

CorkSport OCC Hardware Kit

2014-2018 Mazda 3 with Existing CS OCC & CS Turbo Kit



This Package should contain:

- 1. 8 Feet of Reinforced Silicone Hose
- 2. One Hose Reducer Adapter
- 3. One CorkSport OCC Hardware Pack



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If performance and reliability are important to you then an oil catch can is a critical component for your SkyActiv engine, especially when equipped with a turbo kit. Cylinder blow by gases and oil vapor build up in the engine crank case during normal and spirited driving situations. The OEM design pulls these gases and vapors into the intake manifold to be recycled through the combustion process, leaving behind contaminants in the intake manifold & cylinder head. The CorkSport Oil Catch Can provides an additional step in this process to help filter out contaminants and vapors before they enter the engine.

Let us know your thoughts about the CorkSport OCC with a review at:

Pre-Installation Notes:



Use extreme caution while working under the vehicle. Use adequate load rated jack and jack stands to support the vehicle on a level surface. Please reference vehicle owners manuals for proper jacking locations.



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.



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.



These in car installation photos were produced using a 2016 Mazda 3 MT Sedan. Other models will be similar.

Materials and Time:



General Info.

Part #: AXM-6-889-12

Time Est: 2 hours

Wrench Rating: 2/5



Tooling List

4mm Allen Wrench
10mm Wrench
14mm Wrench
21mm Lug Nut Socket
¼" Nut Driver
8mm Socket
10mm Socket
12mm Socket
14mm Socket
Ratchet Wrench
Torque Wrench
Large Flathead Screwdriver
Blue Locktight
3/8" Drill Bit & Drill
Razor knife



Parts List

1. 8 Feet of Reinforced Silicone Hose
2. One Hose Reducer Adapter
3. One OCC Hardware Pack



Order of Operations & Table of Contents



OCC Installation

Section 1: Intake Removal

Section 2: Starter Removal

Section 3: Hose Installation

Pg. 6-7

Pg. 8-9

Pg. 10-13



OCC Maintenance

Section 4: Maintaining the OCC

Pg. 14



Some of the steps in the following instructions may be skipped if you are completing the installation while installing the CS turbo kit. Some components will already be removed.



The images in the following instructions were taken with the front bumper removed. This was done to provide adequate lighting and viewing angles to aid in installation. Removal of the front bumper is not required.

1. Intake Removal

- a) **Remove Engine Cover** by pulling up on it. There are no screws that hold it down. This will help when loosening the intake clamp (shown in green square Figure 1a).
- b) **Unplug MAF sensor** (shown in Figure 1a with a red circle and in Figure 1b close up). Press down on the latch and the sensor will unplug.
- c) **Remove valve cover hose** from intake elbow. It should pull out with a little effort (shown removed in Figure 1c).
- d) **Trace this hose back to the engine and remove it from the valve cover.** Shown with red arrows in Figure 1d.
- e) **Loosen hose clamp on air box to throttle body** (green arrow Figure 1e). This will require a large screw driver or a 10mm socket.

