

CorkSport Performance

AXO-6-115 Turbo Cold Air Box

Installation Instructions for the CorkSport Performance Turbo Cold Air Box 2021+ Mazda 3 & CX30 Turbo and 2022+ CX50 Turbo.

Written By: Cody Dunton



INTRODUCTION

In this installation guide we have provided step by step instructions to install the CorkSport Performance Turbo Cold Air Box.

Advisory:

- The engine bay will be hot after recent vehicle operation. Allow the vehicle to cool or use a fan to cool the engine bay before working on the vehicle.

TOOLS:

- [1/4" Ratchet \(1\)](#)
- [Ratchet Extension - 6in \(1\)](#)
- [10mm Wrench \(1\)](#)
- [10mm Socket-Deep \(1\)](#)
- [3mm Allen key \(1\)](#)
- [5mm Allen Key \(1\)](#)
- [Small Flathead Screwdriver \(1\)](#)
- [Phillips Screwdriver \(1\)](#)
- [Blue Threadlocker \(1\)](#)

PARTS:

- [CorkSport Turbo MAF Housing \(1\)](#)
- [CorkSport Turbo Silicone Intake Elbow \(1\)](#)
- [CorkSport 3.5" Dry-Flow Filter \(1\)](#)
- [CS T-Bolt Clamp - 70-78mm \(1\)](#)
- [CS T-Bolt Clamp - 86-94mm \(1\)](#)
- [CS T-Bolt Clamp - 95-103mm \(1\)](#)
- [CorkSport Turbo Cold Air Box \(1\)](#)
- [CorkSport Turbo Cold Air Box Support Bracket \(1\)](#)
- [CorkSport Turbo Cold Air Box MAF Support Bracket \(1\)](#)

Step 1 — Getting Started



- First and foremost; **THANK YOU** for becoming a part of the CorkSport Family. We hope to bring you the highest level of Parts, Customer Service, & Support
- *How To Use These Instructions:* The instruction format will relate colored marking in the image to the color dot in the text to the right of the image
- *These instructions were written using a Mazda 3 and CX-30. Installation on the Mazda CX-50 will be similar but have minor differences.*
- *Instructions show both OEM intake removal and CS SRI removal. Some steps will be skipped depending on your existing setup.*
- *If you already have a CorkSport Heatshield installed with your CS SRI, the CorkSport Airbox will replace the heatshield completely. They cannot be used together.*

Step 2 — Required Parts

⚠ The OEM Rubber mounts and Snorkel from the Stock Air Box are required for installation. If you already have a CorkSport SRI and do not have these parts, please contact your local Mazda Dealer and purchase:

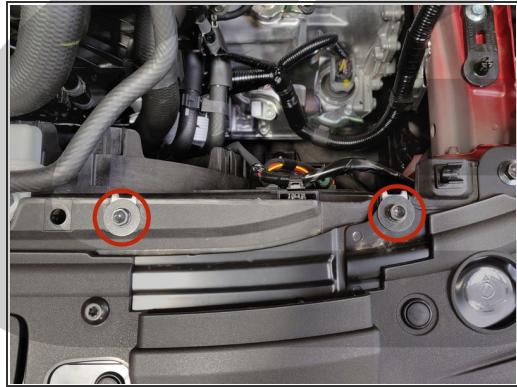
- One(1) Snorkel (AKA "Fresh Air Duct")
 - Mazda3/CX30 Part#: PX1N-13-200
 - Mazda CX50 Part#: PXAC-13-200B
- Three(3) Rubber Mounts
 - Mazda3/CX30 Part#: PE01-13-363
 - Mazda CX50 Part#: PX9X-13-363

