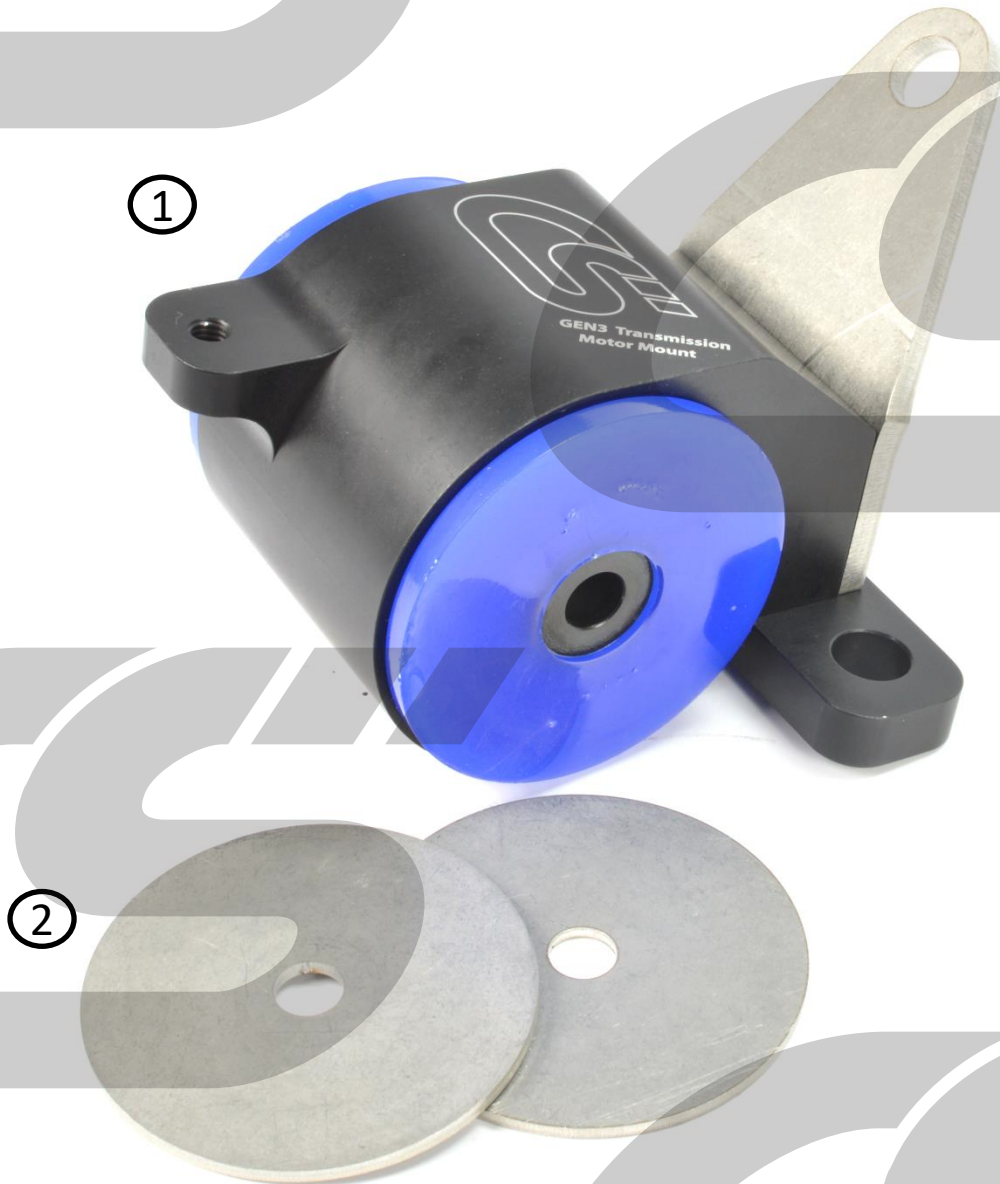


# CorkSport Transmission Motor Mount

2013-2018 CX-5, 2014-2017 Mazda6, 2014-2018 Mazda3

This Package should contain:



- 1. One (1) Assembled CorkSport TMM
- 2. Two (2) Stainless Steel Washers

# CorkSport Transmission Motor Mount

2013-2018 CX-5, 2014-2017 Mazda6, 2014-2018 Mazda3



**Thank you for purchasing the CorkSport Transmission Motor Mount.** The CorkSport TMM replaces the factory mount with a stronger, stiffer mount that reduces drivetrain movement. Doing so allows for less wheel hop, torque steer, and sharper shifting whether you're on the street or track.

