

## CorkSport Oil Catch Can



**Thank you for purchasing the CorkSport Mazda and Mazdaspeed Oil Catch Can.** By adding an Oil Catch Can to your vehicle you will be able to enhance the reliability of your engine and improve performance and fuel economy. The Oil Catch Can will capture unclean crankcase vapors and oil that can contaminate the intake tract allowing for cleaner air entering the engine and less detonation rates. Please let us know your feedback by submitting a review at <http://www.corksport.com/corksport-oil-catch-can.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



**How our instructions work:** To best cover all of our customers experience levels, we have included an overview checklist for the more technically advanced users along with step-by-step instructions for customers that require additional detail.



**These installation instructions were written using a 2010 Mazdaspeed 3 with FMIC kit installed.** Other year Mazdaspeed3 models will be similar. For other models follow general instructions provided within.

### Materials and Time:



#### General Info.

Part #: Gen-6-888  
Time Est: 1-2 hours  
Wrench Rating: 2/5



#### Tooling List

10mm Socket  
Needle nose pliers  
Drill and 6mm drill bit (07-09 MS3 only)  
Scissors or equivalent for trimming silicone



#### Parts List


1x Oil Catch Can  
1x M6 Nut  
2x M6 Bolts  
1x T-Bracket  
4x Zip Ties for Silicone Tubing  
2x Hose Clamps  
1x Vacuum T  
1x Vacuum Cap.  
11ft Silicon Tubing

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## Checklist

This is an overview of each step in the build. You can use this as a reference and a checklist as you button up the work on your car. **Steps 1 and 2 are for Mazdaspeed 3 Only. General instructions start in section 3** These instructions are intended for Mazdaspeed 3 owners only but this product will work on any car. It is a good idea to read the Mazdaspeed 3 instructions to get an idea of the process before moving to section 3.




### 1. Removing Under tray.

-  Refer to the vehicles owners manual for jacking and jack stand points
- a) Jack-up and support the vehicle using factory jacking and jack stand points.
- b) Remove the two plastic screw plugs holding the fender liner to the under tray (**green circles Figure 1a**).
- c) Remove the ten 10mm hex head bolts from the under tray (**red arrows in Figure 1a**).
- d) Remove the four 10mm hex head bolts holding the rear of the under tray to the inner fender liner on the driver and passenger sides then remove the under tray from the car (see **Figure 1b**).

### 2. Installing The CorkSport Oil Catch Can

- a) To locate the PCV hose, look up by the dipstick that is located behind the AC compressor (see hose in **Figure 2a**).
- b) Release the spring style hose clamps that holds the PCV hose in place, slide them to the middle of the hose, and remove the hose from the vehicle.
  -  The factory PCV valve is located on the block and is made of plastic. It can be easily broken if care is not taken when removing the factory hose.
- c) Replace installed T-bracket using the same set screws. The preferred height can be adjusted in the vehicle.
- d) Locate the lower part of the drivers side frame rail.
  - **2010+ Mazdaspeed 3**) There are two unused threaded bolt holes to attach the T-bracket to and skip to step (e).
  - **2007-2009 Mazdaspeed 3**) There is one unused threaded bolt holes that we will attach the T-bracket to and another you will need to drill a hole in the tab located forward of the bolt hole (**Figure 2b**).
- e) Mount the Oil Catch Can and bracket to the frame of the car using the provided M6 bolts and nut (**Figure 2c**) as required.
  -  To maximize the efficiency of the Oil Catch Can we are going to connect the Cam Case breather and the crank case breather together. **Figure 2d** shows the final routing. Use this for reference through the rest of the instructions.
- f) Attach the manifold plug and one of the supplied clamps on the intake manifold port where the hose was removed in step 2b. (**Figure 2e**) Tighten the clamp.
  -  There is extra silicone tube supplied for the next steps. You will need to trim the hose based on the intake you are using and the route you use for the silicone hose.
- g) Attach one end of the supplied silicon hose with a clamp to the factory PCV valve (shown in **Figure 2a** with **Green Arrow**). Tighten the clamp but make sure not over tighten because the factory valve is made of plastic and can crack.

