

# INSTALLATION INSTRUCTIONS



## **CORKSPORT** **Front Mount Intercooler Kit**

*2006-2007 Mazdaspeed 6*

**PART #: ATE-6-141-10**

*Need Help With Your Installation? Call (360)260-CORK*



*We absolutely, positively,  
deliver - every time.*

**CORKSPORT.COM**



## **CORKSPORT** **Front Mount** **Intercooler Kit** 2006-2007 Mazdaspeed 6

### **PRODUCT DESCRIPTION:**

Welcome to the new and improved CorkSport Front Mount Intercooler Kit for MS6! This kit centers around a large 21"x10"x3" bar & plate intercooler for optimum cooling. Coupled with it is redesigned mandrel bent aluminum piping that is sized to be the best combination of quick throttle response, flow capacity, and minimal boost lag. Tying everything together are custom reinforced silicone couplers that are optimized for minimal flex under high boost levels. If you're ready to take your MS6 to the next level, CorkSport is happy to help!

Please let us know your feedback of the by submitting a review at: <https://corksport.com/2006-2007-mazdaspeed-6-front-mount-intercooler-kit.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.

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

**NOTE** 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.

**!** Some trimming to the vehicle is required for installation of the CS MS6 FMIC kit. Do not attempt unless completely confident in your abilities and are fully committed to using this FMIC kit. Ensure you read the installation instructions carefully to prevent damage to your vehicle.

### **MATERIALS & TIME:**

#### GENERAL INFO:



Time Est:  
5hrs



Difficulty:  
4/5



CEL:  
No



Warranty:  
2-Year

#### PARTS LIST:





- One (1) CorkSport MS6 FMIC
- One (1) CorkSport MS6 FMIC Mounting Bracket
- One (1) CorkSport MS6 Hot Pipe Upper Section
- One (1) CorkSport MS6 Hot Pipe Lower Section
- One (1) CorkSport MS6 Cold Pipe Upper Section
- One (1) CorkSport MS6 Cold Pipe Lower Section
- One (1) CorkSport MS6 Compressor Outlet Silicone
- One (1) CorkSport MS6 Hot Pipe Silicone
- One (1) CorkSport 2.25" to 2.5" Silicone Adapter
- One (1) CorkSport MS6 Intercooler Outlet Silicone
- One (1) CorkSport MS6 Cold Pipe Silicone
- One (1) CorkSport 2.75" to 3" Silicone Adapter
- Five (5) 63-71mm Clamps
- Four (4) 70-78mm Clamps
- One (1) 77-85mm Clamp
- Two (2) 83-91mm Clamps
- One (1) M8x1.25 1" Tall Rubber Standoff
- Four (4) M8x1.25 Nyloc Nuts
- Eight (8) M8 Washers
- Two (2) M8x1.25x20mm Bolts with Thread Locker
- Two (2) M8x1.25x25mm Bolts
- Two (2) M6 18mm OD Washers
- Two (2) M6x1.0 Flange Nuts
- Two (2) M6x1.0x25mm Bolts
- One (1) CorkSport Shift Weight

#### TOOLING LIST:

- 8mm Wrench
- 10mm Wrench
- 12mm Wrench
- 13mm Wrench
- 8mm socket
- 10mm Socket
- 12mm Socket
- 13mm Socket
- 1/4" or 3/8" drive Ratchet
- Oscillating cutter & blades
- Grinder & cutoff wheel
- Hydraulic Jack
- Jack Stands
- Pliers
- Flathead Screwdriver

# ORDER OF OPERATIONS & TABLE OF CONTENTS:

---

	<b>VEHICLE DISASSEMBLY</b> Section 1: Removing the OEM TMIC & Couplers Section 2: Removing the Front Bumper	Pg. 4-5 Pg. 6-9
	<b>CORKSPORT FMIC INSTALL PREPARATION</b> Section 3: Trimming Radiator Core Support Section 4: Trimming Headlight Support & Crashbar Foam Section 5: Trimming Hood Latch Support Section 6: Trimming Front Bumper Section 7: Draining Engine Coolant	Pg. 9-12 Pg. 13 Pg. 14 Pg. 15 Pg. 16
	<b>CORKSPORT FMIC INSTALLATION</b> Section 8: Installing the CorkSport Intercooler Section 9: Installing the CorkSport Cold Pipes Section 10: Installing the CorkSport Hot Pipes	Pg. 17-18 Pg. 19-23 Pg. 23-26
	<b>VEHICLE REASSEMBLY</b> Section 11: Vehicle Reassembly	Pg. 27

## DETAILED INSTRUCTIONS:

### 1. Removing the OEM TMIC & Couplers



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.



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



The vehicle shown had a CorkSport upgraded TMIC. Disassembly is identical.

- b) Remove the two 10mm bolts holding the OEM TMIC shroud. Shown circled in red in Figure 1a. Then remove the TMIC shroud.
- c) Loosen the clamps at the inlet and outlet of the intercooler using a 10mm deep socket and ratchet. Clamps shown with red arrows in Figure 1b.
- d) Remove the three 12mm nuts that bolt the TMIC to the engine. Shown with blue in Figure 1b.
- e) Remove the BPV hose from your BPV. Shown with blue hose and green arrow in Figure 1b.
- f) Remove the OEM TMIC from the vehicle.