Please let us know your feedback about the CorkSport Transmission Motor Mount by submitting a review at: <https://corksport.com/transmission-motor-mount-for-2014-2018-mazda-3.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.



**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 installation instructions were written using a 2015 Mazda3 2.5L Manual.** Other years, drivetrains, and models will be similar.

## Materials and Time:



### General Info.

Part #: AXM-6-128-10

Time Est: 2 hours

Wrench Rating: 3/5



### Tooling List

10mm Socket  
12mm Socket  
17mm Socket  
19mm Socket  
3/8" Drive Ratchet  
Breaker Bar  
Ratchet Extension  
Torque Wrench  
Flathead Screw Driver  
Needle nose Pliers  
Floor Jack & Jackstands



### Parts List

One (1) Assembled CorkSport TMM  
Two (2) Stainless Steel Washers

Need Help With Your Installation?

Call (360) 260-CORK

## Order of Operations & Table of Contents

Follow the order of operations listed below for your purchased exhaust system.



### OEM Parts Removal

Section 1: Removing the OEM Intake

Section 2: Removing the OEM ECU & Battery

Section 3: Removing the OEM TMM

Pg. 2-3

Pg. 4-5

Pg. 6-8



### CorkSport TMM Installation

Section 4: Installing the CorkSport TMM

Pg. 9-10

## Detailed Instructions

### 1. Removing the OEM Intake

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).

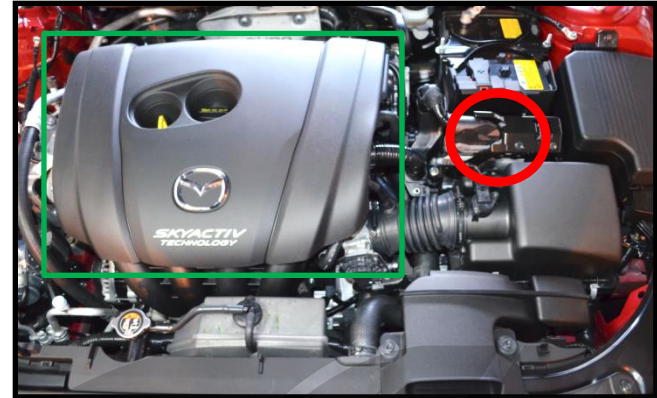


Figure 1a

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.

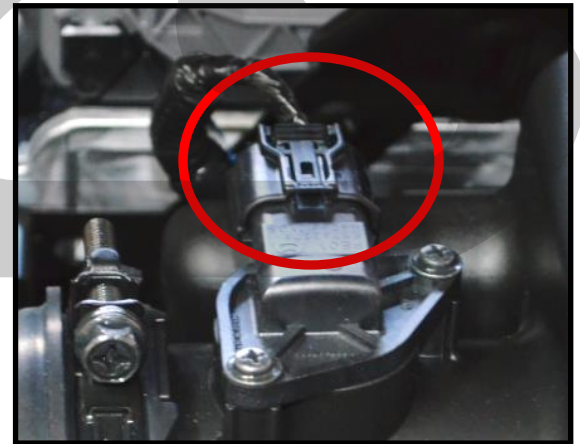


Figure 1b

c) **Remove valve cover hose** from intake elbow. It should pull out with a little effort (shown removed in Figure 1c).

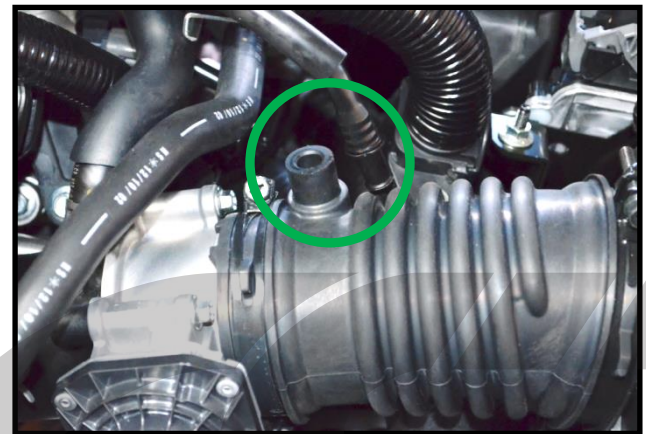


Figure 1c

d) **Loosen hose clamp** on air box to throttle body (green arrow Figure 1d). This will require a large screw driver or a 10mm socket.



