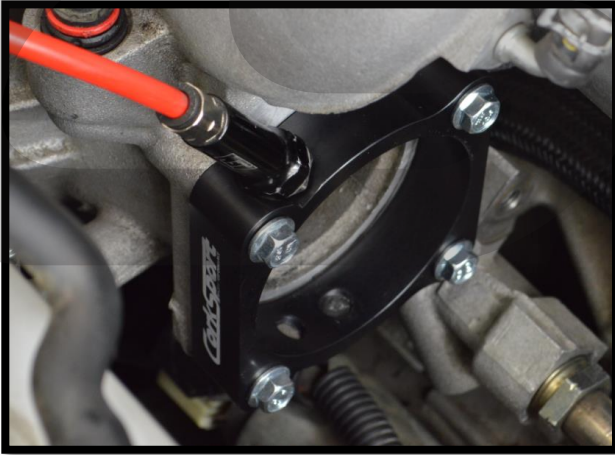


## CorkSport DISI MZR 72mm Throttle Body Spacer

2007 – 2013 Mazdaspeed 3, 2006 – 2007 Mazdaspeed 6, &  
2007-2012 Mazda CX-7



Thank you for purchasing the CorkSport DISI MZR 72mm Throttle Body Spacer. If you're looking to take your Mazdaspeed to the next step and push past the limits of your OEM fuel system, allow CorkSport to help. The CS 72mm Throttle Body Spacer is perfect for those wanting to add methanol injection for cooler boost temps and some extra fuel. Features include three ports that can all be easily used with a variety of nozzles, intake manifolds, and throttle bodies, a clean black anodized finish, and an O-ring for easy sealing. Please let us know what you think by submitting a review at: <https://corksport.com/72mm-throttle-body-spacer-for-mazdaspeed-3-mazdaspeed-6-and-mazda-cx-7.html>

### Pre-Installation Notes:



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



**This throttle body spacer changes the location of your throttle body.** Modification to cold side intercooler pipe is likely necessary for proper fitment. Instructions were made with a top mounted intercooler. Modifications will vary with other intercooler setups. Early MS6 TMIC Cold Pipes cannot be used.



**These instructions were written for reference only** and the use of a factory service manual is recommended. Please read these instructions thoroughly prior to starting installation.



**These instructions were made using a 2007 Mazdaspeed 6.** Installation for other Mazdaspeed 3, Mazdaspeed 6, and Mazda CX-7 will be similar.

### Materials and Time:



#### General Info.

Part #: GEN-6-498-10

Time Est: 2-3 hours

Wrench Rating: 3/5



#### Tooling List

Flat Head Screwdriver

Phillips Head Screwdriver

Needle Nose Pliers

8mm Wrench

10mm Wrench

12mm Wrench

Small Vise-Grips or C-Clamps

Teflon Thread Sealant

#### Tooling List

8mm Shallow Socket

8mm Deep Socket

10mm Deep Socket

12mm Deep Socket

4" Extension

3/8" Drive Ratchet

3/16" Allen or 3/16" Hex Socket

Torque Wrench

#### Parts List

- One (1) CorkSport DISI MZR 72mm Throttle Body Spacer
- Four (4) M6x1.0x75mm Stainless Socket Cap Screws
- Two (2) 1/8"-27 NPT Brass Plugs



Need Help With Your Installation?

Call (360) 260-CORK

## Order of Operations & Table of Contents



### **Engine Disassembly**

Section 1: Intercooler and Intake Removal

Section 2: Throttle Body Removal

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### **Throttle Body Installation**

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### **Engine Assembly**

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## Detailed Instructions



These instructions were made using a 2009 Mazdaspeed 3. Installation for other Mazdaspeed 3 and Mazdaspeed 6 will be similar.

### 1. Intercooler and Intake Removal

- a) Remove the negative battery terminal and place the plastic cover back over the battery (green arrow in Figure 1a).



Figure 1a

- b) Remove the two 10mm bolts fastening intercooler shroud to the intercooler. Push the shroud towards the firewall to unhook it and remove it from the vehicle (red circles in Figure 1b).