## 2. Installing The CorkSport Oil Catch Can Continued...

- h) Route the Silicone hose down to the Oil Catch Can and connect it to the bottom port of the Oil Catch Can (shown in **Figure 2c** with a **red arrow**).
- i) Remove the Top Mount Intercooler Shroud attached with two 10mm bolts.
- j) Remove the PCV hose. If you already have a CorkSport Stage II intake you will have the silicon tube connecting the PCV breather from the turbo inlet pipe to the cam case breather. This can be pulled off easily. If you have the factory PCV hose you will need to disconnect it. You will need to press on either side of the blue clip in **Figure 1f** and also remove the other end at the cam cover.
  -  You can also remove the clips using a modified paper clip (shown in **Figure 2g**). Slide the paper clip in behind the latch clip and remove the entire assembly.
  -  [video support on removal of the valve cover breather hose located in knowledgebase](#)
- k) Connect the silicon tube to the cam cover port and route it down toward the line that was hooked up from the PCV valve to the oil Catch can.
- l) "T" the hose connected in **step 2j** to the hose connected in **step 2h**. Use the supplied PCV T (shown circled in **Figure 2h**). Trim the hoses as necessary to prevent kinking and interference with moving parts.
- m) Connect the remaining silicone tube to the factory vacuum port on the intake elbow or to the CorkSport Stage II intake port on the turbo inlet pipe.
- n) Route the hose down to the remaining port on the Oil Catch Can. Trim the hoses as necessary to prevent kinking and interference with moving parts.
  -  Be sure to keep the hose away from any moving engine components. (clutch slave cylinder, etc)
- o) Zip tie all of the hoses away from moving parts so that they will not bind or kink in the future.
- p) Reinstall the Top Mount Intercooler shroud that was removed in **step 2i**.
- q) Reinstall the under tray using the steps **1b-1d**
- r) Lower the vehicle back down off the jack stands
- s) This completes the installation of your CorkSport Oil Catch Can. Please read the periodic maintenance in Step 4.

## 3. General Installation Instructions for the Non-Mazdaspeed 3 Vehicles

- a) Jack up and support the vehicle using factory jacking and jack stand points.
- b) Locate a suitable place to mount the CorkSport Oil Catch Can. There are two supplied brackets that can be used. If you cannot find a suitable place to locate the oil catch fabricate another bracket to attach to the can.

### 3. General Installation Instructions for the Non-Mazdaspeed 3 Vehicles Continued...

- c) Mount the CorkSport Oil Catch Can using the supplied hardware or any other required hardware.
- d) Locate and remove the factory PCV line at the intake manifold.
- e) Run the supplied silicone hose from the upper port on the Oil Catch Can (green arrow in Figure 3a) to the engine block PCV port. Run the supplied silicone hose from the lower port on the Oil Catch Can (red arrow in Figure 3a) to the intake manifold PCV port. Use the factory spring clamps and the supplied hose clamps to secure the tubing.
- f) Secure the silicone tubing with supplied zip ties making sure to keep tubing out of the path of moving engine components.
- g) Lower the vehicle back down off the jack stands.

### 4. Periodic Maintenance of your CorkSport Oil Catch Can

- a) The CorkSport Oil Catch Can will need to be emptied periodically. A general rule for this is to initially check it at 500 miles (500 miles on test car is shown in Figure 4a).
- b) After the first 500 miles, you can check it less frequently. This is easy to do during oil changes since you will have the skid tray off anyway. Simply open the plug at the bottom of the catch can and let the contents drain into an oil pan (First oil change on test car is shown in Figure 4b).
- c) The frequency that you will have to drain the CorkSport Oil Catch Can will be car specific. Depending on driving habits and modification to your vehicle this may be more or less often. Remember to keep an eye on the sight tube on a regular basis to judge how often you will need to drain the can (Second oil change on test car is shown in Figure 4c).



## Detailed Instructions



**Steps 1 and 2 are for Mazdaspeed 3 Only. General instructions start in section 3**

These instructions are intended for Mazdaspeed 3 owners only but this product will work on any car.

It is a good idea to read the Mazdaspeed 3 instructions to get an idea of the process before moving to section 3.

### 1. Removing Factory Under Tray

- Jack up and support the vehicle using factory jacking and jack stand points. Refer to the owners manual for correct positions of jack and jack stands
- Remove the two plastic screw plugs holding the fender liner to the under tray (green circles Figure 1a).
- Remove the ten 10mm hex head bolts from the under tray (red arrows in Figure 1a).
- Remove the four 10mm hex head bolts holding the rear of the under tray to the inner fender liner on the driver and passenger sides (see Figure 1b).