Figure 1d

## 1. Removing the OEM Intake (continued)

- e) **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.

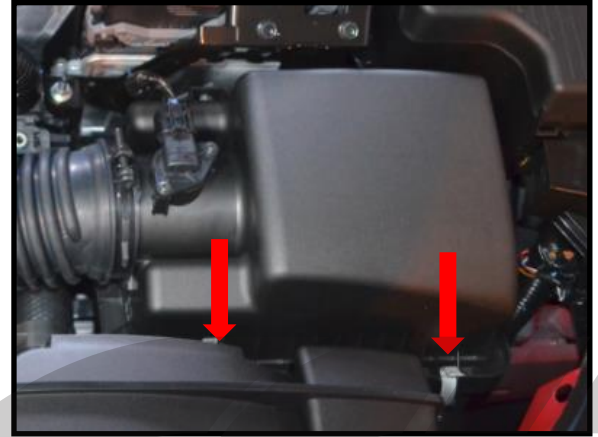


Figure 1e

- e) **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.

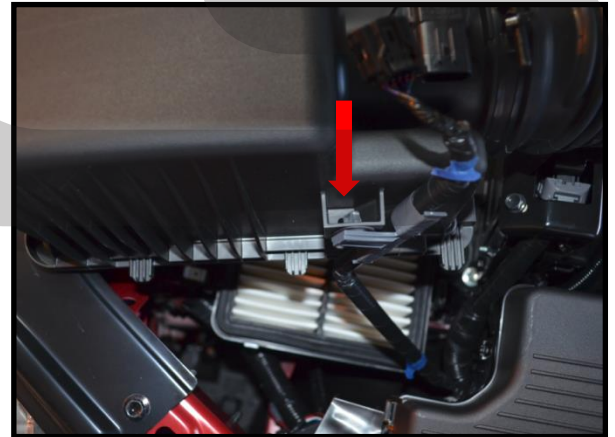


Figure 1f

- g) **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.

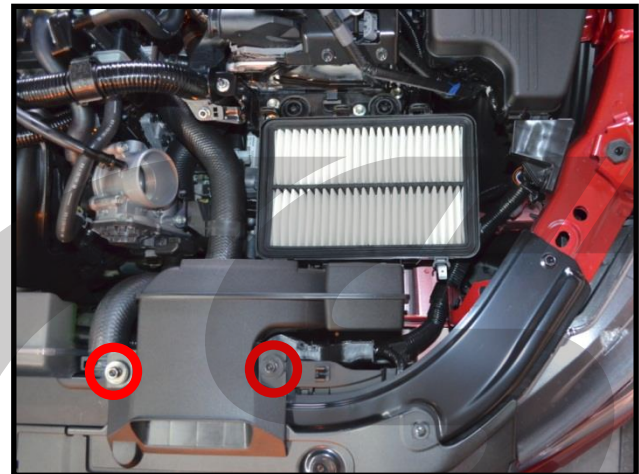


Figure 1g

**2. Removing the OEM ECU & Battery**

- a) **Disconnect the battery terminals** with a 10mm socket. Shown with the **red circles** in **Figure 2a**. Negative terminal first, then positive.
- b) **Loosen the two 10mm flange nuts holding the battery tie down bracket.** Do NOT remove the nuts completely. Shown with **blue circles** in **Figure 2a**. Remove the bracket from the vehicle.



Figure 2a



The battery tie down bracket is attached with hooks that attach to the battery tray. Once the nuts are loosened, the hooks can be rotated away and the bracket lifted off.

- c) **Remove the two 10mm flange bolts holding the ECU cover.** Shown with the **red circles** in **Figure 2b**. Remove the cover.
- d) **Remove the ECU wiring harness connectors.** Rotate the light grey lever in the direction of the **red arrows** in **Figure 2c**.



Figure 2b

- e) **Remove the two 10mm flange nuts holding the ECU.** Shown with the **red circles** in **Figure 2c**.