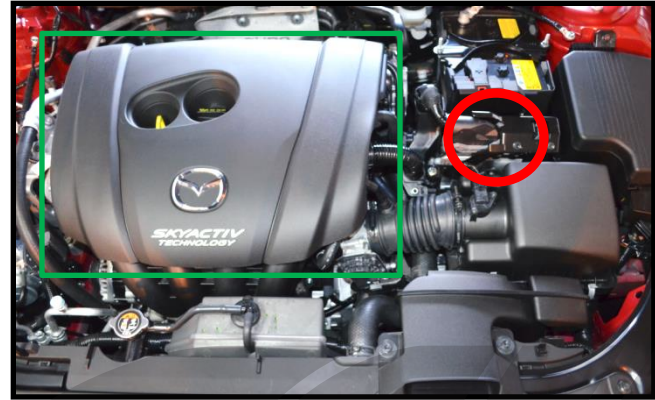


Figure 1a

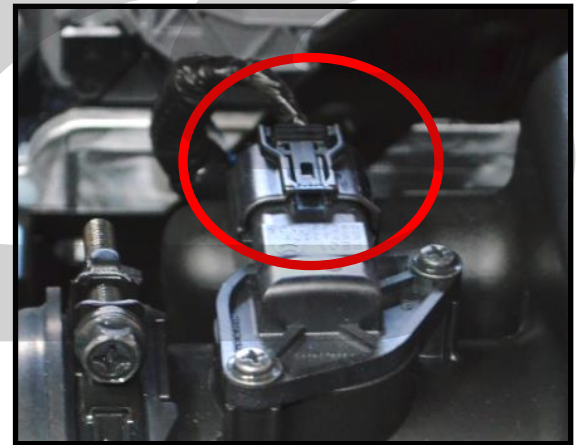


Figure 1b



Figure 1c

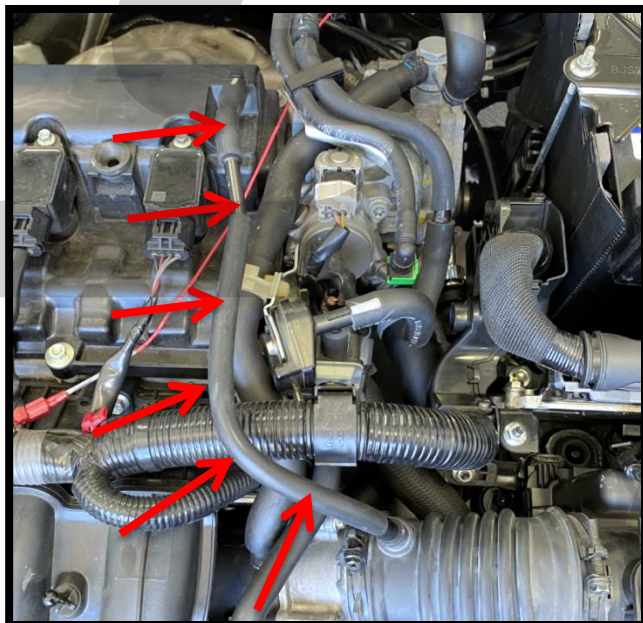


Figure 1d



Figure 1e

1. Intake Removal (continued)

f) **Remove Air Box Bracket** (red arrows Figure 1e). They will push off the top of the box but stay on the lower housing of the air box.

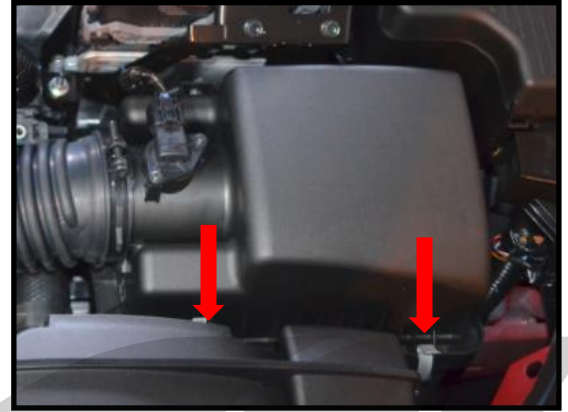


Figure 1f

g) **Disconnect the MAF wiring and pull up on air box lid and remove it from the car** (Figure 1f). You will need needle nose pliers to compress the sides of the wiring harness tie down.

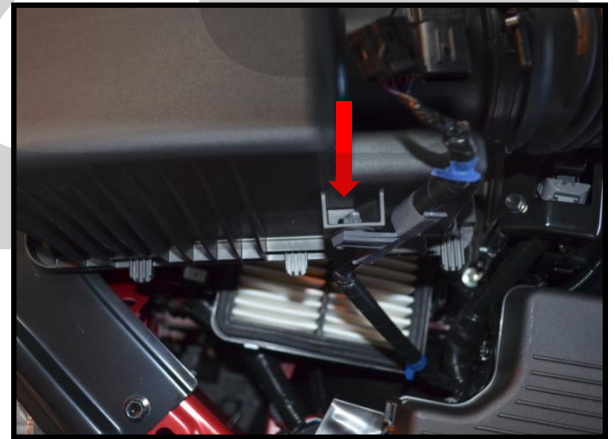


Figure 1g

h) **Remove two (2) 10mm bolts** that hold the lower air box (red circles in Figure 1g) and remove it from the car. Simply pull up.

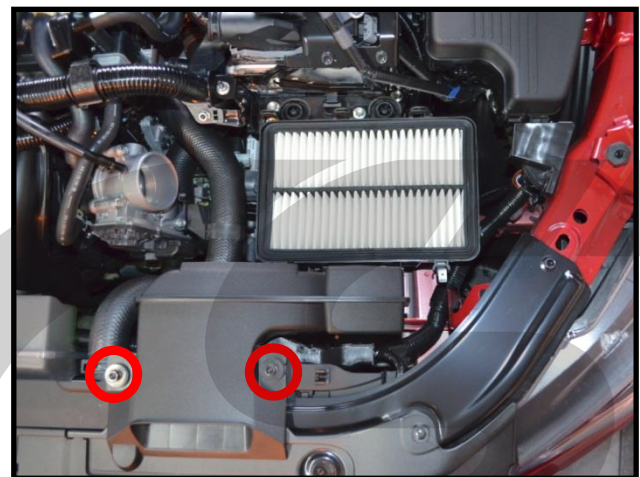


Figure 1h

2. Starter Removal



Disconnect the negative & positive battery cables

- a) Locate the engine starter on the front of the engine as shown in **Figure 2a**.
- b) Disconnect the white plastic clip from the starter shown in **Figure 2b**.
- c) Open the starter power wire cover as shown with the **red arrows** in **Figure 2a**.
- d) Use a 12mm socket to remove the power wire nut **circle in red** in **Figure 2c**. Remove the power wire from the starter.