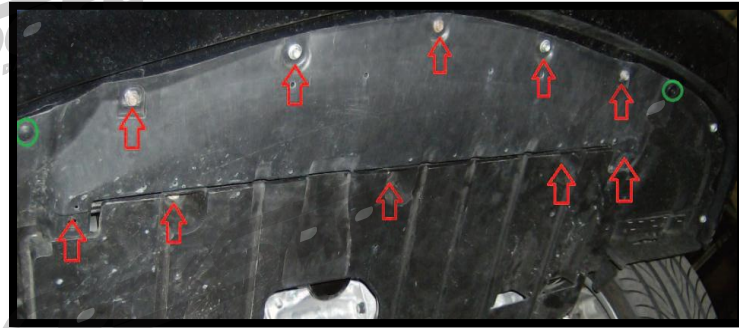


Figure 1a



Figure 1b

### 2. Installing the CorkSport Oil Catch Can

- To locate the PCV hose, look up by the dipstick that is located behind the AC compressor. (Figure 2a identifies the hose. The red arrow shows the end that goes into the intake manifold and the green arrow shows the end that goes into the engine).



This is important as we will be hooking hoses up to these in step (g) and (h).

- Release the spring style hose clamps attached to the PCV hose and slide them to the middle of the hose. This can be done using needle nose or snub nose pliers. Remove the hose from the vehicle.



The factory PCV valve is located on the block and is made of plastic. It can be easily broken if care is not taken when removing the factory hose.

- Replace the universal bracket attached to the catch can with the supplied T-bracket using the set screws from the universal bracket. The preferred height can be adjusted in the vehicle.

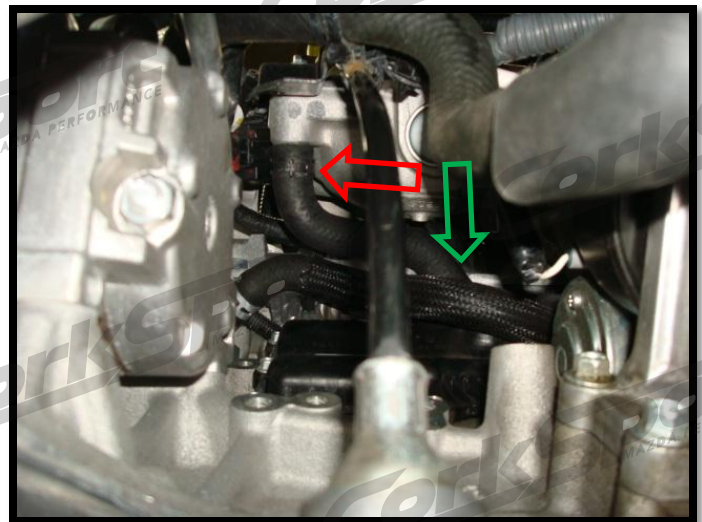


Figure 2a

- Locate the lower part of the drivers side frame rail.
  - 2010+ Mazdaspeed 3:** There are two unused threaded bolt holes that you will attach the T-bracket to. **Skip to step (e).**
  - 2007-2009 Mazdaspeed 3:** You will need to drill a second hole in the tab located forward of the bolt hole. You will need a 6mm or ¼" drill bit. Attach the bracket to the existing bolt hole and make a mark on the tab in the other bolt hole location in order to drill the hole (the red circle in Figure 2b indicates hole location)

## 2. Installing the CorkSport Oil Catch Can Continued...

- e) Mount the Oil Catch Can and bracket to the frame of the car using the two supplied 10mm bolts. On the 2007-2009 Mazdaspeed3 you will use the provided 10mm head nut on the bolt hole that was drilled (**Figure 2c**).