Step 3 — Removing the CorkSport SRI



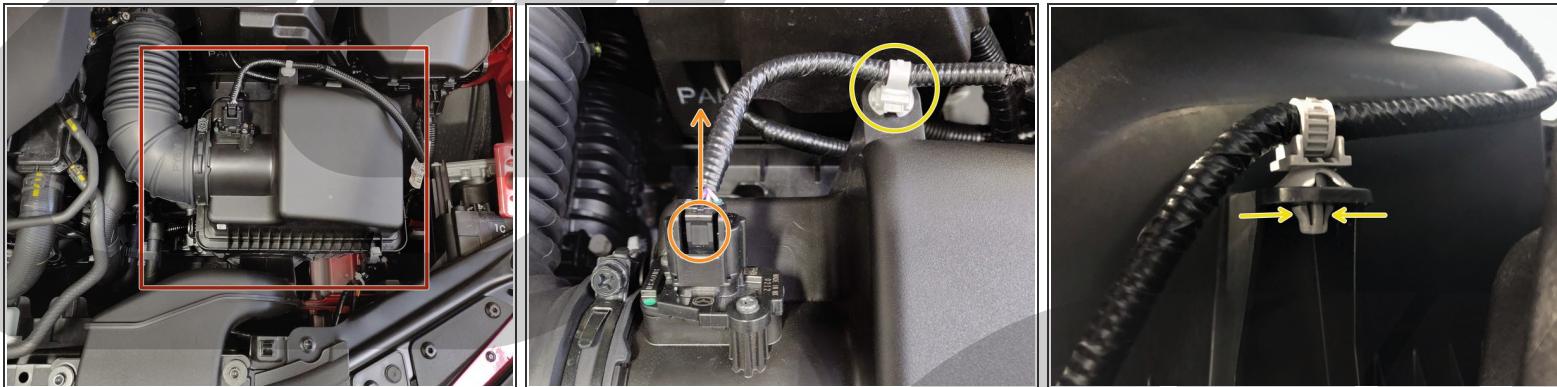
- ① If you are installing on a vehicle with the stock intake, skip to **Step 5**.
- ② The following steps are shown with the factory Turbo Inlet Pipe (TIP) and CS SRI. Removal of the CS SRI with the CorkSport TIP will be similar.
- Start by disconnecting the MAF wiring harness by depressing the tab and pulling downward.
 - ② Place the wiring out of the way for later
- Remove the air filter and clamp by using a 10mm socket and ratchet.
- Loosen the clamp securing the intake silicone using the same tools.
- Remove the MAF housing and bracket from the mounting pegs and silicone coupler.
- Loosen the clamp on the other end of the intake silicone and remove.

Step 4 — Air Duct Bolt Removal and MAF Support Bracket Disassembly



- Remove the two 10mm bolts that secure the OEM air intake duct as they will be needed later.
- Remove the rubber isolators from the CS SRI MAF bracket. They will be needed in the next step.
- Remove the bracket and screws from the MAF Housing using a 5mm Allen Key. The bracket and screws will not be needed for the install of the CS Cold Air Box and can be stored in a safe location.
- Skip to **Step 10**

Step 5 — Removing the OEM Intake Part 1



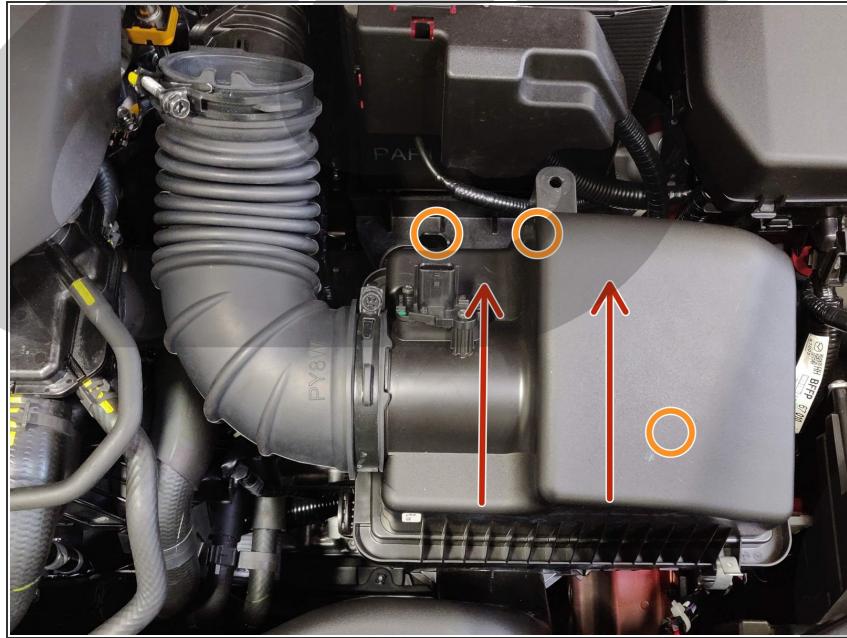
- Locate the OEM intake system in the engine bay.
- Unplug the MAF sensor by pushing down on the top tab and sliding the connector up.
- Using your fingers or a flathead screw driver, squeeze the underside of the clip to release the two locking tabs in the direction shown.
 - You may have to rotate the clip to get access to each of the locking tabs.*
 - Place the wiring out of the way for later*

