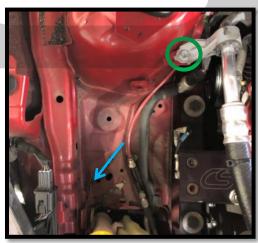


Figure 2a



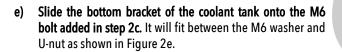
Figure 2b

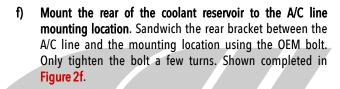


#### **DETAILED INSTRUCTIONS:**

#### 2. Installing the CorkSport Coolant Reservoir (cont.)

- c) Thread one of the supplied M6 bolts into the U-nut with the M6 18mm OD washer. Only thread it in a few turns. shown completed in Figure 2c.
- d) Insert the CS reservoir into the engine bay and install the OEM coolant hoses onto the barbs of the CS reservoir. Secure the hoses using the OEM spring clamps. Shown completed in Figure 2d.







For some Mazda 3, the A/C line does not mount to this bracket, so there is no OEM bolt. For those vehicles, use the other supplied M6 bolt for mounting.



Figure 2e

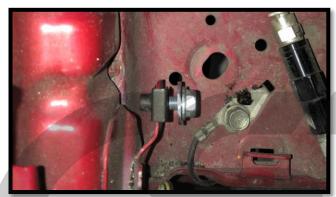


Figure 2c



Figure 2d



Figure 2f



### **DETAILED INSTRUCTIONS:**

### 2. Installing the CorkSport Coolant Reservoir (cont.)

g) Lift up on the power steering reservoir to free the tab that holds it to the windshield washer bottle. You can then move it towards the front of the engine bay as shown in Figure 2g.



Moving the power steering reservoir allows you to access the lower mounting bolt for the coolant tank through the opening circled in blue in Figure 2g.

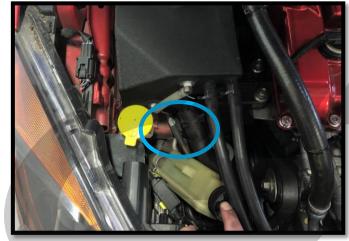


Figure 2g

- h) Using the access created, tighten the lower M6 mounting bolt until snug using a small 10mm socket and ratchet. A ¼" drive, deep 10mm socket works best in this area, as shown in Figure 2h.
- i) Tighten the rear mounting bolt using a 10mm socket and ratchet until snug. Shown in Figure 2i.

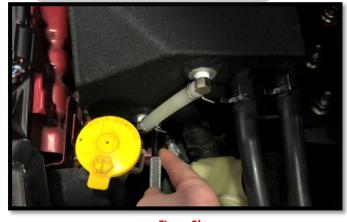


Figure 2h

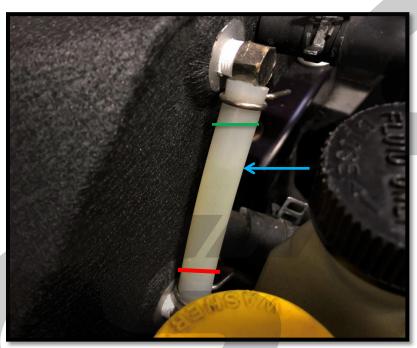


Figure 2i



### 2. Installing the CorkSport Coolant Reservoir (cont.)

- j) Verify coolant reservoir is sitting level and straight. As every car is slightly different, fitment can vary. If the reservoir is angled, twisting it gently can slightly bend the brackets to have better alignment.
- k) Refill the coolant that was removed earlier. If a lot of coolant was spilled during installation, ensure you top off your engine coolant. See Figure 2 for information on fill level.



If fluid is visible in sight tube, sufficient coolant is in the coolant tank. The red line shown is considered "minimum" while the green line is considered "maximum".

Please note, the vehicle used for images did not have typical Mazda dark green coolant so the level is very hard to see in Figure 2j but is noted with the blue arrow.

Figure 2j



On first startup, check for any coolant leaks. Monitor engine temperatures for the first few drives to ensure no air bubbles or leaks in the system. After a few days, double check coolant level and top it off if needed.



Coolant tank will be hot during and some time after engine operation. Use caution when working around the coolant tank.



This completes the installation of your CorkSport Coolant Reservoir. Enjoy the improved strength and great appearance!



### WHAT'S NEXT?

#### **CorkSport Mazdaspeed Turbocharger**

Give Experience a boost in performance with our drop-in Mazdaspeed turbocharger. It easily bolts in and replaces your undersized OEM turbo with NO mechanical modifications. The CorkSport turbo supports a range of 250-450\* horsepower in your Mazdaspeed. If your Mazdaspeed 3 or Mazdaspeed 6 turbo is worn out or is smoking, you need our turbo. Add the power without the hassle today!



#### **CorkSport 72mm Throttle Body**

Introducing the first and only performance throttle body for the MZR DISI that offers no sacrifices. By taking a ground-up approach we were able to succeed in making a throttle body that performs better than OE while retaining OE fitment and daily drivability. With easy installation and drop in fitment, you are sure to enjoy the gains from the CorkSport Throttle Body.



### **CorkSport Oil Catch Can**

Enhance the reliability of your engine, improve performance, and improve fuel economy with the CorkSport Oil Catch Can. By adding an oil catch can, you will increase the longevity of your engine by helping keep unclean crankcase vapors and oil out of the engine's intake. Made of billet aluminum for strength, the CorkSport Oil Catch Can includes everything you need for a complete install. Don't let your Mazda get contaminated by sediment, crankcase vapors, or unclean oil. With the CorkSport Oil Catch Can you will remove unwanted debris that would normally contaminate the intake tract. This allows for cleaner air entering the engine, lower detonation rates and increases longevity.