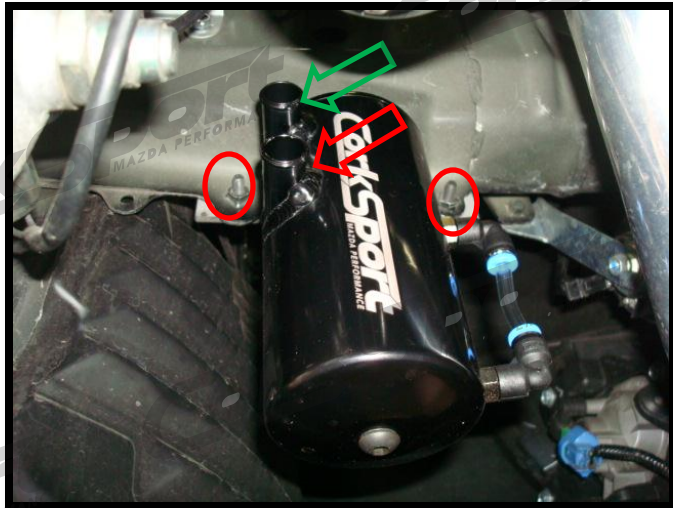


Figure 2c



Figure 2b



To maximize the efficiency of the Oil Catch Can we are going to connect the Cam Case breather and the Crank Case breather together. **Figure 2d** shows the final routing. Use this for reference through the rest of the instructions.

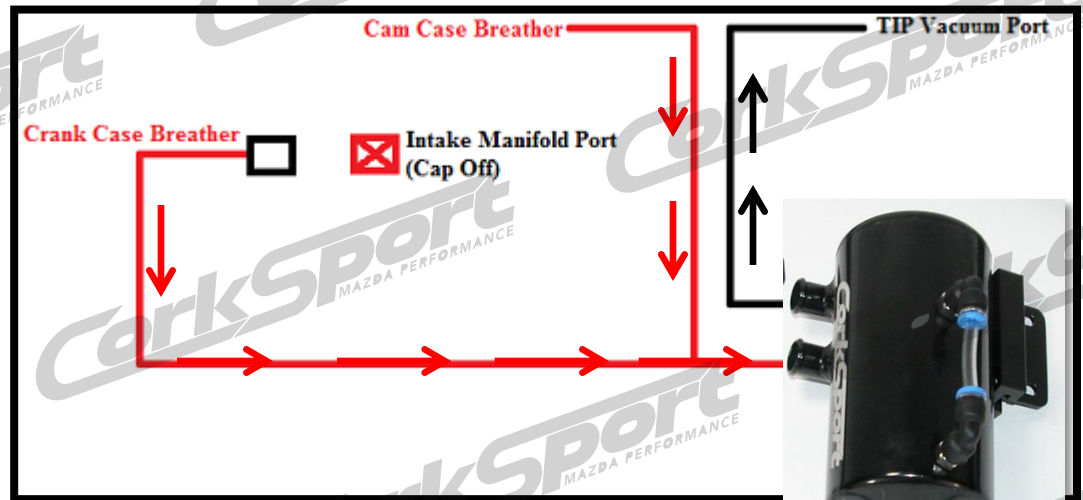


Figure 2d

- f) Attach the manifold plug and one of the supplied clamps on the intake manifold port where the hose was removed in step 2b (**Figure 2e**) and tighten the clamp.



There is extra silicone tube supplied for the next steps. You will need to trim the hose based on the intake you are using and the route you use for the silicone hose.

- g) Attach one end of the supplied silicon hose with a clamp to the factory PCV valve (shown in **Figure 2a** with **green arrow**). Tighten the clamp but make sure not over tighten because the factory valve is made of plastic and can crack.

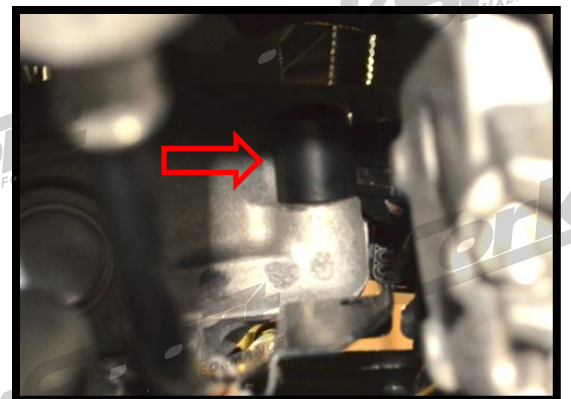


Figure 2e



2. Installing the CorkSport Oil Catch Can Continued...

- h) Route the Silicone hose down to the Oil Catch Can and connect it to the bottom port of the Oil Catch Can (shown in **Figure 2c** with a red arrow).
- i) Remove the top mount intercooler shroud attached with two 10mm bolts.
- j) Remove the PCV hose. If you already have a CorkSport Stage II intake you will have the Silicon tube connecting the PCV breather from the turbo inlet pipe to the cam case breather. This can be pulled off easily. If you have the factory PCV hose you will need to disconnect it. You will need to press on either side of the blue clip shown in **Figure 1f**. Remove the hose at the cam cover end.