Step 6 — Removing the OEM Intake Part 2



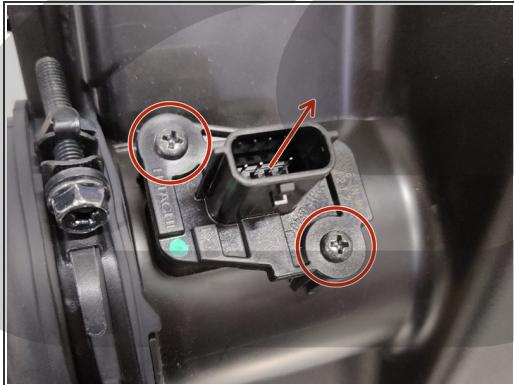
- Using a 10mm socket and ratchet, loosen the clamp that attaches the OEM rubber intake tube to the turbo inlet pipe.
 - Depending on what your model is may change what clamp and socket is needed.
- Pull the intake tube off of the turbo inlet pipe by grabbing where the clamp is located at and pulling to the front of the car.
 - Let the intake tube rest on top of the turbo inlet pipe.
- Use the 10mm socket and ratchet again to remove the two bolts that secure the front of the intake.

Step 7 — Removing the OEM Intake Part 3



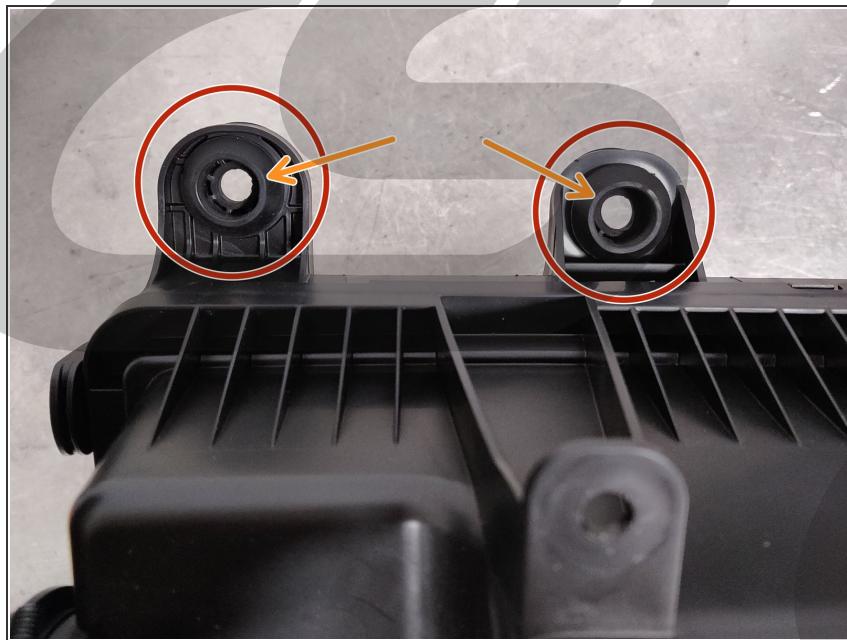
- Pull vertically upwards to remove the OEM intake.
- There are three rubber isolators that will release when lifting upwards and their locations are circled for reference.