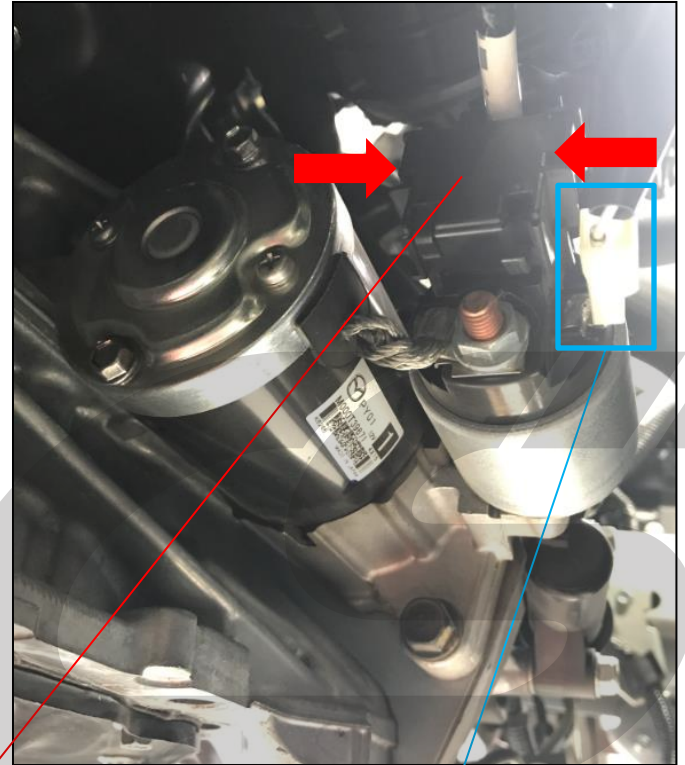


Figure 2a

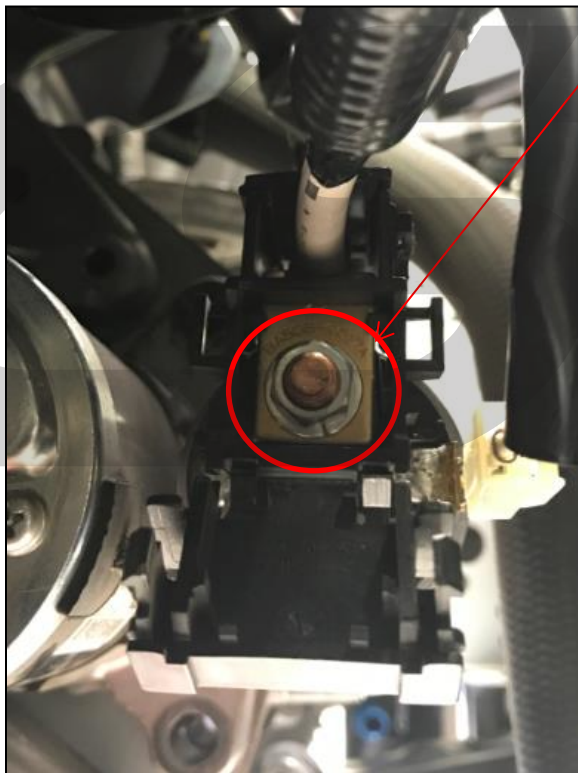


Figure 2c

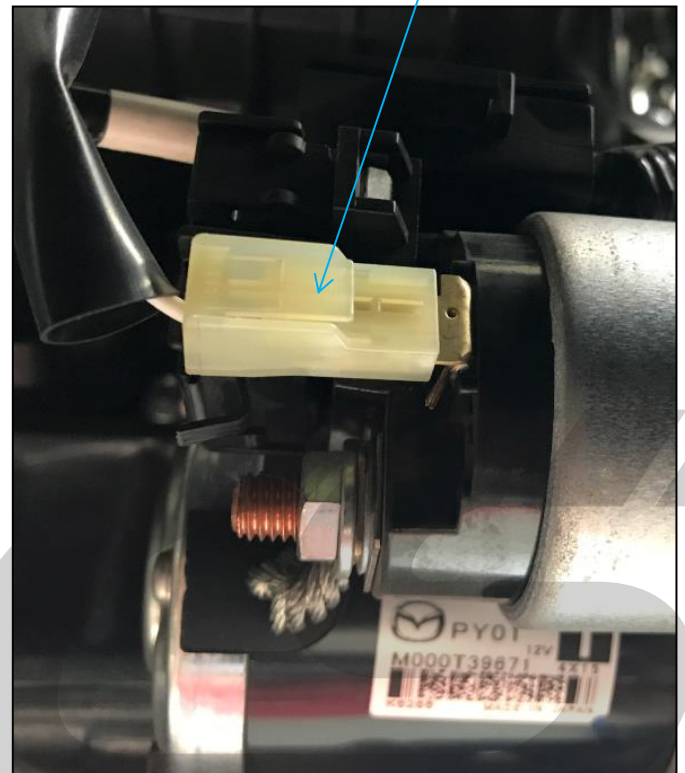


Figure 2b

2. Starter Removal (continued)

- e) **From the driver's side of the engine bay locate the upper starter bolt.** Break the bolt loose with a 14mm wrench then use a short socket, extension, and ratchet to remove. Shown with the **red circle in Figure 2d.**
- f) **From the passenger's side of the engine bay locate the lower starter bolt.** Remove the bolt with a 14mm wrench or ratchet. Shown with the **red circle in Figure 2e.**
- g) **Remove the starter from the vehicle.**

Driver Side View of Starter



Figure 2d

Passenger Side View of Starter



Figure 2e

3. Hose Installation



The high pressure fuel line that feeds the fuel rail is near the PCV valve. Be cautious to not damage this part while working in this area

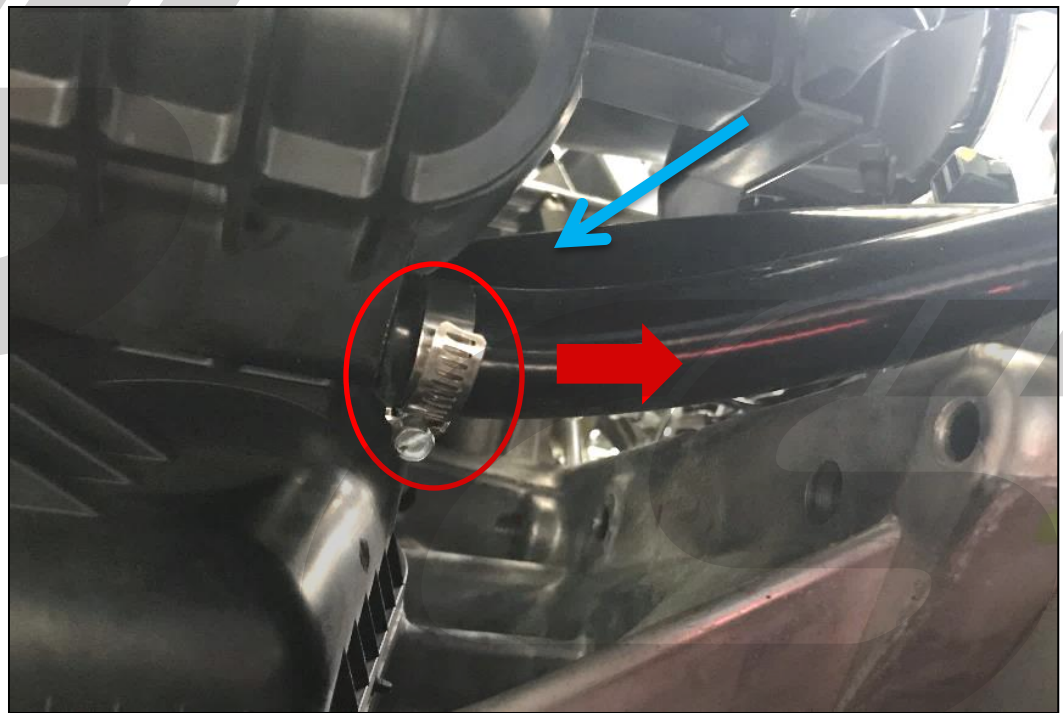


Figure 3a

- a) **Remove the existing OCC hose.** Loosen the worm gear clamp & remove the existing OCC hose from the intake manifold port. Shown in **Figure 3a** in **red**.
- b) **Using the supplied vacuum cap and the clamp that was just removed, plug the intake manifold port.** Tighten the clamp until snug. Try to pull the cap free to ensure the cap is secure.
- c) **Remove the upper hose from the PCV valve** (hose shown with **blue arrow** in **Figure 3a**). Slide the supplied clamp over the end of the hose.
- d) **Install the hose with clamp onto the PCV valve** where the hose was removed in step 5b (shown with **blue circle** in **Figure 5b**). Press the hose onto the PCV port until there is at least 3/4" overlap. The valve can pivot so verify that it is aligned when installing.
- e) **Tighten the clamp but make sure not over tighten!** The factory PCV valve is made of plastic and can crack. Once complete, pull on the hose slightly to verify the hose is secure.