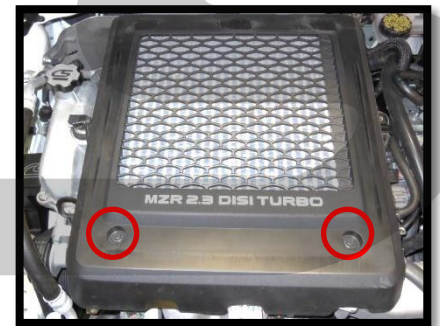


Figure 1b



We recommend using plastic Ziploc bags and a sharpie to label all bolts and parts throughout the install.

- c) Remove the clamps for the throttle body and turbo boost tubes from the intercooler. Use a 10mm socket to loosen the clamps (green circles in Figure 1c).

- d) Detach the bypass valve (BPV) from the intake. Remove the vacuum signal hose (red arrow), and the large BPV to intake hose by compressing the clamp with pliers (green arrow in Figure 1c). Leave the bypass valve attached to the intercooler pipe.

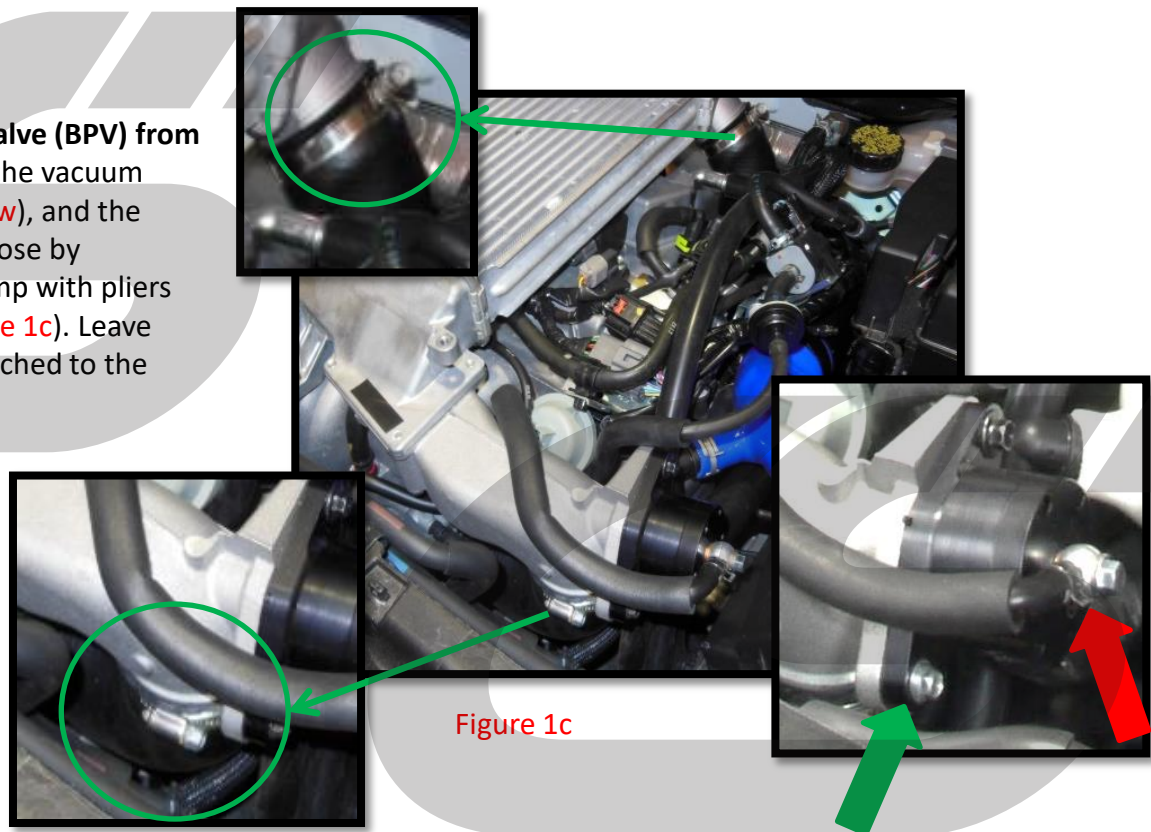


Figure 1c

**1. Intercooler and Intake Removal (continued)**

- e) Remove the three (3) 12mm nuts fastening the intercooler to the top of the engine and remove the intercooler from the vehicle by pulling upward (Figure 1d).