Step 8 — MAF Sensor Transfer



- Using the Phillips screwdriver remove the two screws holding the MAF sensor to the OEM intake. Carefully pull upwards to remove the MAF from the OEM intake.
 - We recommend threading the Phillips head screws back into the OEM intake so you do not lose them if you ever need to reinstall the OEM intake.
- Unscrew the Socket Head Cap Screws from the CorkSport MAF housing using a 3mm Allen Key.
- Carefully install the MAF sensor into the CorkSport MAF housing and tighten until both screws are snug.
 - ⚠ Ensure the MAF sensor O-ring is not pinched or damaged during installation.
 - The MAF sensor can only be installed in one orientation.

Step 9 — Remove Rubber Isolators from OEM Intake



- Looking at the OEM air box, locate the two rubber isolators that are on the back.
- Remove the two isolators by pushing on the top side of the isolator. They will be used in the next step

Step 10 — Install Rubber Isolators into Cold Air Box Bracket



- Take the two rubber isolators that were removed in a previous step and install them into the CS Air Box support bracket by pushing the angled side of the isolators through the holes in the bracket.
- (i)* Make sure the rubber isolators are orientated as shown in the picture.

Step 11 — Prepare the CS Cold Air Box for Install



- Remove the CS Cold Air Box lid using a 3mm Allen and place in a safe place so it does not get scratched.
- Flip the Cold Air Box over so that the side with the threaded inserts is facing up.
- Find 2 of the included M6 bolts that are 12mm long. Attach the bracket to the Air Box leaving them just loose enough so that the bracket can still slide in the slots.

Step 12 — Install the MAF Housing Support Bracket



- Locate the MAF housing support bracket.
- Gather the 2 M6 bolts that are 25mm long.
- Find the mounting point that is located inside of the Air Box.
- Install the bracket in the orientation shown and use a 10mm socket and ratchet with an extension to tighten until the bracket is snug but can still be adjusted later.

Step 13 — Removing the OEM Air Duct



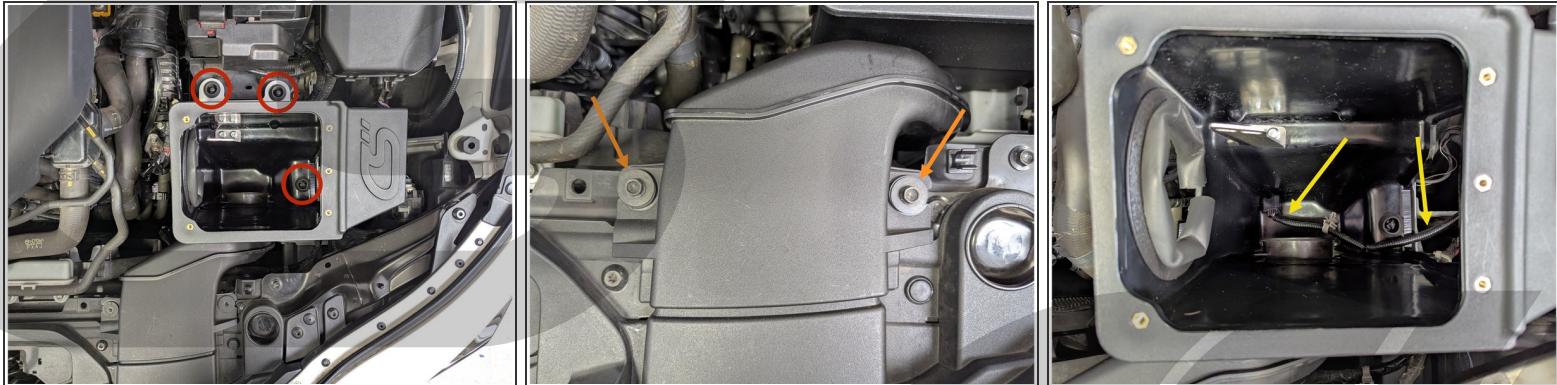
- ⓘ If you do not have the OEM Air Box, please contact your local Mazda Dealer and purchase the required parts. Refer to Step 2 for more details
- Now locate the OEM air box and find the tab that is circled on the side of the air duct.
- Using a flat head screw driver pry up on the plastic tab while twisting the air duct counter-clock wise to release it from the groove.
- After the tab has been rotated out of the groove a little ways, turn the air duct to the same orientation shown and pull towards you to remove it.