3. Hose Installation (continued)



To maximize the efficiency of the Oil Catch Can we are going to connect the Cam Case breather and the PCV Valve together. **Figure 3b** shows the final routing. Use this for reference through the rest of the instructions.

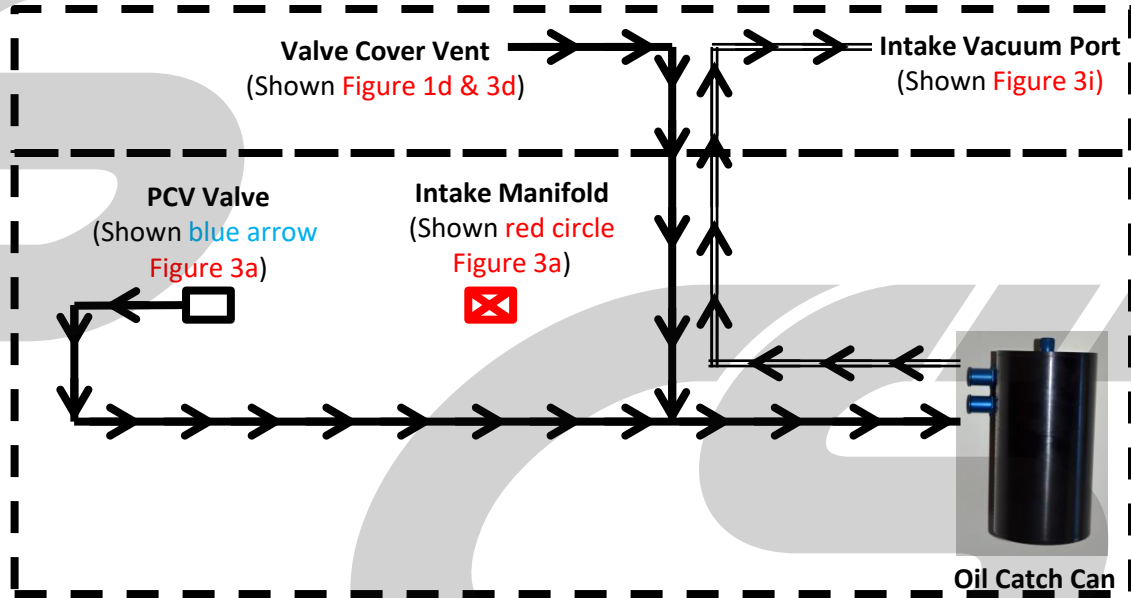


Figure 3b

f) Trace the old intake manifold hose to the oil catch can and remove this hose from the upper port. This portion of hose will not be re-used.

g) Using a razor knife or large scissors, cut the hose that connects the PCV valve to the lower port of the OCC in the approximate location shown with blue line in **Figure 3c**.

h) Insert the supplied T fitting into the hose with the open port facing upwards.