Figure 1d

- f) Remove the intake. Loosen the hose clamp connecting the intake elbow to the turbo inlet pipe with a 10mm socket wrench (red circle in Figure 1e).

- g) Remove the breather pipe from the valve cover (red arrow in Figure 1e) and unplug the MAF sensor (green arrow in Figure 1e).

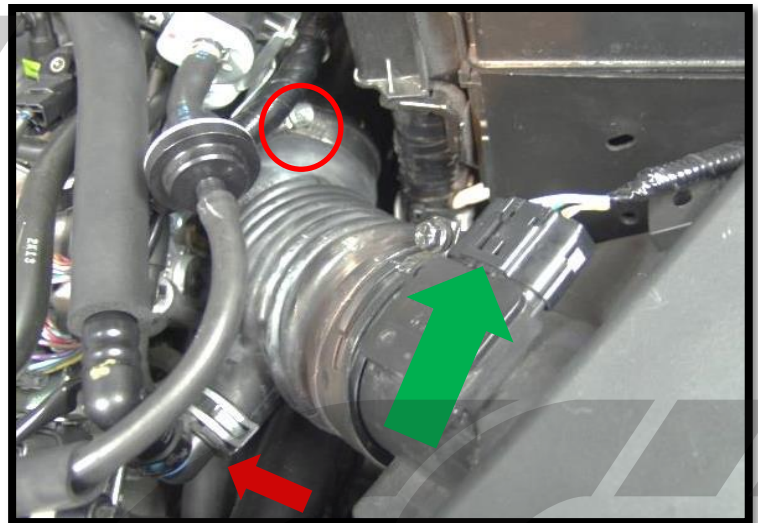


Figure 1e

- h) Remove intake from engine bay.

## 2. Throttle Body Removal



The coolant lines can remain attached to the throttle body during spacer install. The steps below labeled “OPTIONAL” show how to remove the hoses if desired.

- a) **OPTIONAL: Unclamp the throttle body coolant line and slide the clamps back.** Use the needle nose pliers to grab and loosen the clamps. **Green circles** in **Figure 2a**



**OPTIONAL:** Do not remove the hoses off the ports until the vise grips or c-clamps have been installed in the next step. Failure to do so will led to messy coolant everywhere!

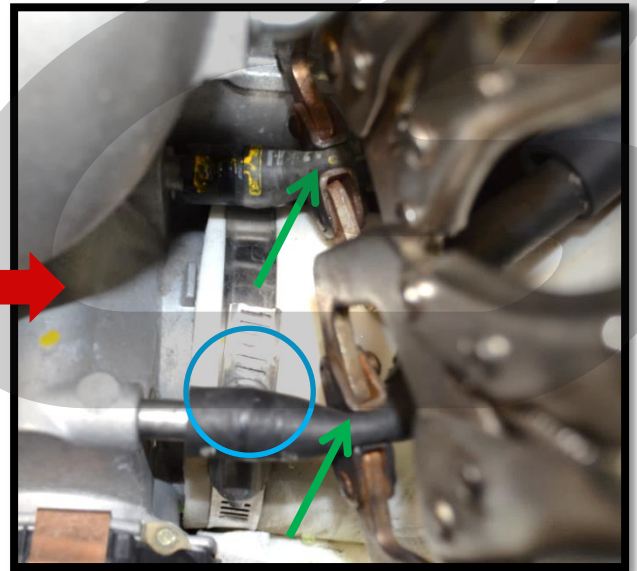
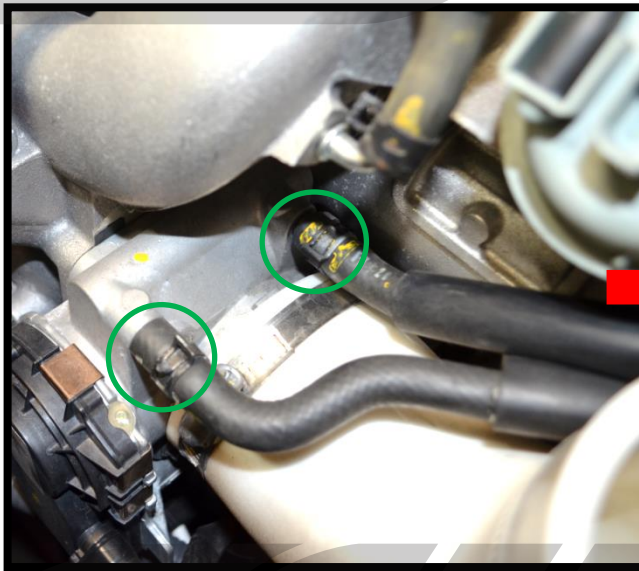