Figure 2f



You can also remove the clips using a modified paper clip (shown in **Figure 2g**) Slide the paper clip in behind the latch clip and remove the entire assembly.



[video support on removal of the valve cover breather hose located in knowledgebase](#)

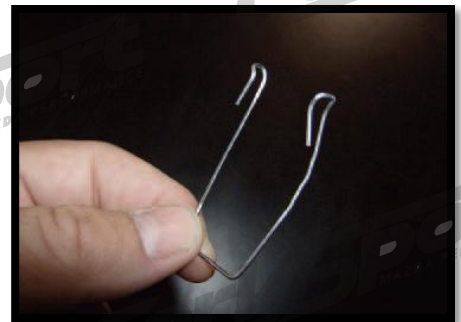


Figure 2g

- k) Connect the silicon tube to the cam cover port and route it down toward the line that was hooked up from the PCV valve to the Oil Catch Can.
- l) "T" the hose connected in step 2j to the hose connected in step 2h. Use the supplied PCV T (shown in **Figure 2h**). Trim the hoses as necessary to prevent kinking and interference with moving parts.
- m) Connect the remaining silicone tube to the factory vacuum port on the intake elbow or to the CorkSport Stage II Intake port on the turbo inlet pipe.
- n) Route the hose down to the remaining port on the Oil Catch Can. Trim the hoses as necessary to prevent kinking and interference with moving parts.

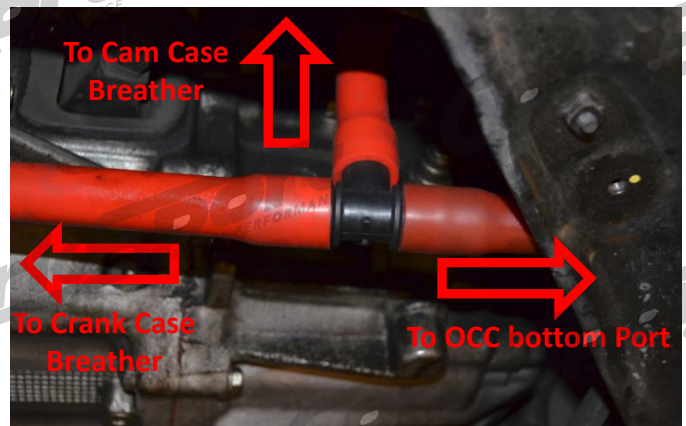


Figure 2h



Be sure to keep the hose away from any moving engine components. (clutch slave cylinder, etc)

- o) Zip tie all of the hoses away from moving parts so that they will not bind or kink in the future.
- p) Reinstall the Top Mount Intercooler shroud.

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## 2. Installing the CorkSport Oil Catch Can Continued...

- q) Reinstall the under tray using the steps **1b-1d**
- r) Lower the vehicle back down off the jack stands
- s) This completes the installation of your CorkSport Oil Catch Can. Please read the periodic maintenance in Step 4.

## 3. General Installation Instructions for Installing the CorkSport Oil Catch Can

The CorkSport Oil Catch Can may be used with any vehicle. The above instructions should be referenced even if you are installing the Oil Catch Can on another vehicle.

- a) Jack up and support the vehicle using factory jacking and jack stand points. Refer to the owners manual for correct positions of jack and jack stands
- b) Locate a suitable place to mount the CorkSport Oil Catch Can. There are two supplied brackets that can be used. If you cannot find a suitable place to locate the Oil Catch Can using the provided brackets, then you may have to fabricate another bracket to attach to the can.
- c) Mount the CorkSport Oil Catch Can using the supplied hardware or any other required hardware.
- d) Locate and remove the factory PCV line at the intake manifold. There will be a PCV line running from the intake manifold to the engine block that needs to be removed so you can add the tubing for the Oil Catch Can.



Figure 3a

- e) Run the supplied silicone hose from the upper port on the Oil Catch Can (**green arrow** in **Figure 3a**) to the engine block PCV port. Run the supplied silicone hose from the lower port on the Oil Catch Can (**red arrow** in **Figure 3a**) to the intake manifold PCV port. Use the factory spring clamps and the supplied hose clamps to secure the tubing.