- f) **Remove the ECU from the vehicle.**

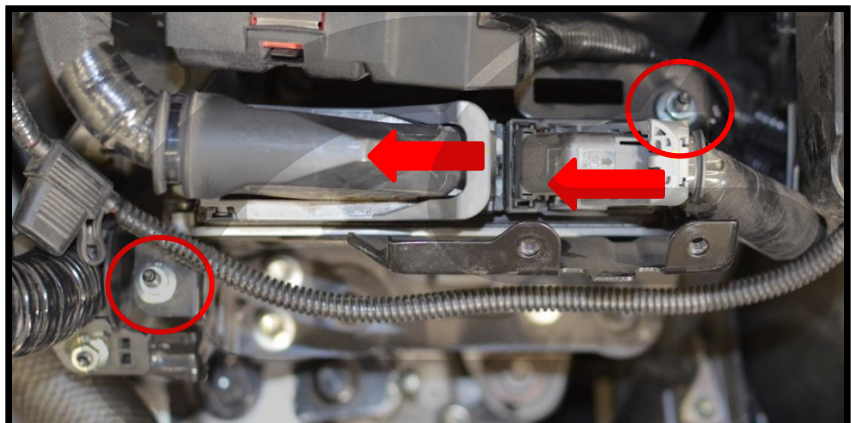


Figure 2c

## 2. Removing the OEM ECU & Battery (continued)

g) Remove the fuse box cover by pushing on the tabs at the front and rear of the cover and lifting up.

h) Remove the electrical connector circled in blue in Figure 2d then pull the wire out from behind the plastic hook in the direction of the blue arrow.

i) Remove the two 10mm flange bolts holding the wiring harness assembly. Shown with the red circles in Figure 2d.

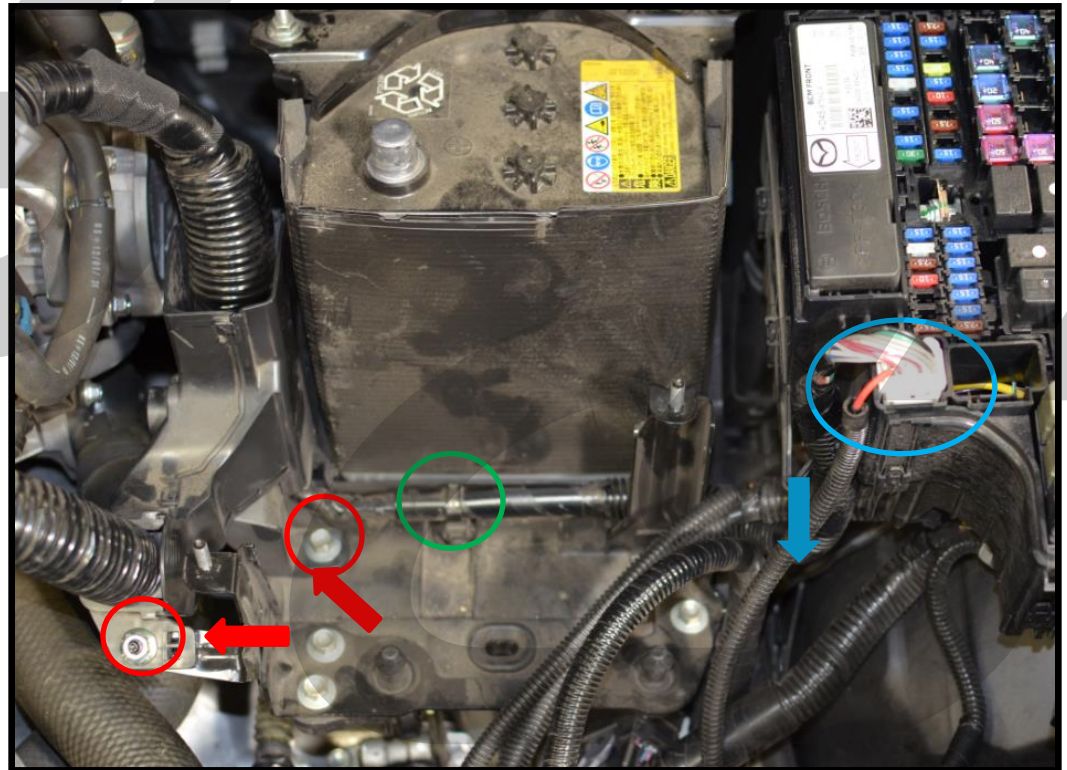


Figure 2d

j) Use a flathead screwdriver to pop the wiring harness loose. Red arrows in Figure 2d.

k) Pop loose the wiring harness clip using needle nose pliers. Use the pliers from under the battery tray to squeeze the tabs on the clip together then pull the clip and wire up. Circled in green in Figure 2d.

l) Remove the battery from the vehicle.

m) Remove the three 12mm flange bolts then remove the battery tray from the vehicle. Shown with the red circles in Figure 2e.