Figure 2a

- b) **OPTIONAL: Clamp the coolant hoses with the vise-grips or c-clamps to stop the coolant flow.** Excessive clamping force is not required. Clamping location shown with the **green arrows** in **Figure 2a**.
- c) **OPTIONAL: Remove the coolant hoses from the throttle body.**
- d) **Remove the throttle body inlet hose using a 10mm socket wrench.** Shown with the **blue circle** in **Figure 2a**.
- e) **Unplug the throttle body wiring** from the connector shown with **green circle** in **Figure 2b**.
- f) **Remove the throttle body** using an 8mm socket wrench and extension. The four bolts are shown with **red circles** in **Figure 3b**. Peel the gasket off the intake manifold. Gasket tab shown with **blue arrow** in **Figure 2b**.

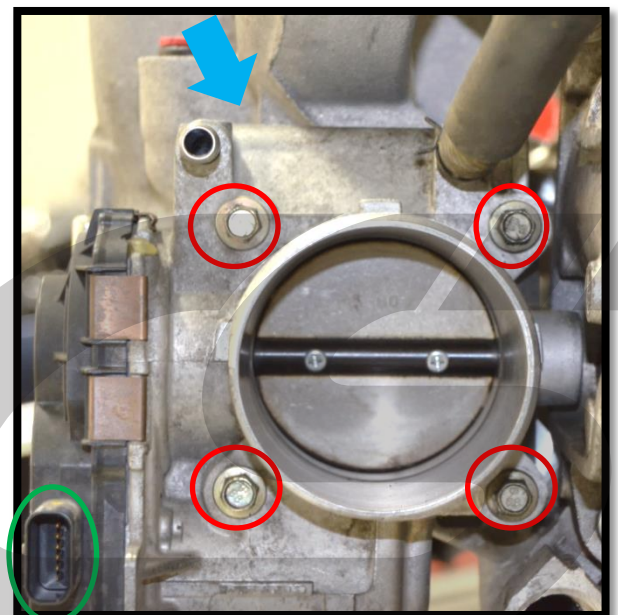


Figure 2b

## 3. CorkSport Throttle Body Spacer Installation

- a) **Inspect the O-ring to ensure that it is fully seated.** The O-ring should very slightly protrude from mounting face. See **red arrow** in **Figure 3a**.



Due to O-ring, the OE gasket is not needed between spacer and intake manifold. The OEM gasket will be used between throttle body and spacer if OE throttle body is reused.

- b) **Determine which port you will be using for your nozzle.** This can be done easily by partially threading a nozzle into the spacer and holding the spacer up to your intake manifold. See **Figure 3b** (bolts were used to hold the spacer in this case).



The spacer was design to install as shows in **Figure 3b** for best nozzle position. It is suggested that the nozzle be installed per manufacturer specification before the spacer is installed. Some nozzle designs will need to be modified to fit.

- c) **Apply teflon thread sealant to the two NPT plugs.** Holding the plugs with a 5mm allen wrench/socket makes this much easier. Follow sealant manufacturer's instructions for application. Liquid thread sealant is recommended as teflon tape can easily break off and enter your engine.

- d) **Install the NPT plugs in the port locations not used.** Tighten 2-3 turns past finger tight (~12-15ft.-lbs.). **Figure 3c** shows the plugs installed.