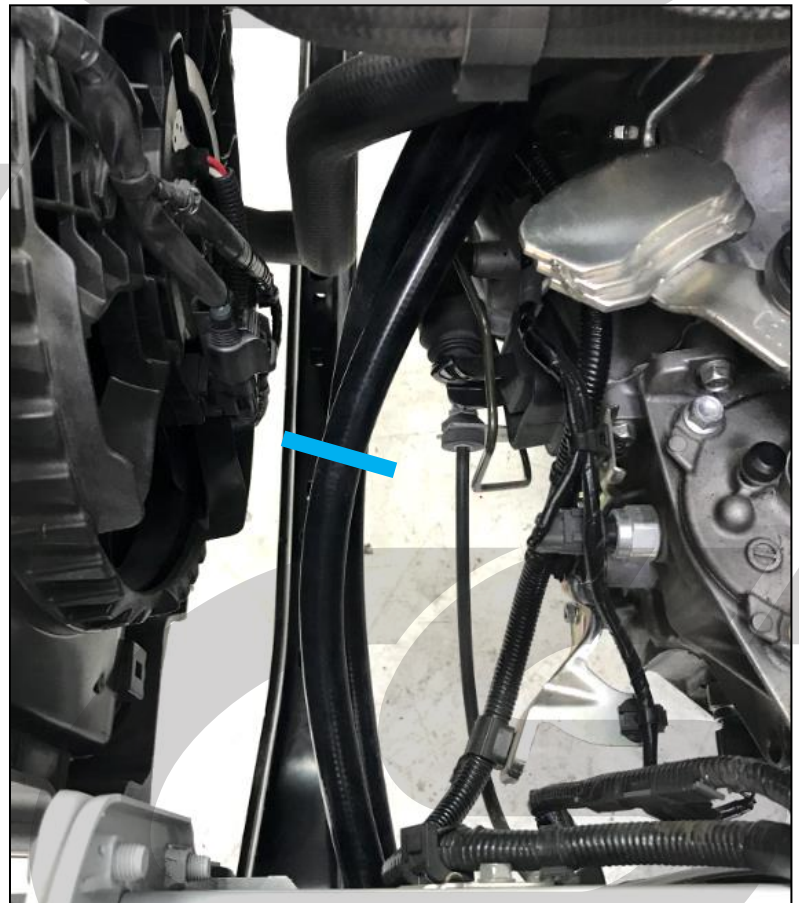


Figure 3c

3. Hose Installation (continued)

- i) **At the top of the engine, install the supplied smaller hose & reducer fitting onto the valve cover port.** Shown in **Figure 3d**.
- j) **Install supplied hose onto the reducer fitting coming off the valve cover.** Route down towards the T fitting installed earlier. Approximate routing with turbo kit shown in **Figure 3e**.
- k) **Trim the hose to length & install on the T fitting.** Final routing into the T fitting shown in **Figure 3f** for reference. Catch can ports also shown for reference in **Figure 3g** on the next page.