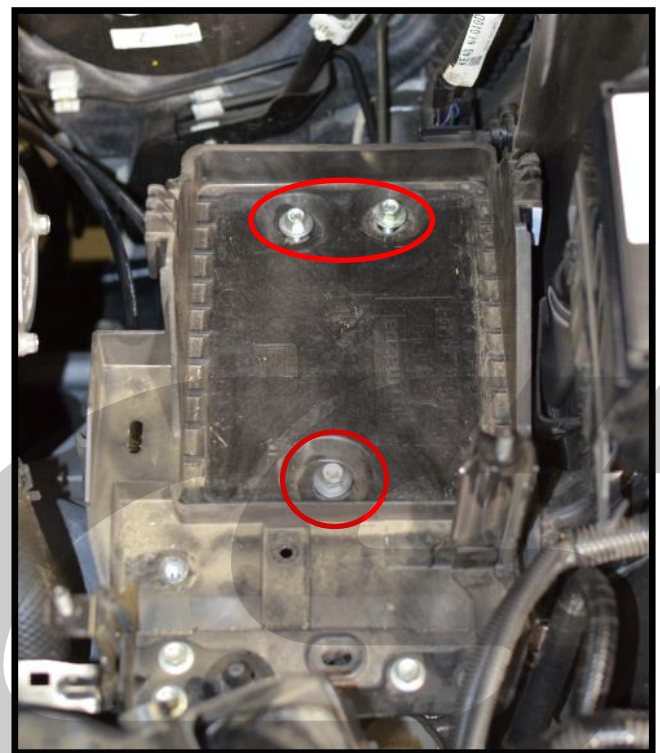


Figure 2e

### 3. Removing the OEM TMM

- a) Use a floor jack and jackstands to gain access to the underside of the vehicle.



Always refer to the floor jack and jack stand manufactures instructions as well as the factory owners manual for your vehicle to determine jacking points and support points. Alternately, use an automotive lift to gain access to the underside of the vehicle.

- b) Remove the OE engine undertray.

- 1) Using a push-clip remover or flathead screwdriver remove six push-clips (circled in red in Figure 3a).
- 2) Using 10mm socket, remove eight bolts (circled in blue in Figure 3a).
- 3) Remove the undertray from the vehicle.