- e) **Install the nozzle in desired port location.** Follow manufacturer recommendations for sealant and tightening torque. **Figure 3c** shows an example nozzle installed.



Figure 3a



Figure 3b



Figure 3c

### 3. CorkSport Throttle Body Spacer Installation (continued)

- f) **Align the CorkSport Throttle Body Spacer to your intake manifold.** The O-ring sits against the intake manifold.
  
- g) **Using the supplied hardware, reinstall your throttle body.** If using an OEM throttle body, reuse the gasket removed earlier between the throttle body & spacer. Tighten the four bolts to **10-14ft-lbs.** Figure 3d shows the throttle body spacer & throttle body installed.

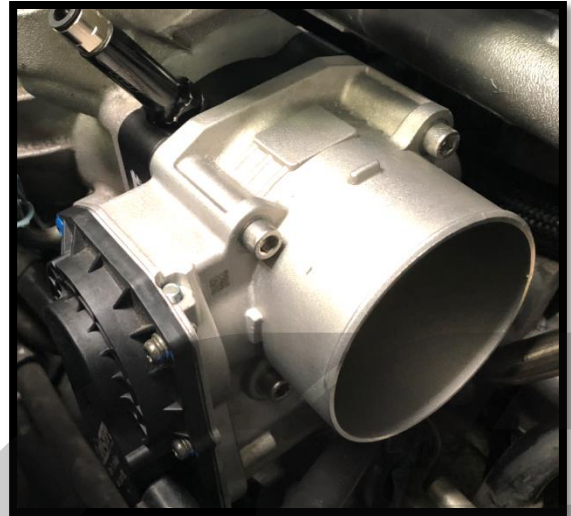


Figure 3d

### 4. Intercooler Cold Pipe Modification



This section will vary depending on your intercooler setup. The spacer is 20mm wide, so your silicone/piping will need to be adjusted by this amount. The below instructions are for TMIC setups with 90° silicone elbows.

- a) **Measure 20mm from the end of the throttle body side of your silicone.** Mark this 20mm all around the silicone. Figure 4a shows this measurement.
  
- b) **Using a fresh razor blade, cut along the line marked on the previous step.** Figure 4b shows the silicone after being cut.



Figure 4a



For straight silicone couplers, this procedure may also work, but you must ensure your cold pipe & throttle body are not hitting one another & you have enough silicone to clamp onto after the cut. Modification to the metal piping may be required.



Figure 4b

## 5. Engine Reassembly

- a) Reinstall any additionally removed components following OE procedures and torque specs.
- b) Follow Sections 1 and 2 in reverse to reinstall components removed in these instructions.



Complete your methanol system installation and/or check your entire system for leaks/function before checking for boost leaks.

- c) **Boost leak check the system** to verify there are no leaks from the throttle body, throttle body spacer, NPT plugs, or other components.



This completes the installation of your CorkSport 72mm Throttle Body Spacer. Perform a boost leak test and inspect for leaks and any loose fasteners before starting the vehicle! Enjoy!



## What's Next:

### CorkSport 72mm Throttle Body

The CorkSport 72mm Throttle Body takes performance and OE fitment and combines them to create a combination that performs and fits without compromise. If a higher flow capacity throttle body is what you desire, there is no substitute for the CorkSport Throttle Body.



### CorkSport Intake Manifold

Introducing the long-awaited CorkSport Intake Manifold for the DISI-MZR engine found in the Mazdaspeed 3 and Mazdaspeed 6. First impressions will quickly tell you this is a very different design and design goal than typically found in the performance aftermarket options for the MS3 and MS6; that's for good reason. The CorkSport Intake Manifold is a combination of performance and OE fitment without compromise. Equal flow, higher flow, tighter packaging, and TMIC fitment are aspects that define the CorkSport Intake Manifold



### CorkSport Dual VTA Bypass Valve

The CorkSport Binary VTA BPV provides features and performance to suit stock cars and on up to big turbo high power setups. The CorkSport Binary VTA BPV holds 50psi, responds in 50 milli-sec, and won't stall your car every shift. All this comes in a compact design with adjustability to allow for easy installation in even the most cramped engine bay or with custom piping.