Step 14 — Remove and Install Rubber Isolator and Air Duct



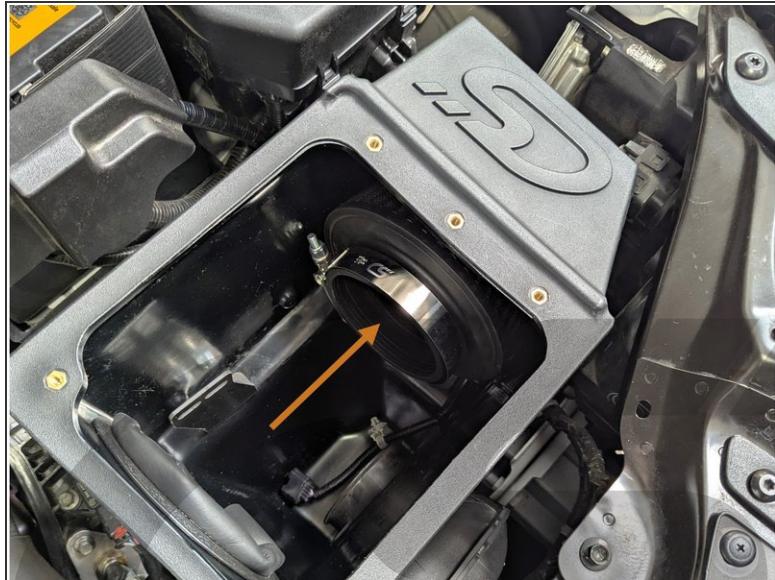
- Remove the rubber isolator from the OEM intake by pushing on the top side of the isolator and pulling on the bottom.
- Install the rubber isolator into the CorkSport Cold Air Box by pushing the angled side of the isolator through the bottom of the hole in the location shown.
 - Make sure the rubber isolator is orientated as shown in the picture.
- Attach the OEM air duct into the lower hole in the CS Cold Air Box by aligning the tabs and rotating clockwise.

Step 15 — Installing the CS Cold Air Box



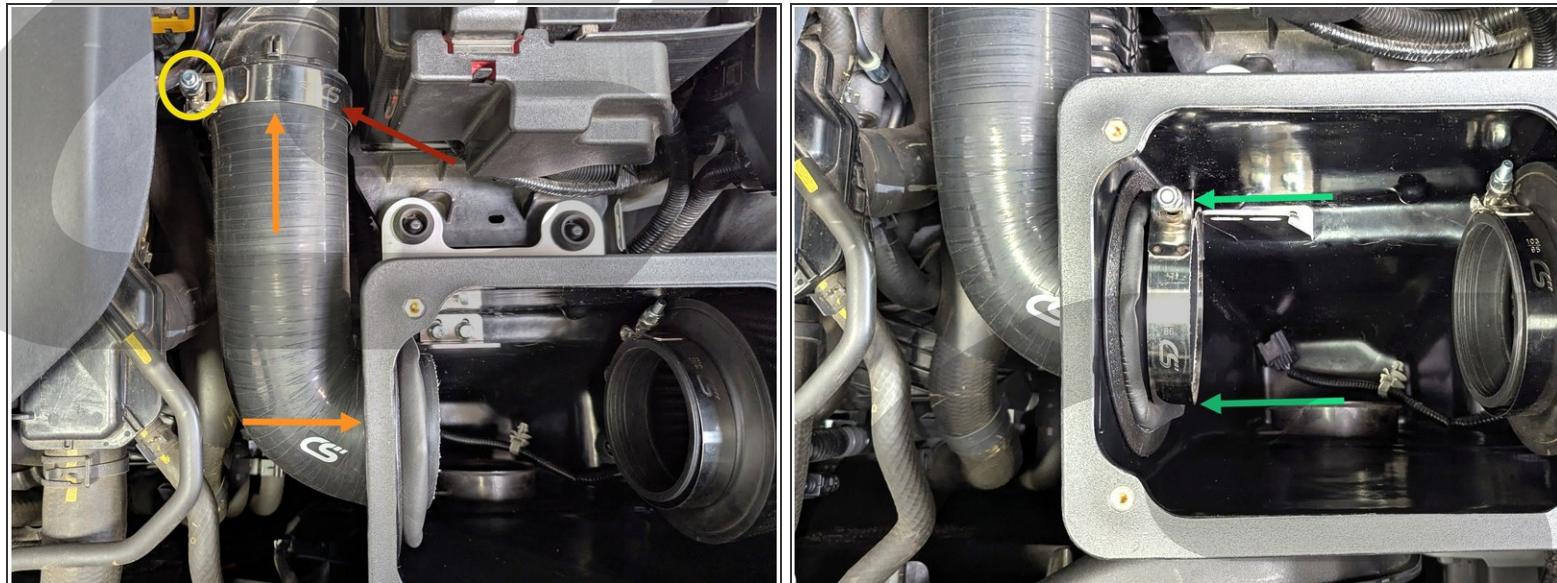
- Place the CS Cold Air Box with the OEM air duct into the engine bay and line up the three holes circled with the pegs. Push down on the rubber isolators once it is centered on the pegs until they are fully seated.
- Reinstall the two 10mm bolts into the air duct and tighten until they are snug.
- Route the MAF wiring harness so that it sits at the bottom of the air box.