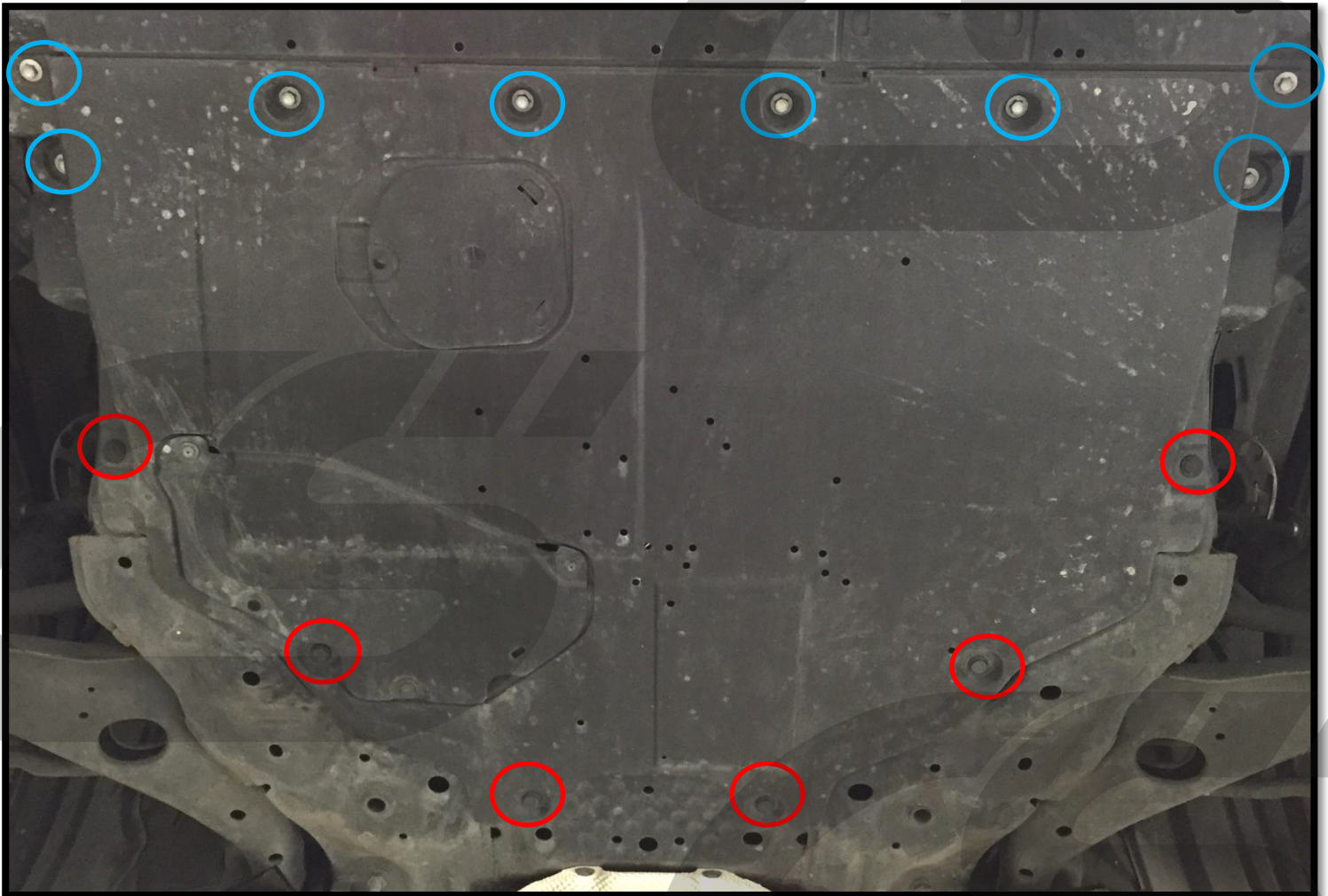


Figure 3a

- c) Lower your car back down off the jackstands. You do not have to do this, but it makes the TMM install easier.



### 3. Removing the OEM TMM (continued)

- d) Use a floor jack to support the transmission. Find a flat spot on the transmission and use very light pressure to support the transmission and prevent movement when you remove the OEM TMM.

Figure 3b shows a good location to use on manual cars with a red circle.



Use a piece of rubber or wood while jacking up the transmission in order to prevent damage to the transmission housing. Other locations can be used if desired but ensure that the jack sits in a stable and flat location on the transmission. Automatic transmission cars will differ from Figure 3b. Ensure to spread out the load with a large piece of rubber or wood if lifting from the transmission pan on AT cars.