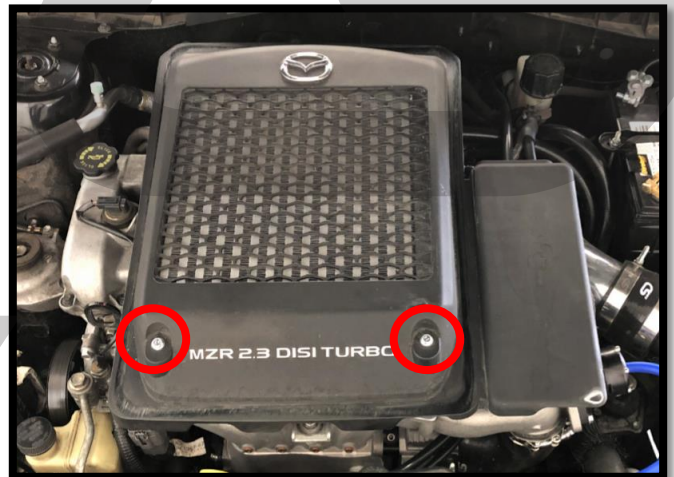


Figure 1a

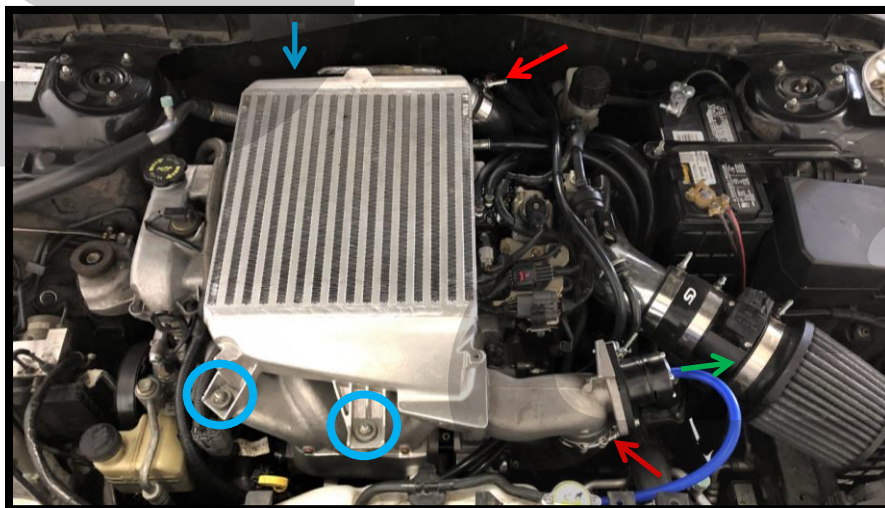


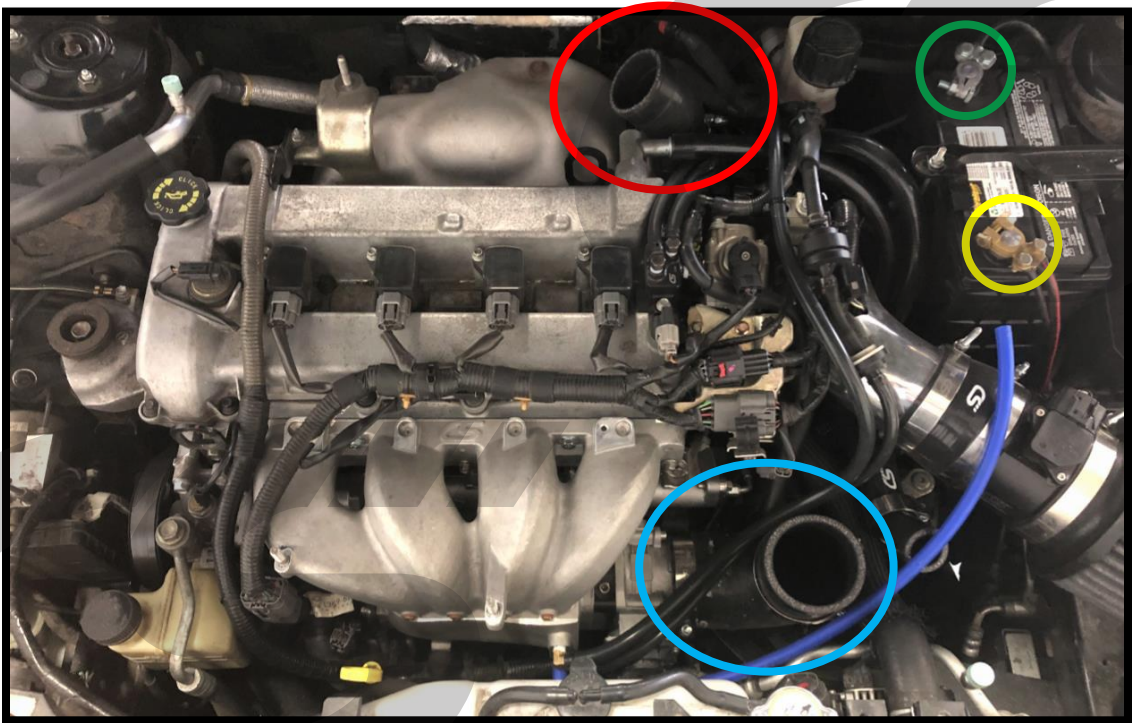
Figure 1b



## DETAILED INSTRUCTIONS:

### 1. Removing the OEM TMIC & Couplers (cont.)

- g) Locate the coupler coming off the turbocharger. Using a 10mm deep socket and ratchet loosen the clamp holding this coupler to the turbocharger. Then remove this coupler from the vehicle. Coupler shown with **red circle** in **Figure 1c**.
- h) Locate the coupler coming off the throttle body. Using a 10mm deep socket and ratchet loosen the clamp holding this coupler to the throttle body. Then remove this coupler from the vehicle. Coupler shown with **blue circle** in **Figure 1c**.



**Figure 1c**

- i) **While in this area, disconnect your battery as we will be unplugging a sensor in the airbag system.** Start by disconnecting the negative terminal, then disconnect the positive terminal. Negative shown **circled in green**, positive **circled in yellow** in **Figure 1c**.
- j) **Remove the lower portion of your short ram intake.** Unplug the MAF sensor, and loosen the clamp that connects the SRI to your turbo inlet pipe. Then remove this portion of your SRI.



The previous step is optional as the FMIC kit can be installed without removing your intake, however, we recommend removing your SRI for easiest access.

## **DETAILED INSTRUCTIONS:**

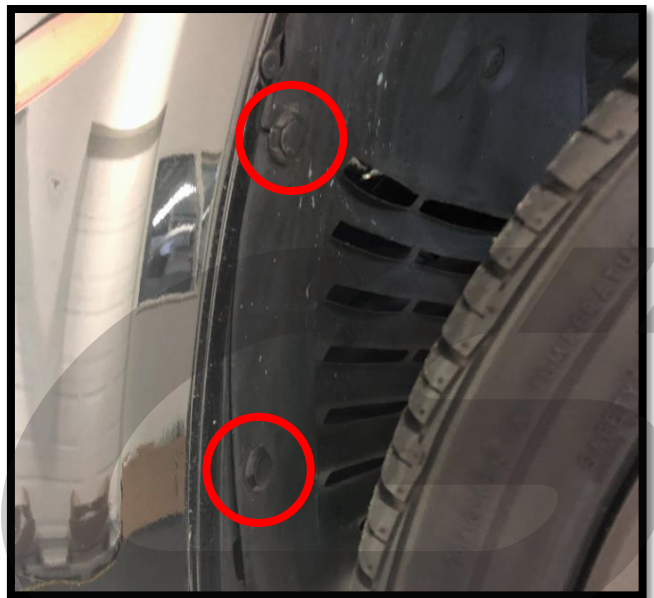
### **2. Removing the Front Bumper**

- a) From the top edge of the grill, remove the two phillips head screws. Shown **with red arrows** in **Figure 2a**.
- b) From the top edge of the grill, remove the two push clips. Shown **with blue arrows** in **Figure 2a**.



**Figure 2a**

- c) Moving to the fender liner, remove the two push clips in front of the driver's side tire. Shown **circled with red** in **Figure 2b**.



**Figure 2b**

## **DETAILED INSTRUCTIONS:**

### **2. Removing the Front Bumper (cont.)**

- d) Pull the fender liner back and look upwards at the corner of the bumper. Remove the 8mm bolt in this location. Where to look shown in **Figure 2c**, bolt shown **circled in red** in **Figure 2d**.

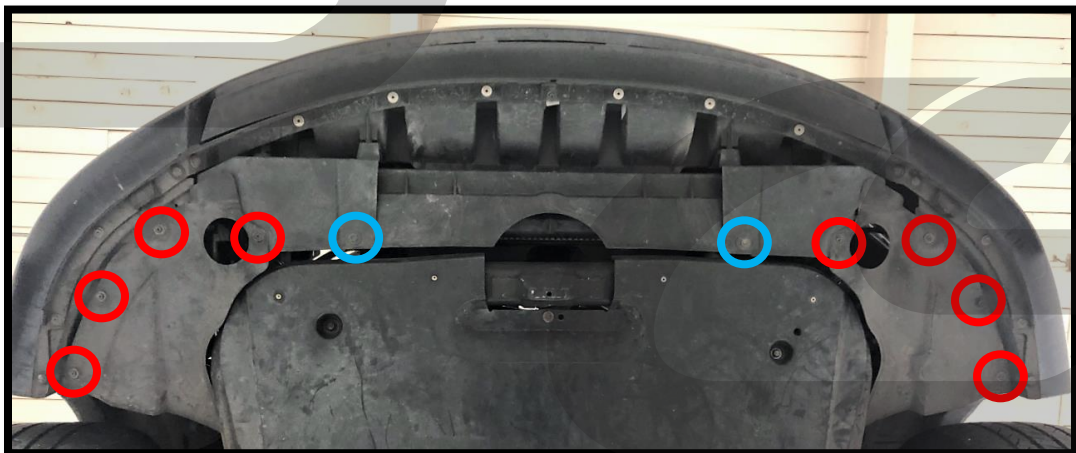


**Figure 2c**



**Figure 2d**

- e) Repeat steps 2c and 2d on the passenger side of the vehicle.
- f) Moving to underneath the front bumper, remove the eight, 8mm bolts from the undersides of the fender liners. Shown **circled in red** in **Figure 2e**.
- g) Remove the two 10mm bolts that attach the bumper to the core support. Shown **circled in blue** in **Figure 2e**.



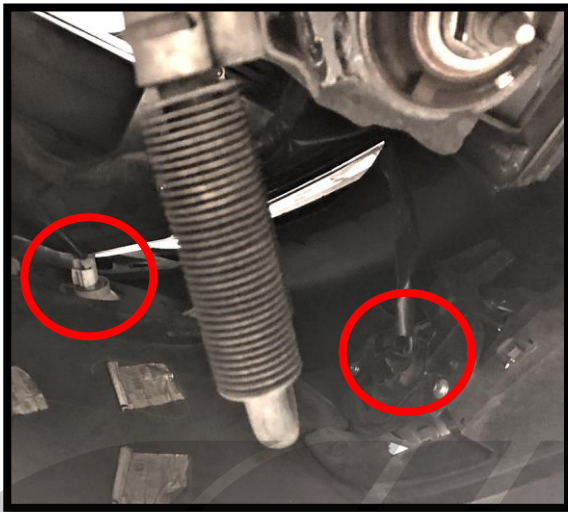
**Figure 2e**



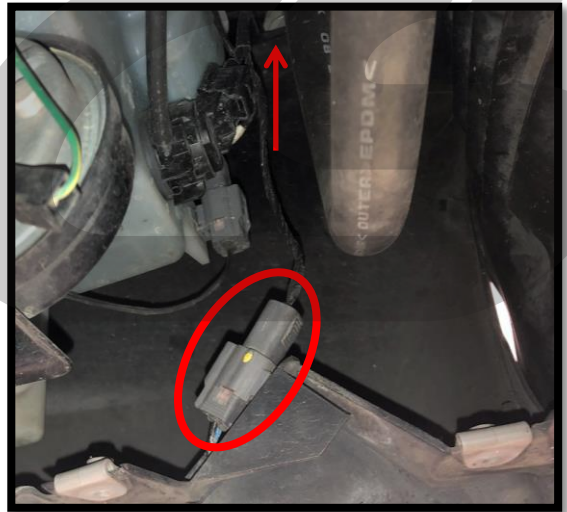
## **DETAILED INSTRUCTIONS:**

### **2. Removing the Front Bumper (cont.)**

- g) Pull the bottom of the driver's side fender liner down and look up into the opening. Unplug the two electrical plugs connected to the bumper. One low down at the fog light, and one high up at the turn signal. Shown **circled in red** in **Figure 2f**.
- h) Repeat Step 2g on the passenger's side of the vehicle. The fog light plug is right on the bottom edge of the bumper and the turn signal is up high behind the washer bottle. **Shown in red** in **Figure 2g**.