Step 16 — Placing the CS Filter into Air Box



- Slide the 95-103mm T-bolt clamp over the end of the CorkSport 3.5" Filter and make sure orientation matches.
- Place the filter into the Air Box as shown

Step 17 — Installing the CS Turbo Intake Silicone



- ① The following steps are shown with the factory Turbo Inlet Pipe (TIP) and CS SRI. Installation of the CS SRI with the CorkSport TIP will be similar but will have different clamp sizes and silicone coupler.
- Place the 70-78mm T-bolt clamp on the smaller end of the CS silicone elbow.
- Install the smaller end of the CS intake silicone over the turbo inlet pipe and place the larger end in the opening of the Air Box
 - ① Ensure the small side of the silicone is flush to the "tabs" around the turbo inlet pipe.
- Once happy with silicone alignment, tighten the clamp with a 10mm socket and ratchet.
 - ① Ensure the clamp is straight and even, with a small gap from the end of the silicone.
 - ① When tight, the silicone around the edge of the clamp will bulge slightly.
- Set the 86-94mm T-bolt clamp over the larger end of the elbow making sure the clamp is orientated in the way shown.

Step 18 — Installing the CS Turbo MAF Assembly



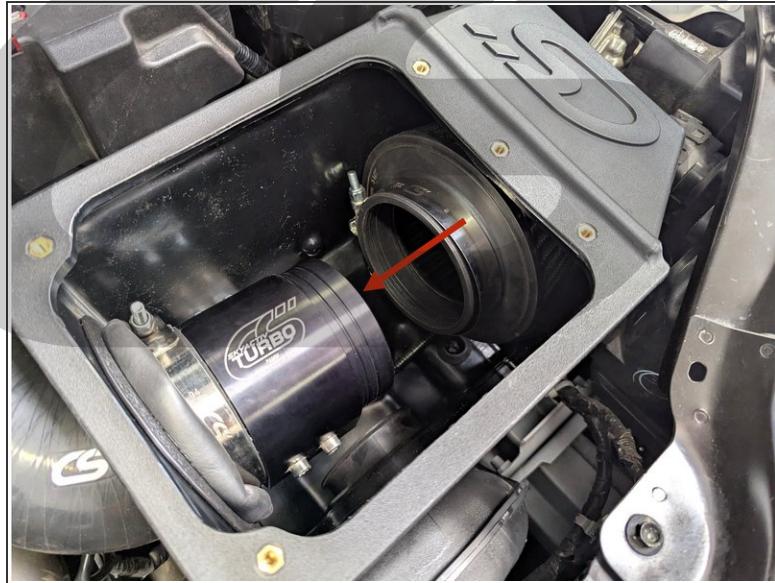
- Find the MAF wiring harness and connect it to the MAF sensor.
- Insert the MAF housing into the end of the CorkSport silicone elbow.
- Adjust the MAF housing so that the flat face on the side is parallel with the support bracket.
- Once happy with the alignment, tighten the clamp with a 10mm socket and ratchet.
 - Ensure the clamp is straight and even, with a small gap from the end of the silicone.
 - When tight, the silicone around the edge of the clamp will bulge slightly.