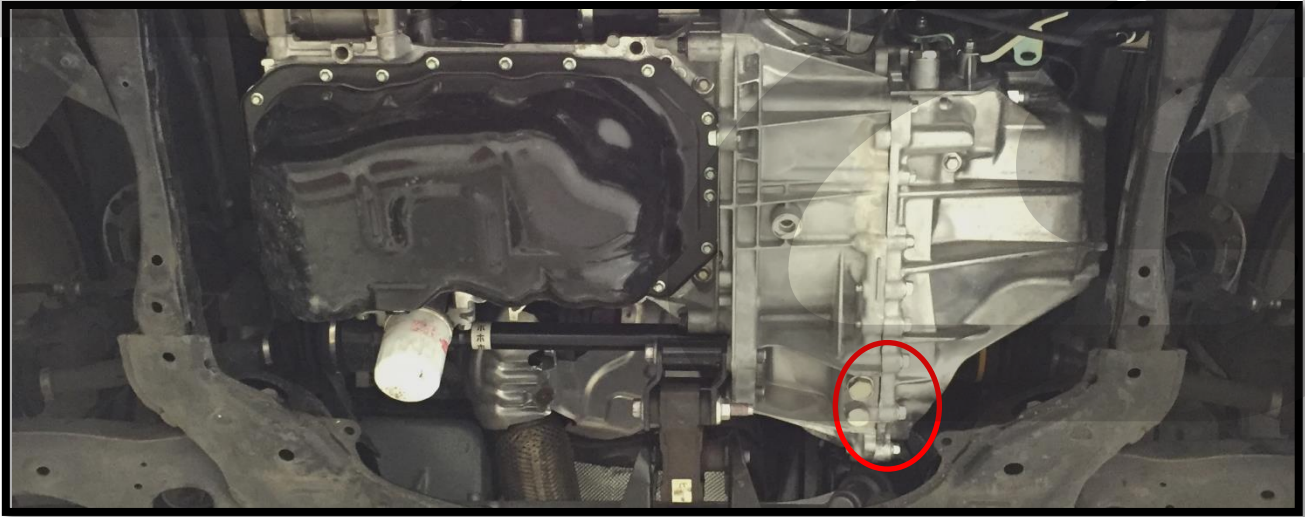


Figure 3b

- e) Remove one 12mm nut and one 12mm bolt that attach the fuse box to the vehicle. Circled in red in Figure 3c.
- f) Pull up and outward to move the fuse box and gain access to all OEM TMM bolts. Pull in direction of blue arrow in Figure 3c. Fuse box should move off of stud like shown with blue circle in Figure 3c.

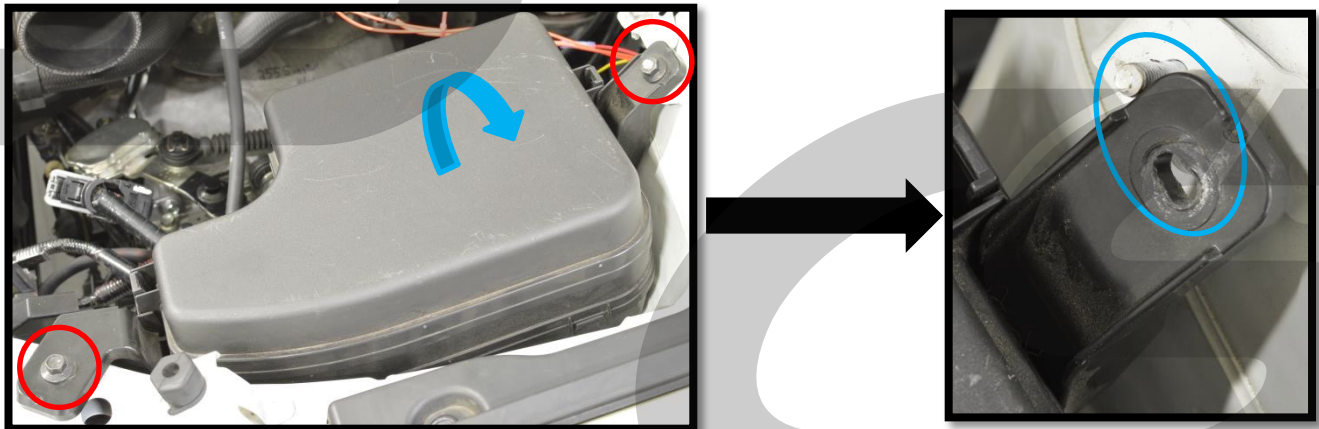


Figure 3c

**3. Removing the OEM TMM (continued)**

g) Remove long 17mm bolt from center of OEM TMM. Head circled in red in Figure 3d. The bolt will likely be a little difficult to remove as the engine/transmission will try to settle as you are removing it. Your floor jack is now what is holding the transmission up.

h) Remove 17mm nut from underneath fuse box. This nut is located on an angled stud underneath the fuse box. See blue circle/arrow in Figure 3d.

i) Remove two 19mm bolts from the ends of the OEM TMM. Shown with green circles in Figure 3d.

j) Pull up on the angled portion of the mount and pivot it towards the engine. See red arrow in Figure 3e for clarity. You may need to pull up on the fuse box to allow the TMM to be freed from the angled stud.

k) Remove the OEM TMM from the vehicle by pulling straight up.