**Figure 2f**



**Figure 2g**



At this point we recommend using blue painters tape to protect the bumper and fender from any scratches during removal/install. Tape around the fender to bumper seams and around the headlights. Blue tape not shown to help with clarity of the install instructions.

- i) Starting on the driver's side, pull out the corner of the bumper. Pull in the direction shown with **red arrows** in **Figure 2h**. Clips will be release as you work your way toward the headlight.



**Figure 2h**



## DETAILED INSTRUCTIONS:

### 2. Removing the Front Bumper (cont.)

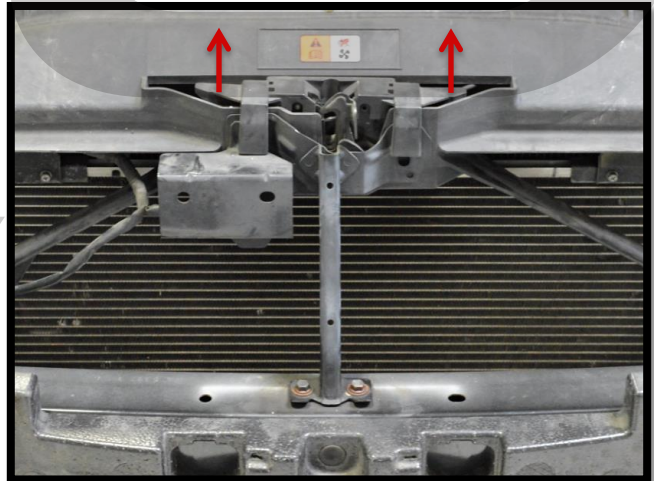
- j) Once you bumper is popped out like shown in **Figure 2i**, it is free from the vehicle. Have a friend hold the drivers side of the bumper while you release the clips on the passenger side of the bumper.
- k) Once complete, remove the bumper from your vehicle and set aside where it will not get damaged.



**Figure 2i**

### 3. Trimming Radiator Core Support

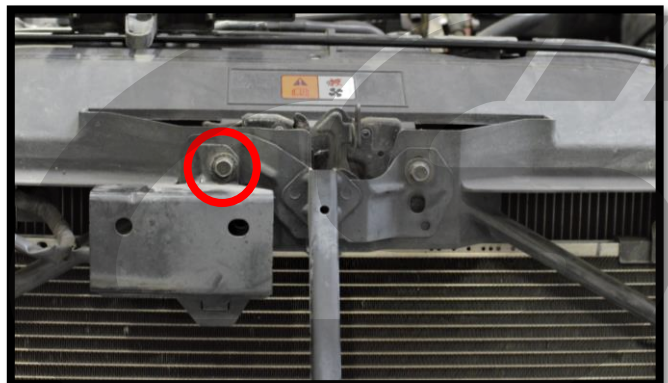
- a) Remove the plastic hood latch cover. It is removed by pulling upwards as shown in **Figure 3a**.
- b) Remove the metal airbag sensor cover by removing one 10mm bolt. Bolt **circled in red** in **Figure 3b**. Once the bolt is removed, the cover can be removed.



**Figure 3a**



Before moving on to the next step, ensure your battery is disconnected. Failure to disconnect your battery can cause issues with your vehicle's airbag system.

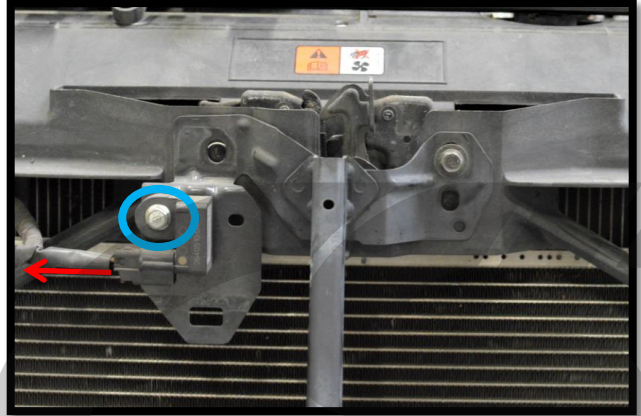


**Figure 3b**

## DETAILED INSTRUCTIONS:

### 3. Trimming Radiator Core Support (cont.)

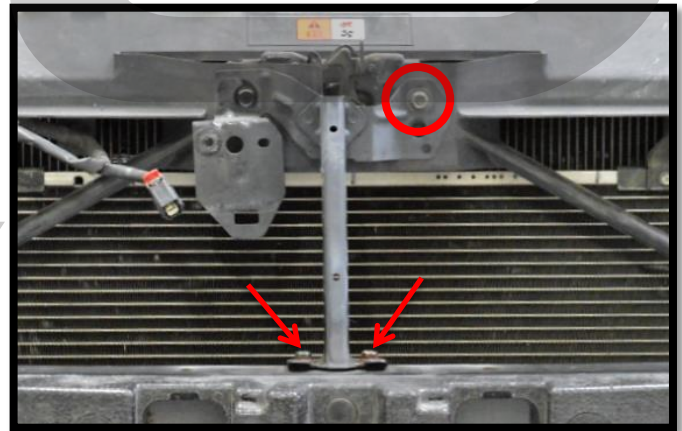
c) Unplug and remove the airbag sensor. Pull the red locking tab outward, then unplug the sensor. Shown in **Figure 3c**.



**Figure 3c**

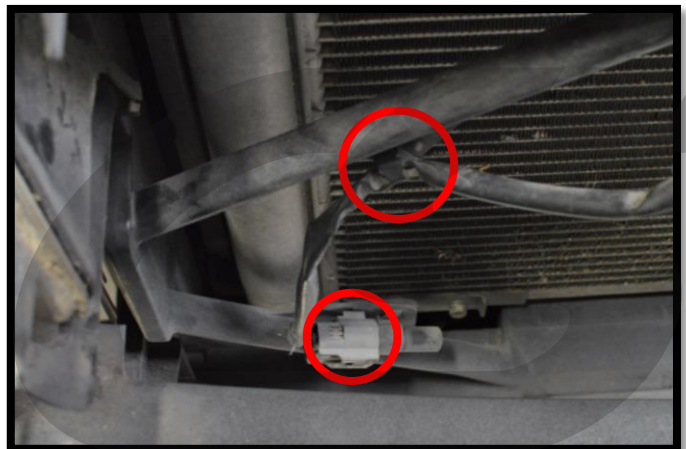
d) Remove the airbag sensor by removing the 10mm bolt circled in blue in **Figure 3c**. Then removed the sensor from the vehicle. This keeps the sensor safe during trimming and intercooler installation.

e) Remove the hood latch support by removing the remaining three 10mm bolts that attach it to the vehicle. Shown in red in **Figure 3d**.



**Figure 3d**

f) Unclip the air temperature sensor located on the passenger side of the core support. Unclip the two clips circled in red in **Figure 3e**.