Step 19 — Secure the MAF Support Bracket



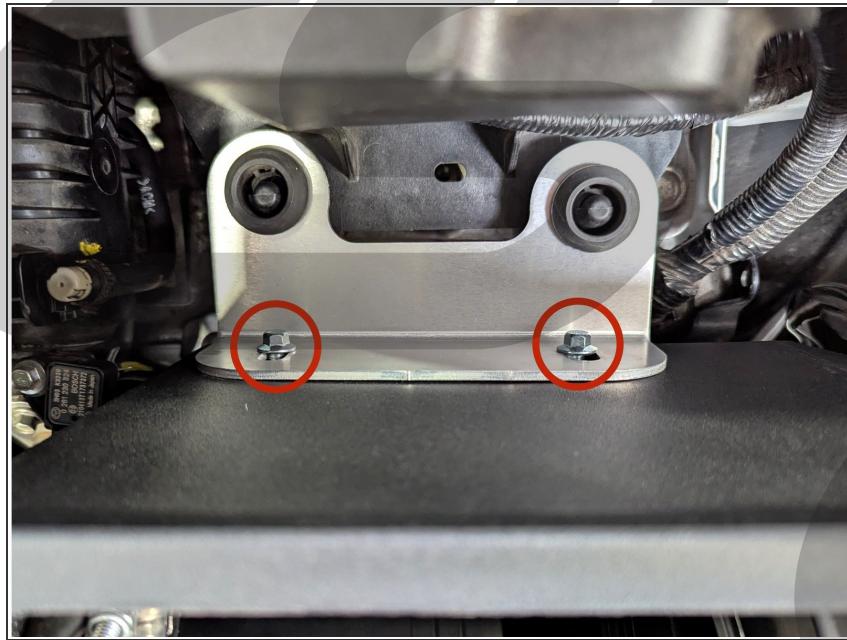
- Apply blue threadlocker to two M6 bolts that are 12mm long.
⚠ Failure to use threadlocker could result in the bolts vibrating loose or an air leak in the MAF housing.
- Take the two bolts and thread them into the MAF housing to secure it to the MAF support bracket. Tighten until snug using a 10mm wrench.
- Adjust the lower section of the bracket as needed and tighten it to the Air Box using a 10mm socket with an extension and ratchet until they are snug.

Step 20 — Install the CS Air Filter onto MAF Housing



- Install the CS Air Filter onto the MAF housing.
- Tighten the clamp with a 10mm socket and ratchet until snug.
 - Ensure the clamp is straight and even, with a small gap from the end of the silicone.
 - When tight, the silicone around the edges of the clamp will bulge slightly.

Step 21 — Secure the CS Air Box Support Bracket



- Adjust the bracket securing the Air Box if needed and tighten the two bolts using a 10mm wrench until they are snug.

⚠ Do not use power tools. Bolts must be snug, do not overtighten

Step 22 — Install the Acrylic Lid



- Carefully remove and discard the protective film on the Acrylic Lid Cover.
- Align it with the five mounting points on the top of the Air Box.
- *(i)* Recommended: Apply a small drop of purple loctite to the threads of each M5 bolt for extra security.
- Loosely install the five M5 bolts with a 3mm Allen.

(i) For bolt replacement if needed:
Thread size = M5x0.8x12mm

- Ensure the Lid is aligned with the edges of the box, then tighten the bolts until snug.

⚠ Do not use power tools. Bolts must be snug, do not overtighten

Step 23 — Installation Complete

- This completes your installation of the CorkSport Performance Cold Air Box!
 - Listen for any strange noises upon first start up. If any are present, you may have a vacuum leak and need to readjust the clamps and/or silicone. Added engine noise and/or suction sounds are normal.
- Contact us with any questions or concerns at sales@corksport.com or (360) 260-2675.
- Please leave a review here: <https://corksport.com>
- Share your experience using #CorkSport on Instagram, Facebook, and Twitter.