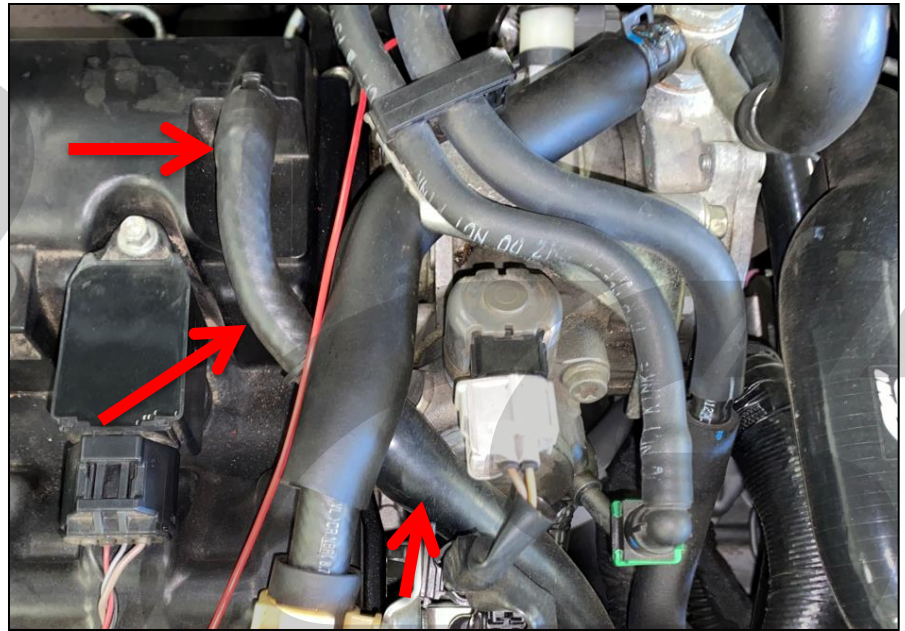


Figure 3d

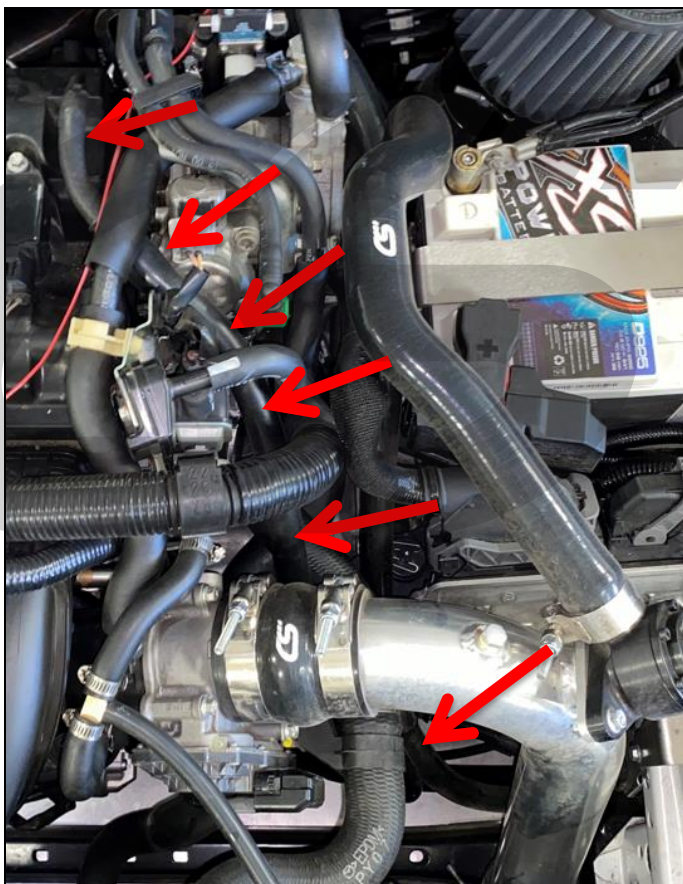


Figure 3e

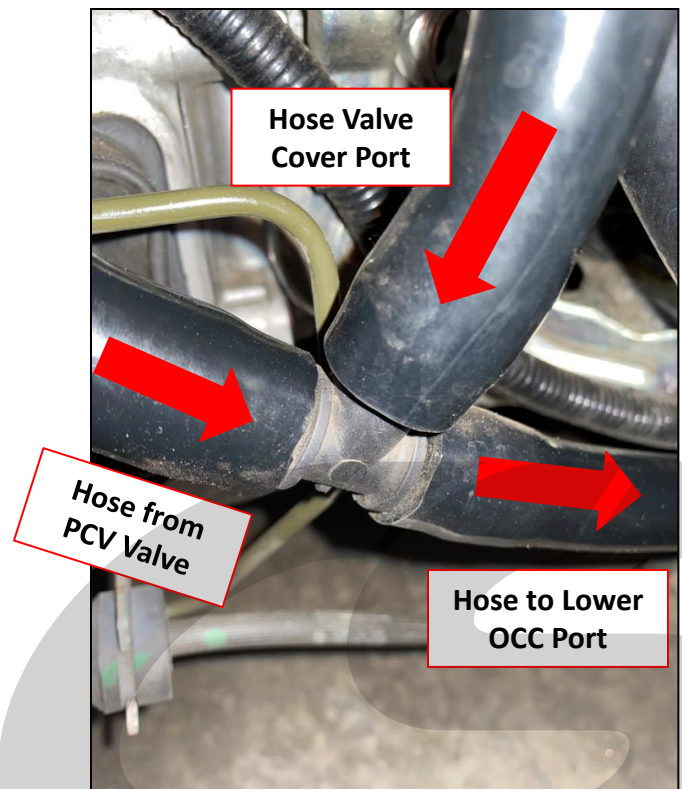


Figure 3f

3. Hose Installation (continued)

- l) **Using the remaining hose, connect to the upper port of the OCC. Route this hose along the hose previously installed and along the side of the battery to the port on the intake pipe. Connection to OCC shown for reference in [Figure 3g](#) below. Approximate routing shown in [Figure 3h](#).**
- m) **Trim this final hose to length and connect it to the port on the intake pipe. Shown in [Figure 3i](#).**
- n) **Secure the hoses in the engine bay using the provided zip ties.**