**Figure 3e**

## DETAILED INSTRUCTIONS:

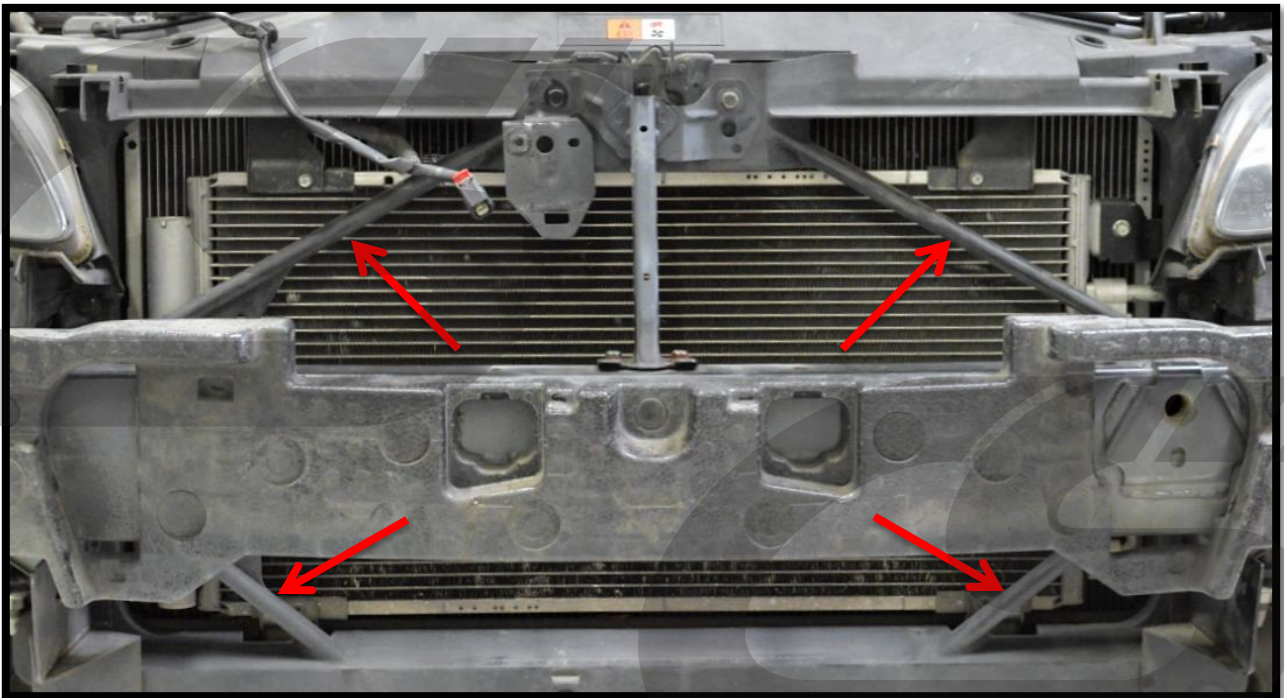
### 3. Trimming Radiator Core Support (cont.)

**NOTE** We recommend an oscillating cutter to give the cleanest cut when removing the radiator support arms. A reciprocating saw with a fine tooth blade or a die grinder and cutoff wheel will also work fine.

**!** When trimming, be very careful to not damage any wiring or the A/C condenser.

**NOTE** Removal of these radiator support arms does not affect the vehicle's functionality or safety in any way.

- g) Cut off the radiator support arms shown with **red arrows** in **Figure 3f**. Cut off each arm where it attaches to the radiator core support, as shown with the **red lines** in **Figures 3g, 3h, and 3i** on the following page.
- h) Clean up sharp edges and/or plastic residue as needed once cutting is complete.
- i) **After cutting, relocate your air temperature sensor.** There are typically some holes on the passenger side of the radiator core support that the sensor can clip into. If not, zip-tie the sensor to the passenger side of the core support.

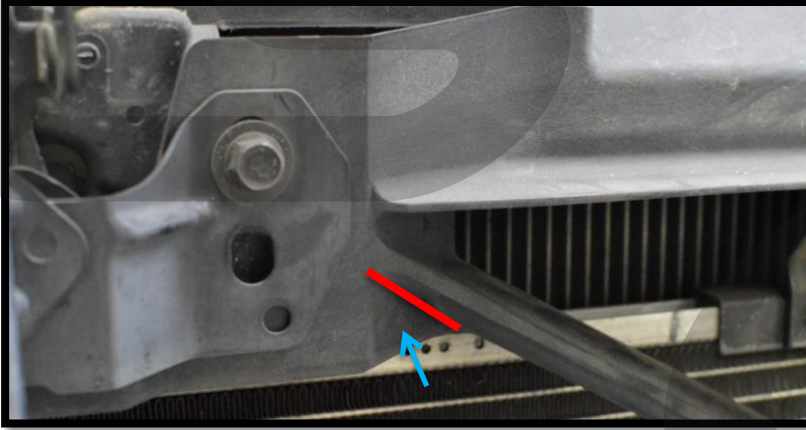


**Figure 3f**



## **DETAILED INSTRUCTIONS:**

### **3. Trimming Radiator Core Support (cont.)**

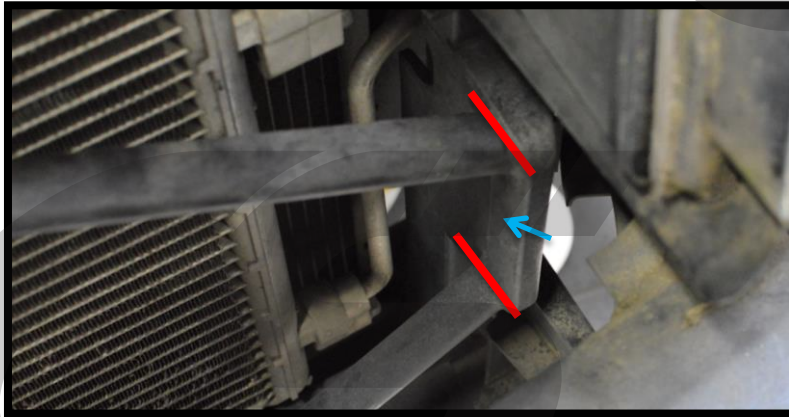


**Figure 3g**

This is the upper driver's side support near the hood latch.

Cut parallel to the angled face shown with the blue arrow.

The upper passenger's side support can be cut in the same way.

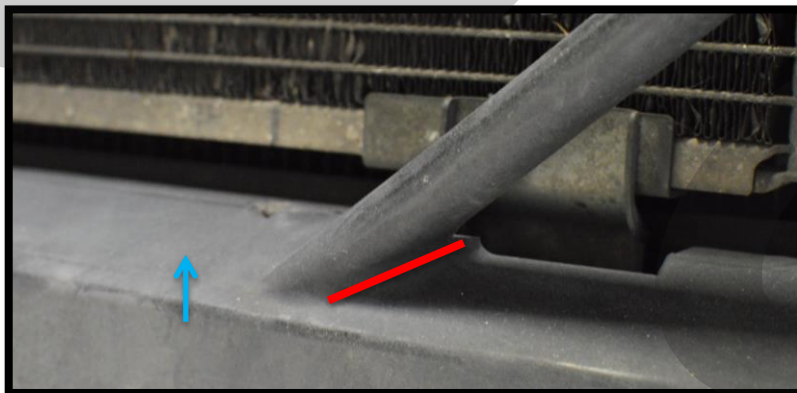


**Figure 3h**

This is the driver's side of the core support, below the headlight. Both the upper and lower supports connect in this area.

Cut parallel to the flat face shown with the blue arrow.

The passenger's side support can be cut in the same way.



**Figure 3i**

This is the lower driver's side support at the bottom of the core support

Cut parallel to the angled face shown with the blue arrow.

The lower passenger's side support can be cut in the same way.



## **DETAILED INSTRUCTIONS:**

### **4. Trimming Headlight Support & Crashbar Foam**

**NOTE** We recommend an oscillating cutter to give the cleanest cut when trimming around the headlight. A reciprocating saw with a fine tooth blade or a die grinder and cutoff wheel can also work okay.

**!** When trimming, be very careful to not damage the headlight. Removal of too much headlight support material can result in an unstable headlight or saggy bumper.

- a) Use **Figure 4a** below as a guide for trimming the driver's side headlight support and crashbar foam. Follow the image as closely as you can to ensure best fitment of the piping and minimal trimming needed. If having issues fitting pipes later on, return to this step.



**Figure 4a**

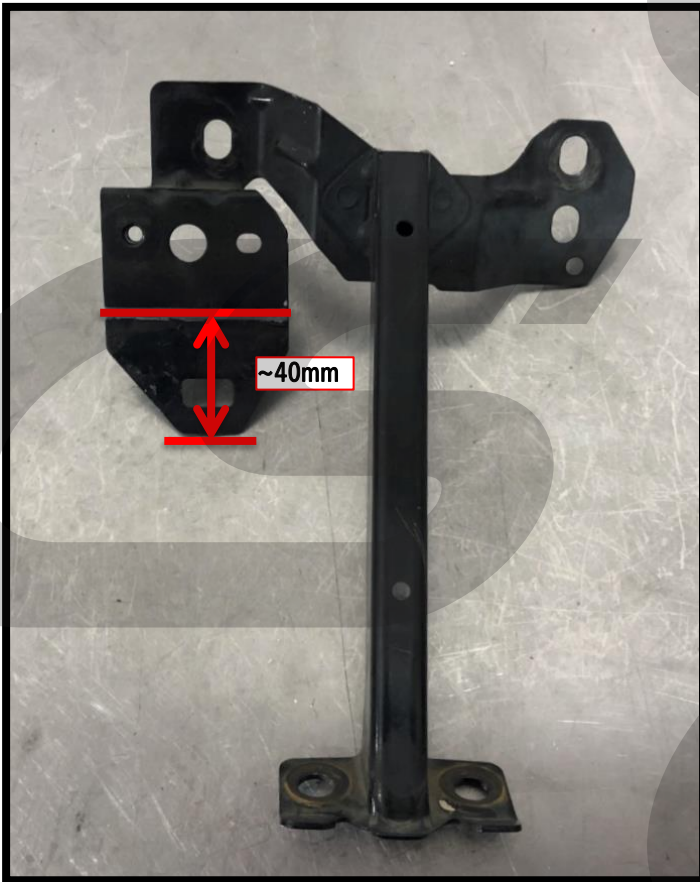
## DETAILED INSTRUCTIONS:

### 5. Trimming Hood Latch Support

**NOTE** We recommend a die grinder or angle grinder with cutoff wheel to give the cleanest cut when trimming the hood latch support. Other metal cutting methods will also work fine.

