



# INSTALLATION INSTRUCTIONS

## PART NUMBER

### 21-781DS

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2014-2016

Mercedes Benz

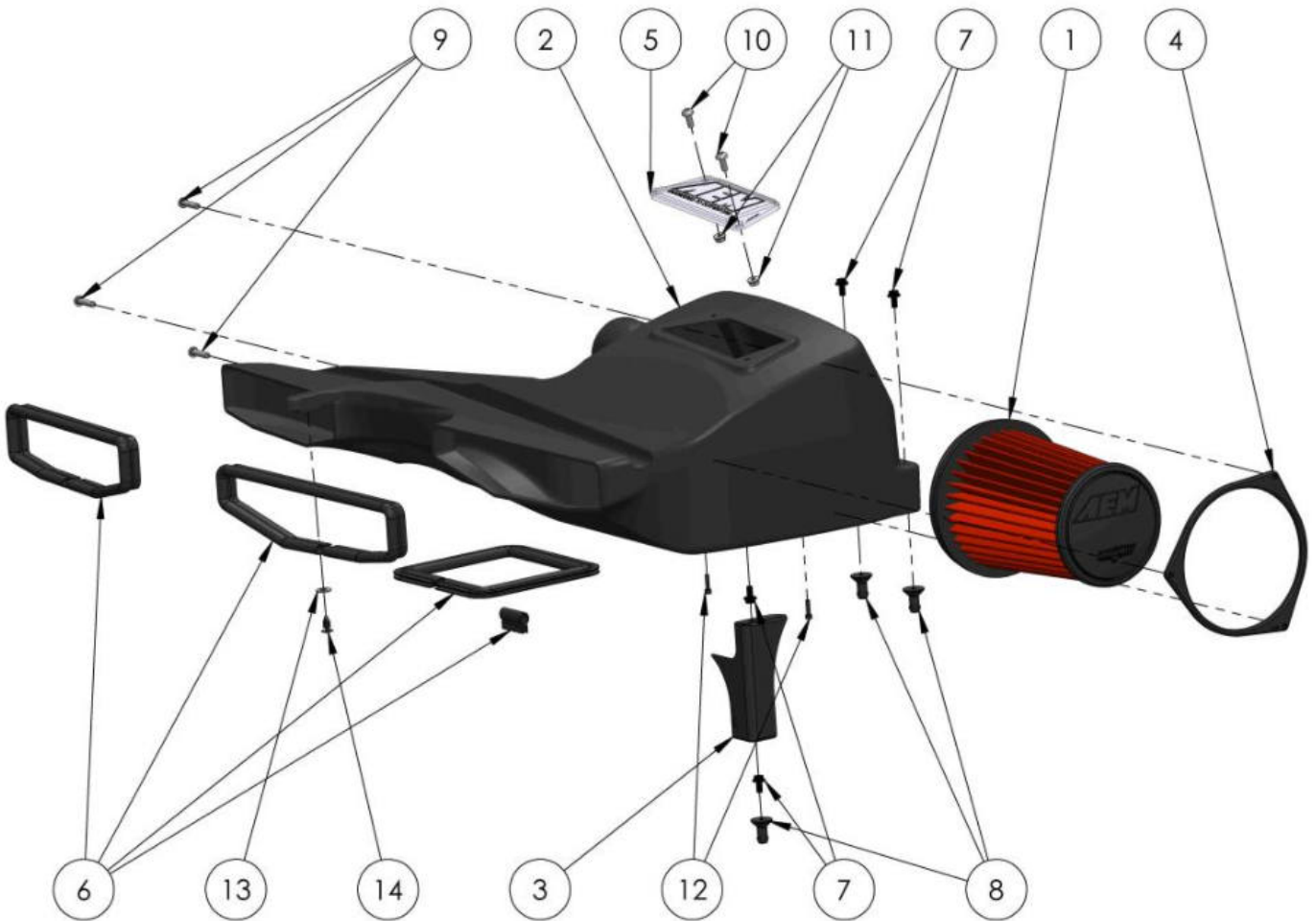
CLA250

2.0T

C.A.R.B E.O # D-670-24

**Intake systems for vehicles listed are 50 state legal. See [AEMIntakes.com](http://AEMIntakes.com) for CARB status on each part for a specific vehicle.**

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	21-1015DK	ELEMENT; 6-3/8 OD B, 5-3/16 OD T; 8-7/8H	1
2	9-0446	AIRBOX; 2014 MB CLA 250	1
3	7-347	BRACKET; AIRBOX STANDOFF MOUNT AND ECU SUPPORT FOR AEM-9-0446	1
4	7-349	RING; AXIAL FILTER RETAINER, STAMPED STEEL, 3 HOLE - M6X1, 6"ID	1
5	8-211	PLATE; AEM LOGO, CLEAR, 6.2" X 2.4" X .25"	1
6	102460	EDGE TRIM; 3/4" BULB, TOP LOC, 75"L	1
7	1-2110	BOLT; HEX/FLANGE M6-1.0 X 12	4
8	8-186-1	MOUNT, PLASTIC AIRBOX, NYLON	3
9	07729	BOLT; M6-1.00 X 25MM BUTTONHEAD, SS	3
10	07730	BOLT; M6 X 1.00 X 16MM , BUTTONHEAD, SS	2
11	444.460.04	NUT, M6 HEX SERRATED	2
12	1-2097	BOLT, SOCKET M4-.7 X 16MM	2
13	08276	WASHER; 5/16"ID X 5/8"OD, FLAT	1
14	8-166	PLUG, LG TREE CLIP BLK	1



Read and understand these instructions **BEFORE** attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine. If you need any assistance please call 1-800-858-3333 to speak with a representative in our Customer Service Center before returning the product.