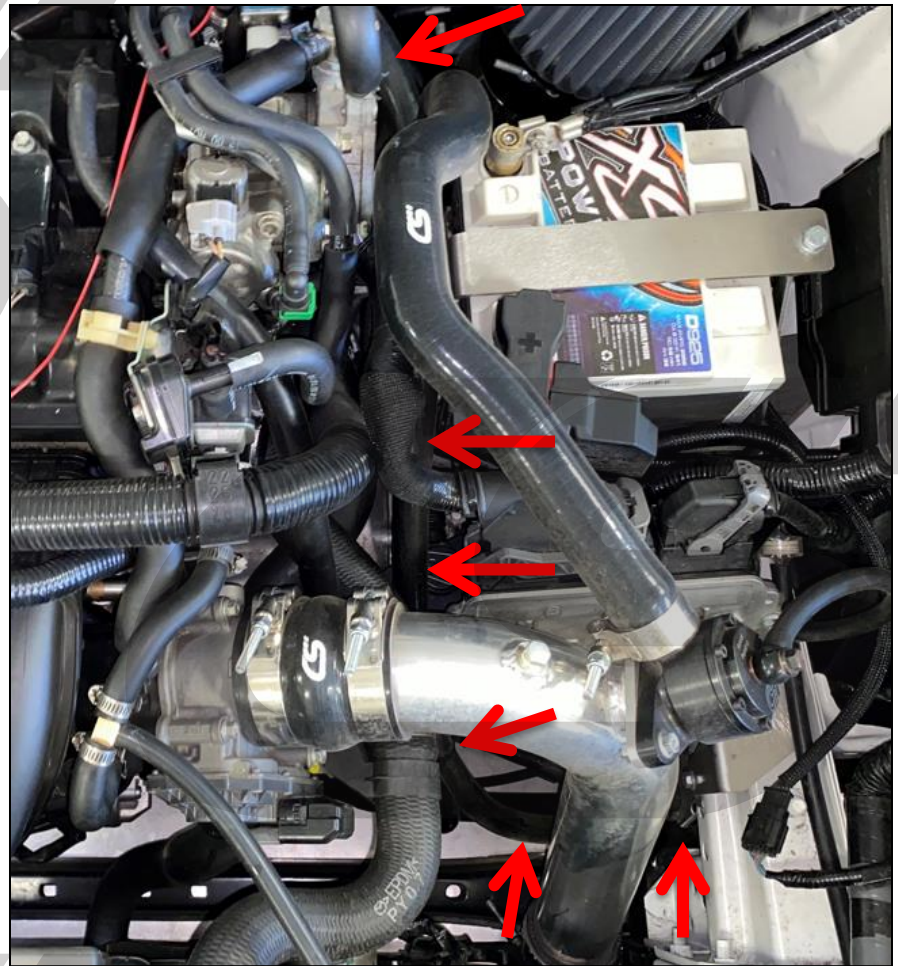


Figure 3h

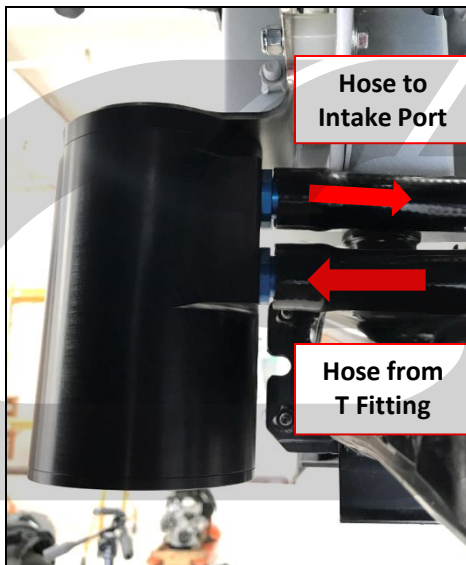


Figure 3g



Once the hoses are secure verify there is no contact with the clutch slave cylinder or the transmission shift arm in any gear.



Figure 3i

4. Maintaining the OCC

- a) **After first installation the OCC will capture an excessive amount of vapor and containments.** Drive the vehicle for approximately a week then drain the OCC.
- b) **Once the initial drainage has been completed the OCC only needs to be drained every oil change or approximately every 3 months, which ever comes first.**

Reassembly:

- a) **With the OCC completely installed you can reinstall the removed components in the reverse order.**
- b) **Torques Specs:**
 - a) Intake System: Tighten hardware to hand tight
 - b) Undercarriage: Tighten hardware to hand tight
 - c) Starter:
 - a) 14mm Bolts = **29-38 ft-lbf**
 - b) 12mm Nut = **89-97 in-lbf**

What's Next:

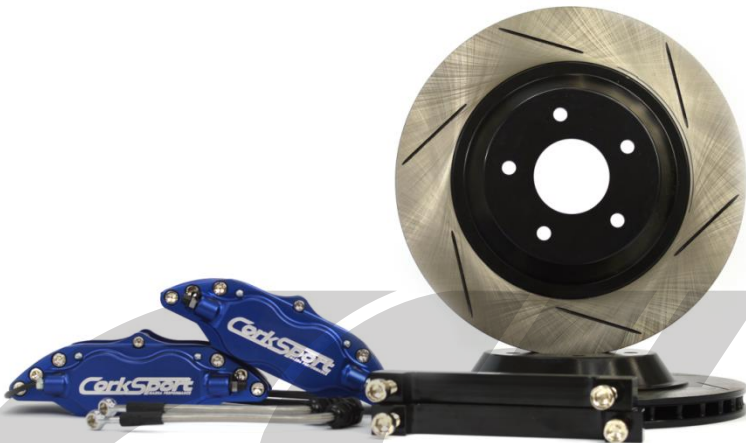
CorkSport Performance Steering Wheel

Take control with the CorkSport Performance Leather Steering Wheel for 2013+ Cx5, 2014+ Mazda 3 and 2016+ Cx3. Hand wrapped and stitched around a racing inspired grip design, the genuine leather is plush and comfortable for daily driving and canyon carving. Designed to be an OEM direct replacement, the CorkSport Performance Leather Steering Wheel is reasonable 90 minute installation.



CorkSport Big Brake Kit

CorkSport Big Brake Kit provides the ultimate in stopping power for your Mazda. Crafted from extremely lightweight billet aluminum, the CorkSport calipers use an opposed piston design that is fixed to provide greatly improved pad wear, and caliper rigidity over the OEM design.



CorkSport Rear Camber Arms

Get your camber back in spec with the CorkSport Adjustable camber arms. Whether you are correcting the added camber from lowering springs or search for the perfect style; the CorkSport rear camber arms will give you the adjustability you need