**!** After trimming, be sure to apply a small amount of paint to the hood latch support to prevent corrosion.

- Measure approximately 40mm (1.57in) from the bottom of the hood latch support as shown in **Figure 5a**. Draw a line across the support in this location.
- Using a cutoff wheel, cut along the line you created. You will be left with the hood latch support shown in **Figure 5b**.



**Figure 5a**



**Figure 5b**

## DETAILED INSTRUCTIONS:

### 6. Trimming Front Bumper

**NOTE** We recommend an oscillating cutter to give the cleanest cut when trimming around the headlight. A reciprocating saw with a fine tooth blade or a die grinder and cutoff wheel can also work okay.

- Locate the corner of the front bumper circled in red in Figure 6a.
- Mark a angled line that takes off approximately 12mm (0.50in) off of this corner.
- Cut off this corner for clearance of the FMIC piping. Shown completed in Figure 6b.

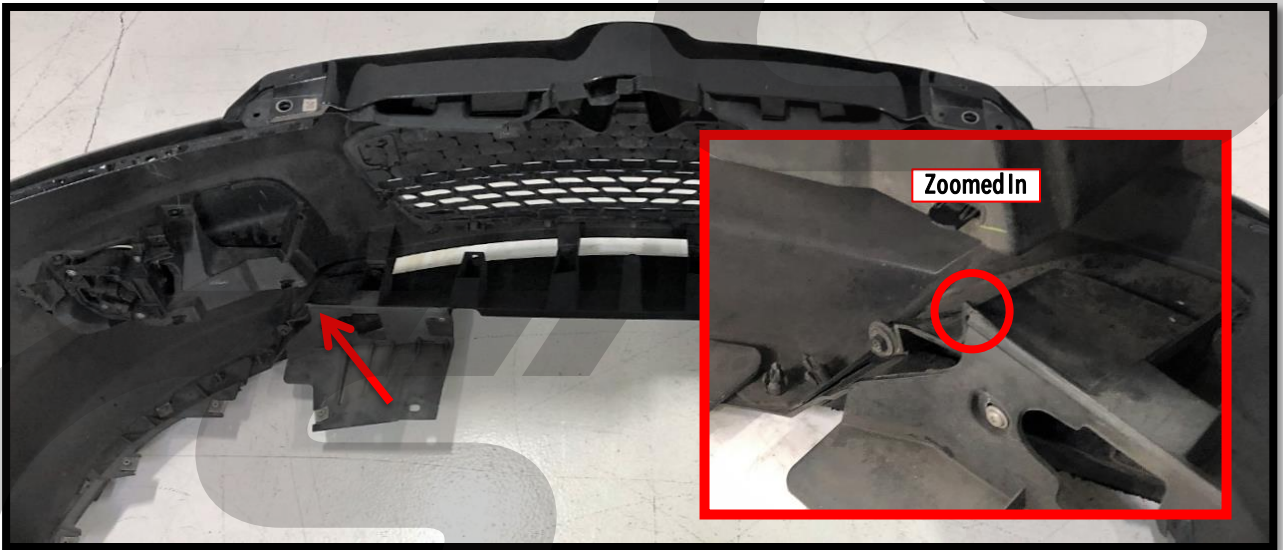


Figure 6a



Figure 6b



## **DETAILED INSTRUCTIONS:**

### **7. Draining Engine Coolant**

a) From underneath the car, locate the bottom radiator drain plug located in the center of the radiator. It is **circled in red** in **Figure 7a** and located just behind the front jacking point.

b) Drain approximately one gallon of coolant by **unscrewing the radiator plug**. This should be about the maximum your car will want to drain out of the radiator.



The vehicle used for images had a non-OEM radiator drain plug. Regular OEM plugs use a 10mm or 12mm hex.

c) Once draining complete, replace the drain plug. **Only tighten hand tight, these are plastic and can break very easily!**



The coolant drained can be reused if you catch it in a clean container. This easily done with a clean milk jug and a funnel.



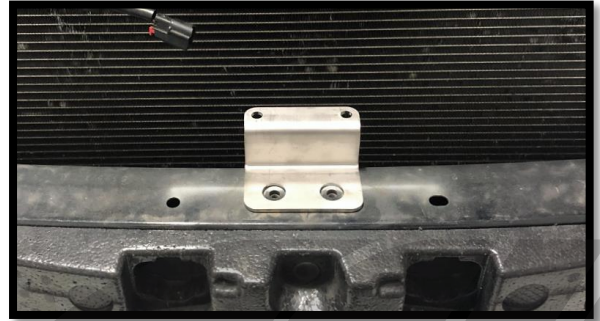
**Figure 7a**



## DETAILED INSTRUCTIONS:

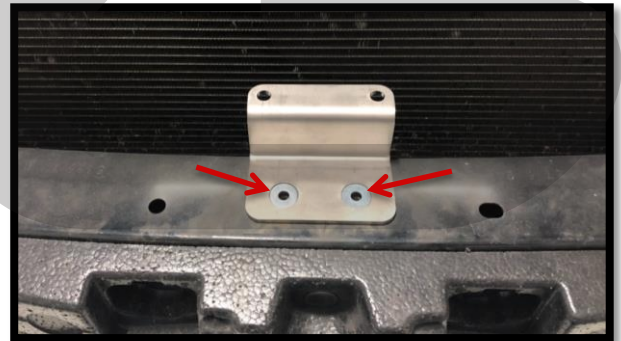
### 8. Installing the CorkSport Intercooler

- a) Place the supplied intercooler mounting bracket on top of the crashbar. It will fit over the two hood latch support mounts. Shown positioned correctly in **Figure 8a**.



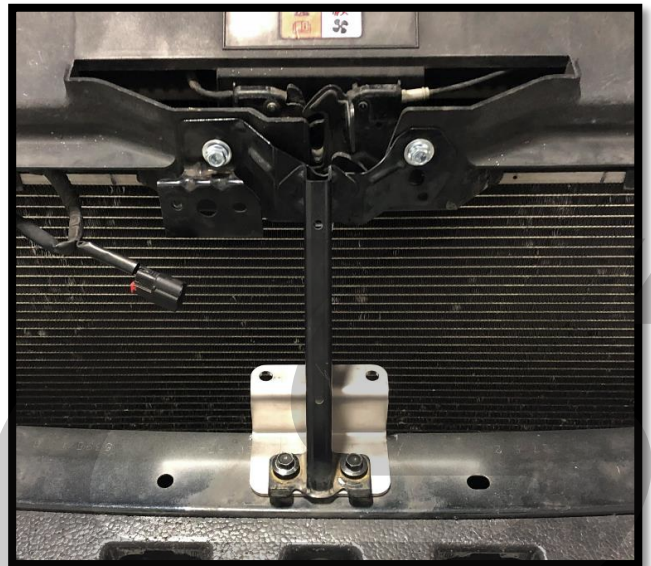
**Figure 8a**

- b) Place the two supplied M6 18mm OD washers in the holes of the supplied mounting bracket. These act as spacers so the hood latch support mount is solid. Shown in position in **Figure 8b** with the red arrows.



**Figure 8b**

- c) Reinstall the trimmed hood latch support using the OEM hardware. Tighten to **12-15ft-lbs**. Shown installed in **Figure 8c**.