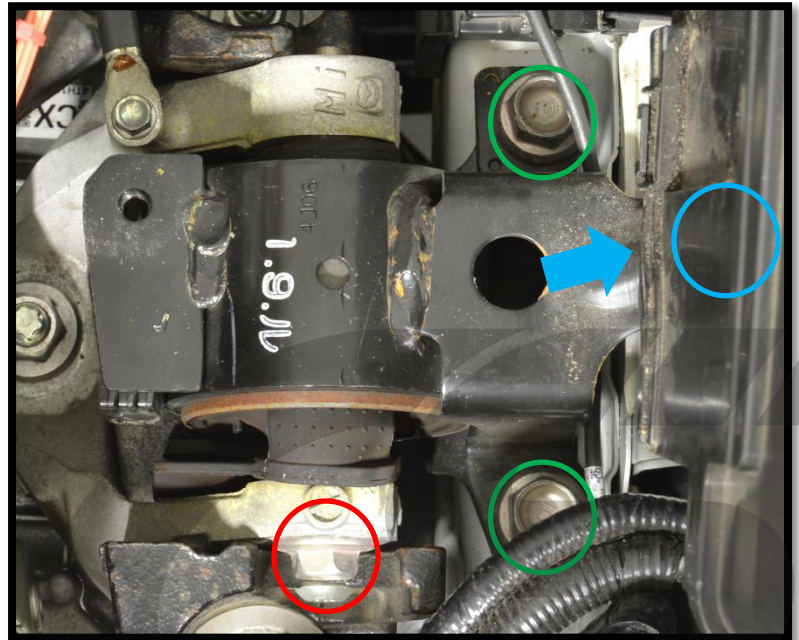


Figure 3d



Figure 3e

#### 4. Installing the CorkSport TMM

- a) Repeat steps 3k and 3j in reverse to properly position the CorkSport TMM. Ensure the hole in the stainless bracket goes over the angled stud. See position shown in Figure 4a.



Ensure the gray wire marked with red lines in Figure 4a does not get pinched throughout the install of the CorkSport TMM. It should fit behind the angled stainless steel bracket and be free to move around.

- b) Install the 2 19mm bolts that were removed in step 3i. Do not tighten yet as they need to be loose to properly align the TMM.



Figure 4a



The engine and transmission tend to move forward in the car once the OE TMM is removed. To align the bolts in step 4b, you will likely need a friend to push backwards on the engine while you install the bolts. If you do not have a friend available or this is not working, you can loosen the three nuts circled in blue in Figure 4a to give some extra adjustment.

- c) Install the 17mm nut removed in step 3h onto the angled stud. Do not tighten this yet either.
- d) Insert a stainless steel washer on each side of the blue polyurethane bushings. Proper locations shown with green lines in Figure 4a.
- e) Install the long 17mm bolt removed in step 3g. You may need to jack the transmission up and/or down to align the bolt with the holes in the mounting bracket, bushing sleeve, and washers. Once completed, the mount should look like Figure 4b.



Figure 4b

**4. Installing the CorkSport TMM (continued)**

- f) Torque the two 19mm bolts at the base of the TMM to 97-112 ft-lbs.**
- g) Torque the 17mm nut at the Mounting bracket to 40-45 ft-lbs.**
- h) Torque the long 17mm bolt going through the TMM to 60-73 ft-lbs.**
- i) If three bolts at the transmission are loosened, torque the three 19mm nuts to 68-85 ft-lbs.**
- j) Lower the floor jack supporting the transmission and remove it.**
- k) Follow the instructions in reverse to reattach the OEM undertray, battery, ECU, and intake.**
  - 1. The battery tray will attach to the top of the CorkSport TMM just like the OEM mount.
  - 2. Tighten all 12mm nuts/bolts to **12-15 ft-lbs.**
  - 3. Tighten all 10mm nuts/bolts until snug.



**This completes the installation of your CorkSport Transmission Motor Mount. An increase in noise and vibration is normal, especially at idle. Excessive levels indicate an issue with installation and the torque on the TMM mounting bolts should be checked.**

## What's Next:

### CorkSport Axleback Exhaust

Get added power and upgrade the new look of your Mazda with the CorkSport Power Series Axleback Exhaust. The engineers at CorkSport were given free reign to design an axle back exhaust in the best way fitting to the graceful design. As always, the CorkSport Axle Back Exhaust was built using only the highest quality materials and design.



### CorkSport 2014+ Mazda 3/6/CX-5 Rear Motor Mount

If you are tired of the numb throttle response, gear shifts, and engine braking, then the CorkSport Race Rear Motor Mount is the performance part your Mazda needs. Excessive engine movement due to the sloppy OE RMM is just waste energy that could be going to the tires as well causes a delay feedback to your driving experience. The CorkSport Race RMM drastically reduces the amount of the engine movement, drastically enhancing your driving experience. It also goes great with our TMM!



### CorkSport Lowering Springs

Give your car the performance appearance and edge you have been looking for with the CorkSport Lowering Springs for your Mazda. By reducing ride height add the CorkSport Lowering Springs to your Mazda will result in a quicker turning response, crisper road feel, a more aggressive appearance, and a firmer spring rate, all while maintaining excellent ride quality.