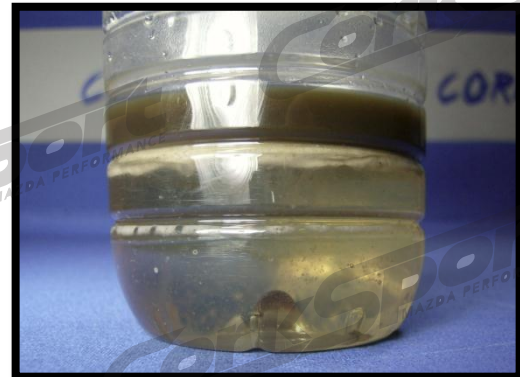


Figure 4a

- f) Secure the silicone tubing with supplied zip ties making sure to keep tubing out of the path of moving engine components.
- g) Lower the vehicle back down off the jack stands.

## 4. Periodic Maintenance of your CorkSport Oil Catch Can

- a) The CorkSport Oil Catch Can will need to be emptied periodically. A general rule for this is to initially check it at 500 miles. You may see a lot of water collected with the oil. You can quickly view the contents and if it needs to be drained by checking the sight tube on the side of the can (500 miles on test car is shown in **Figure 4a**).

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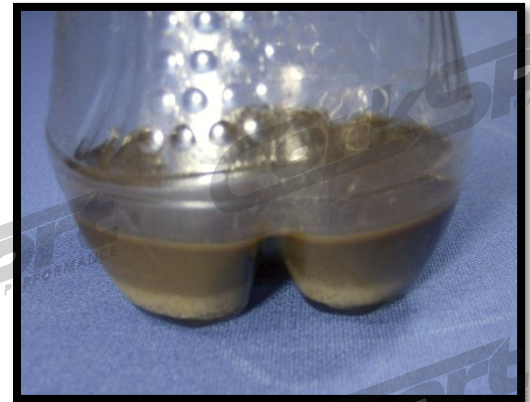


#### 4. Periodic Maintenance of your CorkSport Oil Catch Can

- b) After the first 500 miles, you can check it less frequently. This is easy to do during oil changes since you will have the skid tray off anyway. Simply open the plug at the bottom of the catch can and let the contents drain into an oil pan (first oil change on test car is shown in **Figure 4b**).
- c) The frequency that you will have to drain the CorkSport Oil Catch Can will be car specific. Depending on driving habits and modification to your vehicle this may be more or less often. Remember to keep an eye on the sight tube on a regular basis to judge how often you will need to drain the can (second oil change on test car is shown in **Figure 4c**).



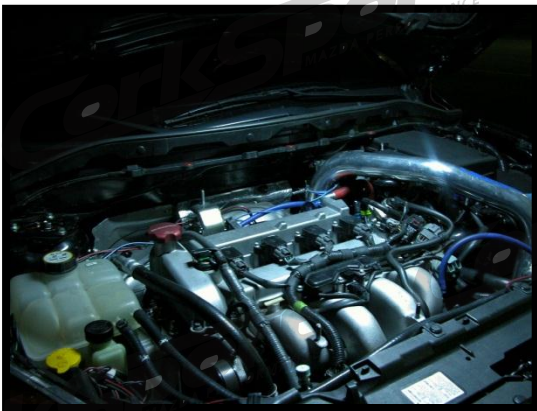
**Figure 4b**



**Figure 4c**

### What's Next:

#### [CORKSPORT Underhood LED Light Kit](#)



**Cast a cool white light on your engine bay** with the CorkSport Mazda LED Underhood Lighting Strip. Connected directly to your battery, this easy to install kit uses a pin switch to activate the light when the hood is lifted, giving you and ambient white light that will enhance your Mazda or Mazdaspeed engine bay and keep the area brightly lit for under the hood installations and car shows.

#### [CORKSPORT Lightweight Lug Nut Set](#)

**Transform your Mazda or Mazdaspeed wheels with CorkSport Lightweight Extended Lug Nuts.** Meticulously crafted from an extruded aluminum billet and Made from 7075 aluminum, CorkSport utilizes CNC machinery to ensure the highest grade of precision quality during production. The CorkSport brand lug nuts are 12mm x 1.5 pitch thread, ultra lightweight and come in a black finish with CS laser etched logo.



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