**Figure 8c**

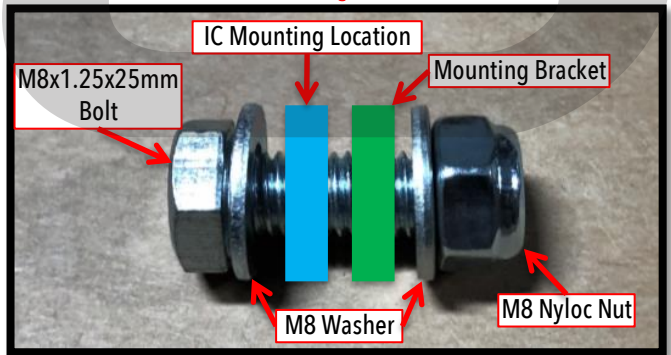
## DETAILED INSTRUCTIONS:

### 8. Installing the CorkSport Intercooler (cont.)

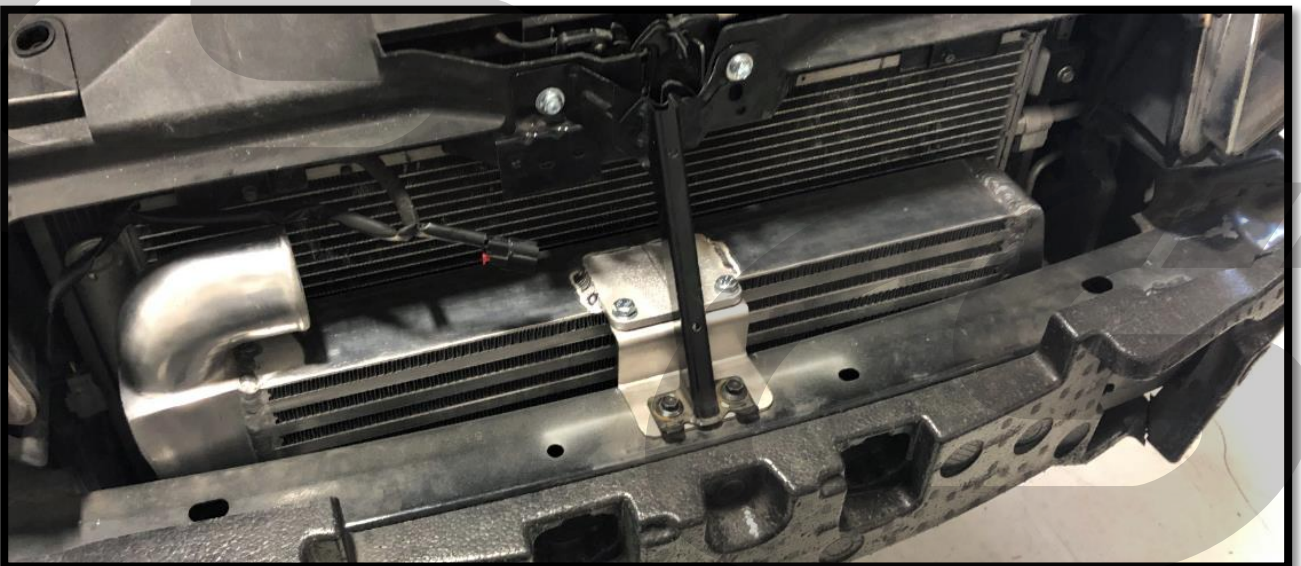
- d) Remove the OEM radiator ducting on the driver's side of the radiator core support. There is one 10mm bolt on the front of the core support (circled in red in **Figure 8d**) and a clip that must be released from the backside of the radiator.
- e) Lift the CorkSport intercooler into position. It fits between the crashbar and the A/C condenser. The mounting location welded to the intercooler sits on top of the bracket you just installed in Step 7a-7c. See **Figure 8f** for clarity.
- f) Secure the intercooler to the vehicle using the supplied M8 hardware. See **Figure 8e** for the correct hardware stack. Only hand tighten for now.
- g) Position the intercooler so it is straight and parallel to the A/C condenser and radiator. Then move it forward and/or backwards as needed until the intercooler has clearance to all components of the vehicle. See **Figure 8f** for clarity.
- h) Once satisfied with alignment, tighten the M8 bolts using a 13mm socket and ratchet to **19-21ft-lbs.**



**Figure 8d**



**Figure 8e**

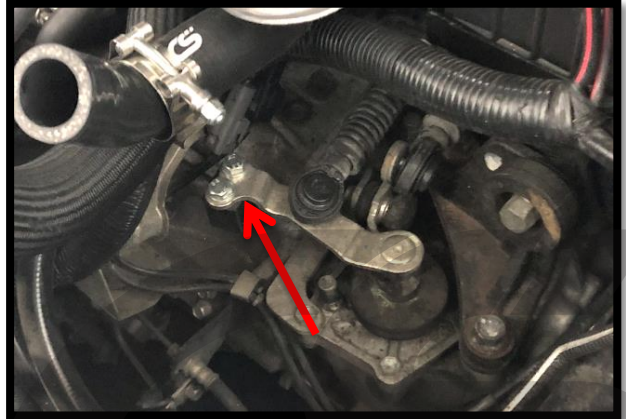


**Figure 8f**

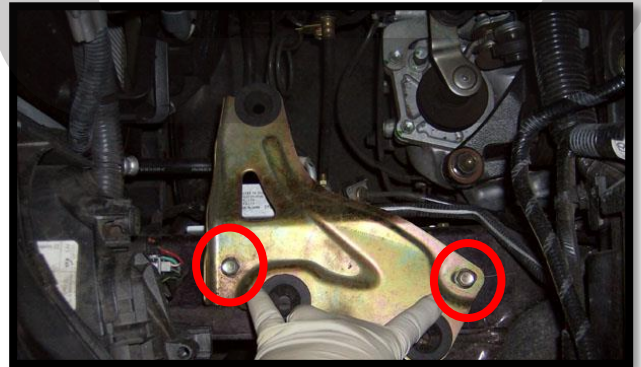
## DETAILED INSTRUCTIONS:

### 9. Installing the CorkSport Cold Pipes

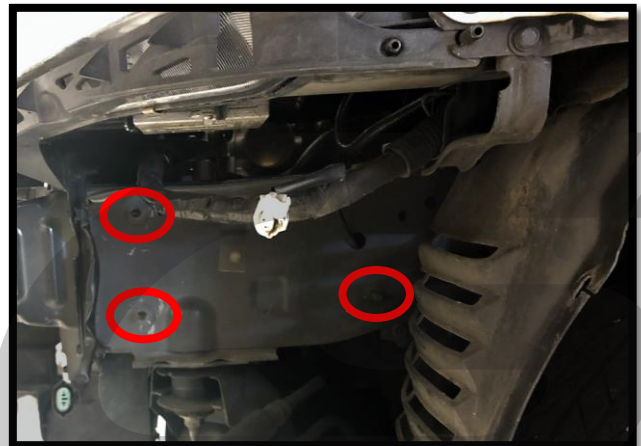
- a) Remove the OEM shift weight using a 12mm socket and ratchet. Location shown in **Figure 9a**.
  
- b) Install the supplied CorkSport shift weight using the supplied M8 washers and M8 bolts with thread locker. Shown completed in **Figure 9a**.
  
- c) If you still have the OEM intake mounting bracket on top of the driver's side frame rail, remove it now using a 12mm socket and ratchet. Bolt locations shown **circled in red** in **Figure 9b**.
  
- d) If you still have the OEM lower airbox resonator located on the side of the driver's side frame rail, remove it now using a 12mm socket and ratchet. Mounting locations shown **circled in red** in **Figure 9c**.



**Figure 9a**



**Figure 9b**



**Figure 9c**



## DETAILED INSTRUCTIONS:

### 9. Installing the CorkSport Cold Pipes (cont.)

- e) Insert the supplied 2.75" to 3" coupler onto the OEM throttle body. The smaller 2.75" end fits over the OEM throttle body.



The vehicle used for images had a CS throttle body and spacer installed. Installation on OEM throttle body is identical, however a 3" straight coupler is shown.

- f) Secure this silicone using the supplied 77-85mm clamp. Tighten clamp until snug. The silicone will bulge slightly at the edge of the clamp when tight. Shown completed in **Figure 9d** with **red circle**.

- g) Using needle nose pliers, loosen the upper radiator hose clamp. Then remove this hose from the radiator. Shown **circled in blue** in **Figure 9d**. Also shown removed in **Figure 9e**.

- h) Insert the upper cold pipe section into the engine bay. This is the large 3" pipe with the BPV flange attached. The curved end fits down in the area circled in red in **Figure 9e**. Lift the upper radiator hose over this pipe during installation.

- i) Slide the other end of the upper cold pipe section into the silicone adapter on the throttle body. Add a 83-91mm clamp over this connection but do not yet tighten. Shown in **Figure 9f**.

- j) Reinstall the upper radiator hose and clamp.

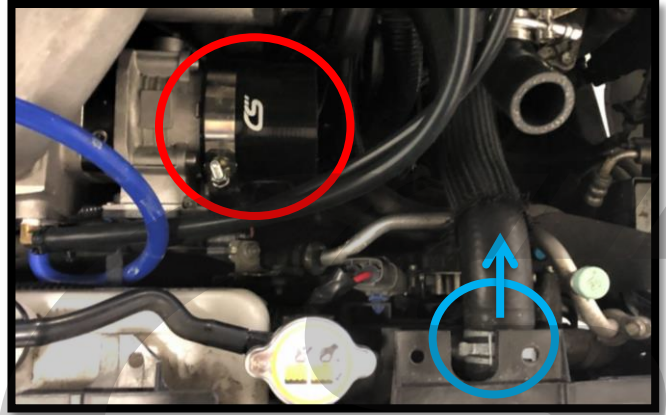


Figure 9d

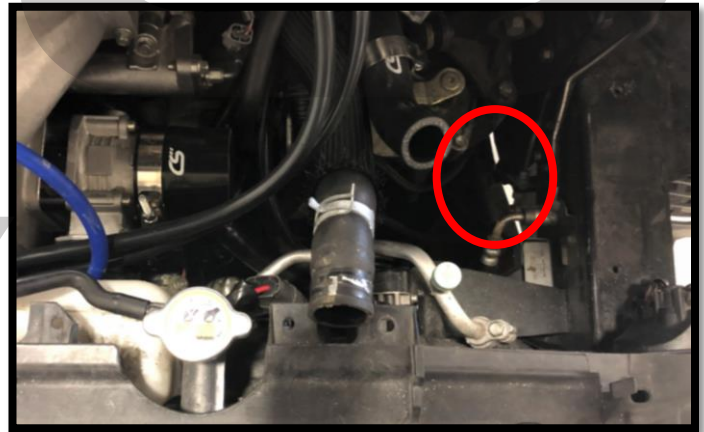


Figure 9e

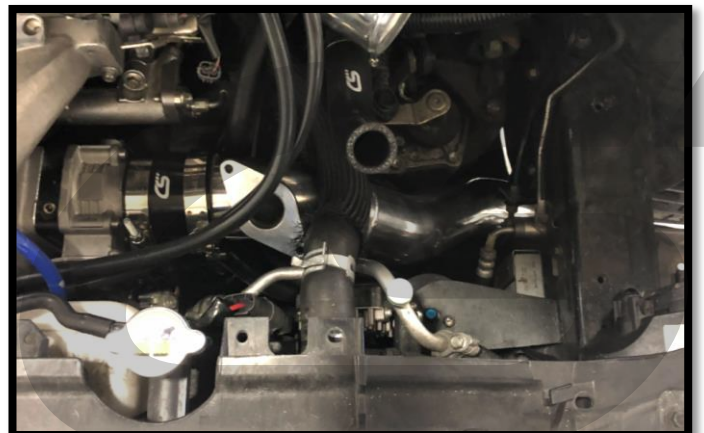


Figure 9f



## **DETAILED INSTRUCTIONS:**

### **9. Installing the CorkSport Cold Pipes (cont.)**

- k) Moving to the driver's side fender liner, install the large end of the cold pipe silicone over the end up the upper cold pipe section. End of the upper cold pipe shown in **Figure 9g** and cold pipe silicone shown installed in **Figure 9h**.



**Figure 9g**



**Figure 9h**

- l) Add one of the supplied 83-91mm clamps to this connection. Leave loose for now. Shown in **Figure 9h**.
- m) Install the lower cold pipe section. This is the short 2.5" pipe with the bracket attached. Insert the end closest to the bracket into the cold pipe silicone and slide the hole in the bracket onto the mounting stud **with red arrow** in **Figure 9i**.
- n) Add one of the supplied 70-78mm clamps to this connection. Leave loose for now.
- o) Add one of the supplied M8 washers and supplied M8 Nyloc nuts to the mounting stud. Leave loose for now.



**Figure 9i**

## DETAILED INSTRUCTIONS:

### 9. Installing the CorkSport Cold Pipes (cont.)

- k) **Install the intercooler outlet silicone.** Connect one end to the lower cold pipe section and the other end to the intercooler outlet. Shown installed in **Figure 9j**.
- l) **Add a 70-78mm clamp to each of the connections of the intercooler outlet silicone.** Leave both loose for now.
- m) **Begin tightening by first tightening the M8 Nyloc nut on the lower cold pipe mounting stud with a 13mm socket and ratchet.** Tighten this nut to **19-21ft-lbs.** Centering this stud in the slot on the mounting bracket is a good start for pipe alignment.
- n) **Once this mounting stud is tightened, double check fitment on all pipes.** Ensure no pipes or silicone are touching the vehicle where they could rub or make noise.
- o) **Once happy with fitment, tighten all clamps until snug.** The silicone will bulge slightly at the edge of the clamps when tight. Follow the clamp alignment in **Figure 9k** to ensure the clamps will not hit the bumper once reinstalled.
- p) **Remove your BPV from your OEM TMIC.** Remove the two OEM 10mm bolts.
- q) **Install your BPV onto the CS upper cold pipe section using the supplied M6 bolts and flange nuts.** Follow the alignment shown in **Figure 9l**. Tighten the 10mm bolts until snug using a 10mm socket and wrench.



Figure 9j



Figure 9k

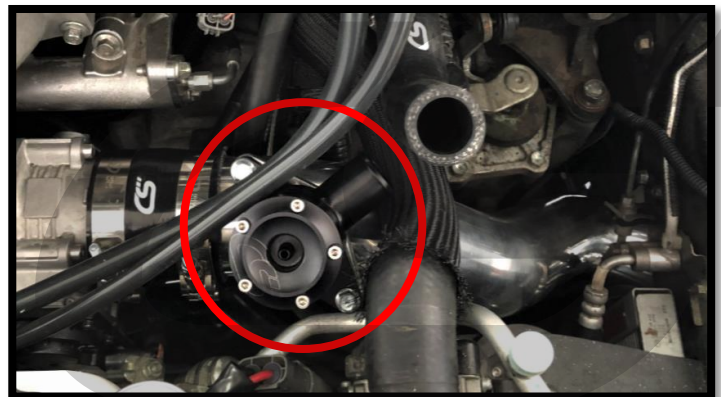
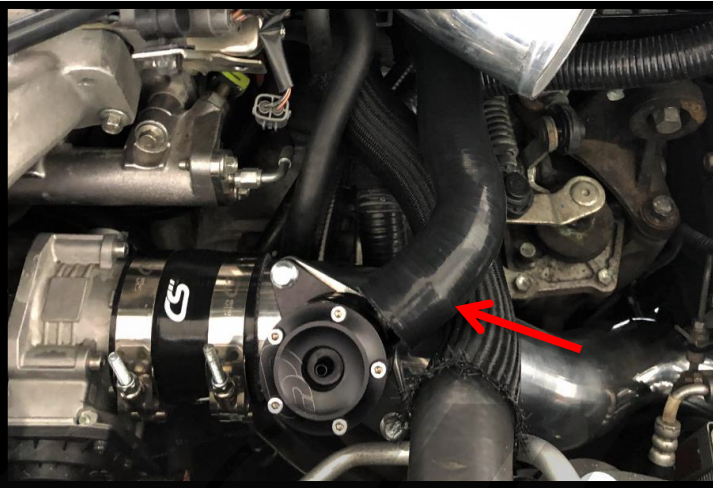


Figure 9l

## **DETAILED INSTRUCTIONS:**

### **9. Installing the CorkSport Cold Pipes (cont.)**

- r) **Rotate your BPV hose so that it can connect to the new location of your BPV.** Trace your BPV hose back to your turbo inlet pipe. Loosen the clamp on your BPV hose and rotate it. Shown rotated in **Figure 9m**.
- s) **Reconnect your BPV clamps and tighten until snug.**
- t) **Reattach your BPV boost reference hose to the top of your BPV.** Shown completed in **Figure 9n**.



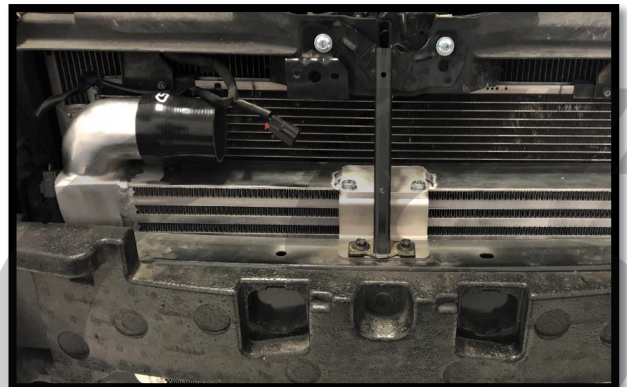
**Figure 9m**



**Figure 9n**

### **10. Installing the CorkSport Hot Pipes**

- a) **Install the supplied 2.5" to 2.25" silicone adapter onto the inlet of the intercooler.** The larger end will fit onto the intercooler as shown in **Figure 10a**.
- b) **Add one of the supplied 70-78mm clamps to this connection.** Leave it loose for now.



**Figure 10a**

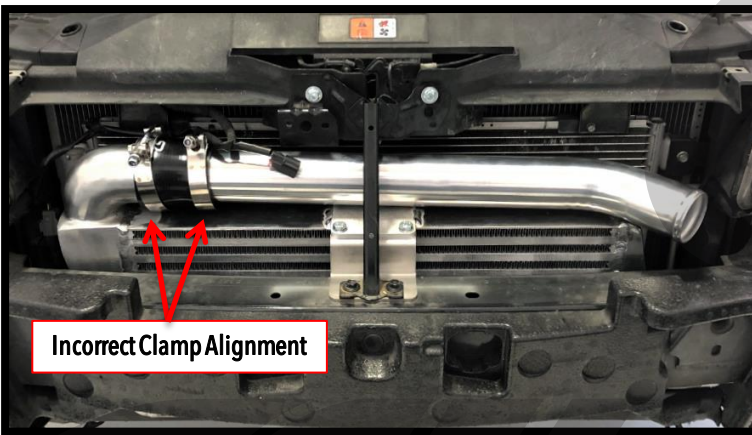


## DETAILED INSTRUCTIONS:

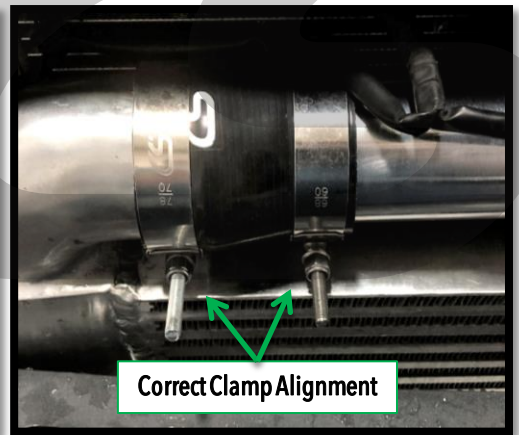
### 10. Installing the CorkSport Hot Pipes (cont.)

- c) Install the long straight end of lower hot pipe section into the silicone adapter. Shown in **Figure 10b**.
- d) Add one of the supplied 63-71mm clamps to this connection. Leave it loose for now.

**NOTE** The clamps shown in **Figure 10b** are in an incorrect alignment and will hit the bumper. Follow **Figure 10c** for correct clamp alignment on this coupler. Do not yet tighten clamps.



**Figure 10b**



**Figure 10c**

- e) Install the hot pipe silicone onto the end of the lower hot pipe. Feed the pipe under the headlight and then slide the lower hot pipe into the silicone. This piece of silicone only really fits one way but if concerned, the "CS" logo will be upright. Shown in **Figure 10d**.
- f) Add one of the supplied 63-71mm clamps to this connection. Leave it loose for now.

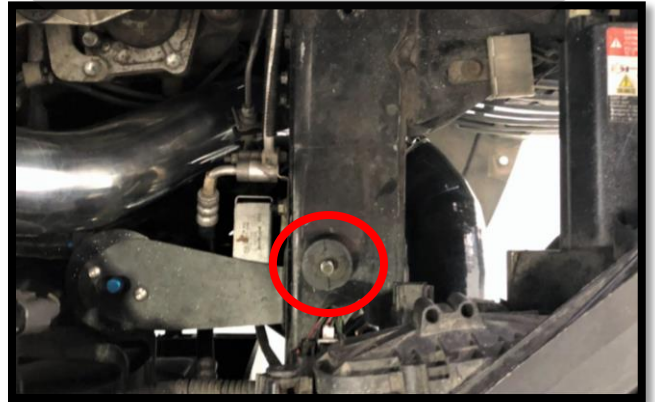


**Figure 10d**




**DETAILED INSTRUCTIONS:****10. Installing the CorkSport Hot Pipes (cont.)**

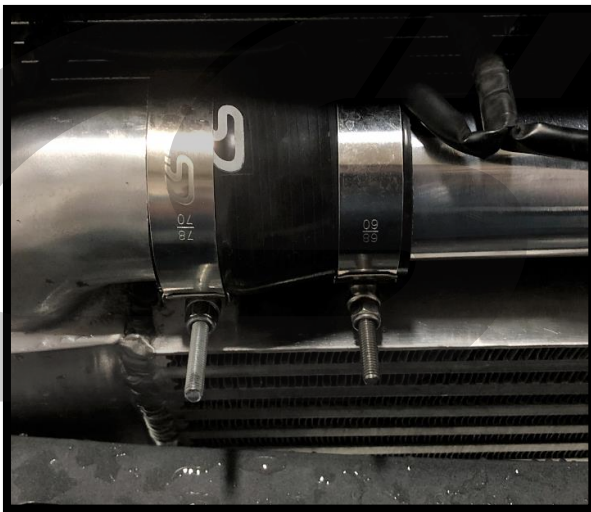
- g) Install the turbocharger outlet silicone onto the turbocharger. Align it in the approximate orientation shown in **Figure 10e**.
- h) Add one of the supplied 63-71mm clamps to this connection. Leave it loose for now.
- i) Install the supplied M8 rubber isolator into the front mounting hole used in the OEM intake bracket. Tighten hand tight. Shown in **Figure 10f circled in red**.
- j) Install the upper hot pipe section into the vehicle. Lift it into position, then place the mounting bracket over the M8 isolator installed in the previous step. Finally, connect the ends to the turbo outlet silicone and hot pipe silicone. Shown partially installed in **Figure 10g**.
- k) Add one of the supplied M8 washers and supplied M8 Nyloc nuts to the stud on the rubber isolator. Leave loose for now.
- l) Add a 63-71mm clamp to each of the connections of the upper hot pipe section. Leave both loose for now.

**Figure 10e****Figure 10f****Figure 10g**

## DETAILED INSTRUCTIONS:

### 10. Installing the CorkSport Hot Pipes (cont.)

- m) Begin tightening by first tightening the M8 Nyloc nut on the upper hot pipe mounting bracket with a 13mm socket and ratchet. Tighten this nut to **19-21ft-lbs.** Centering the isolator stud in the slot on the mounting bracket is a good start for pipe alignment.
- n) Once this mounting stud is tightened, double check fitment on all pipes. Ensure no pipes or silicone are touching the vehicle where they could rub or make noise. Some contact on the hot pipe silicone under the headlight is normal. **Ensure no sharp edges can touch this silicone.**
-  Ensure you have plenty of room between the hot pipe upper section and the positive battery terminal. This is especially an issue if you do not have a positive battery terminal cover on a stock sized battery. The terminal can contact the pipe and arc if the pipe is aligned poorly.
- o) Once happy with fitment, tighten all clamps until snug. The silicone will bulge slightly at the edge of the clamps when tight. Follow the clamp alignment in **Figure 10h** and **10i** to ensure the clamps will not hit the bumper once reinstalled.



**Figure 10h**



**Figure 10i**

## **DETAILED INSTRUCTIONS:**

---

### **11. Vehicle Reassembly**

- a) **Reinstall your short ram intake if removed.** On large CS intakes (3" or 3.5") you may need to rotate SRI so your MAF sensor points downwards in order to have good clearance to the hot pipe. Fitment with other SRIs may vary.
- b) **Refill your engine coolant.** Fill through the radiator cap until it will not accept any more coolant. Add the remaining to the overflow tank at the front of the engine bay.
- c) **Reinstall the airbag sensor and plug it back in.** The sensor cover can be reinstalled if desired but will need to be trimmed to fit. It is not needed for functionality.
- d) **Reconnect your battery.** Positive terminal first, then negative terminal.
- e) **Pressure check the system for any boost/vacuum leaks.**
- f) **Reinstall the front bumper following Section 2 in reverse.** Remember to plug in the fog and marker lights!
- g) **Install any other OEM components removed during installation.**
- h) **Torque Specs:**
  - Bumper Hardware: Tighten until snug
  - 8mm Nut/Bolt: 8-10ft-lbs.
  - 10mm Nut/Bolt: 15-17ft-lbs.
  - 12 or 13mm Nut/Bolt: 19-21ft-lbs.
- i) **Start the vehicle, during first startup, listen for any strange noises, leaks, or other issues that may indicate something was installed incorrectly. We strongly recommend getting a tune for the CS FMIC, but it is not necessary.**



**This completes the installation of your CorkSport Front Mount Intercooler Kit!  
Enjoy the improved performance!**



## WHAT'S NEXT?

### CorkSport CST4 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!

**FREE MAP SENSOR**



### 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 Camshafts

The CorkSport Mazdaspeed Performance Camshafts are developed with the latest design, manufacturing, and casting technologies and ground to CNC precision for the best performance for your Mazdaspeed. Near factory idling cams for the daily driver and even the aggressive track driver bringing improvement in throttle response and torque to your Mazdaspeed.