## 1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set the parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect negative battery terminal.
- e. Do not discard stock components after removal of the factory system.
- f. Open the product package and make sure all parts are included.

<b>Tools Needed:</b>	Utility Knife
Flathead Screwdriver	<b>Optional:</b>
10mm Socket	Small Torque Wrench
Socket Driver	
Needle-Nose Pliers	
Metric Hex Key Set	

## 2. Removal of stock system



a. Remove engine cover by lifting up at all four corners.



b. Release factory inlet duct with a small flat blade as shown and pull downward to fully disconnect.



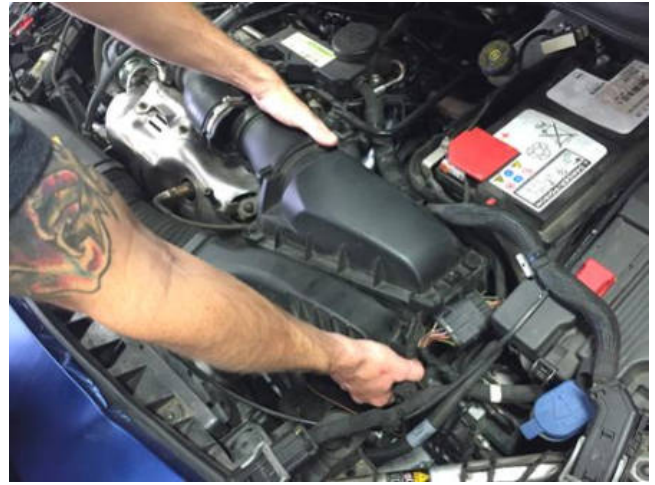
c. Loosen hose clamp at the factory airbox connection and remove as shown.



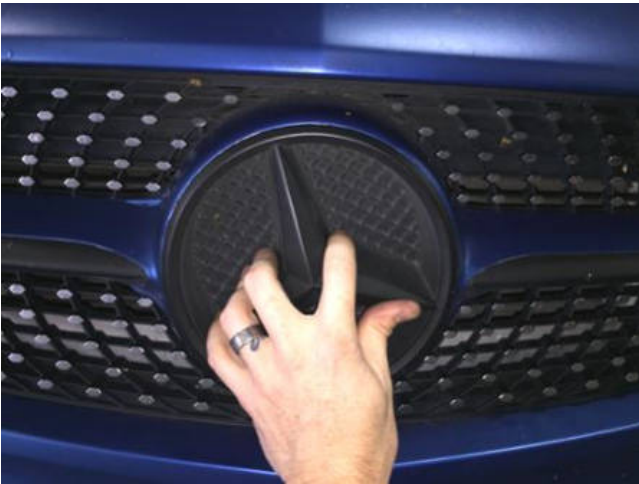
d. Disconnect the ECU mount clips by pushing on them in the direction indicated by the arrows above, then lift the ECU away from the airbox and set aside.



e. Lift up on wire harness retainer on the side of the airbox to remove it.



f. Lifting as shown above, remove the factory airbox assembly from the vehicle.



g. To open up maximum airflow to intake, the secondary air inlet must be uncovered. Twist the Mercedes emblem on the grill counterclockwise and pull to remove it. If your car is equipped with DISTRONIC radar-assisted parking and cruise control features, this emblem (shown at right above) will not be removable by twisting in this fashion. The grill will need to be removed to allow removal of the cover as detailed in step 3h below.



h. Release the inlet cover by squeezing and pushing the cover retainer tabs located on either side of the secondary inlet.



i. The inlet cover may now be removed through the emblem hole. It will look like the piece above. Replace the emblem at this time. Installation is reverse of removal.

### 3. Installation of AEM® performance parts.

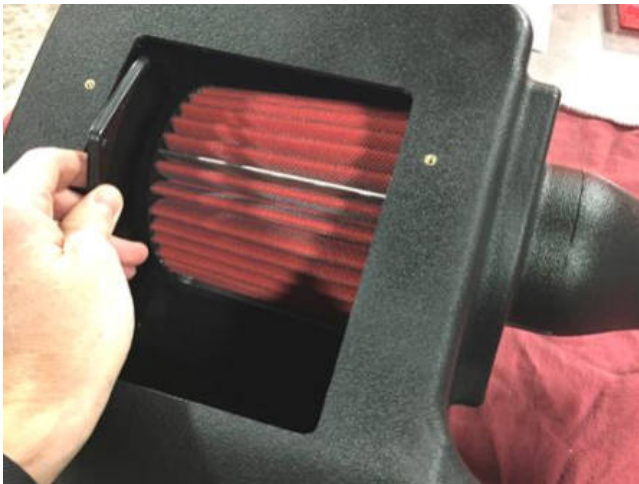
- a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.
- b. Refer to the diagram on pg2 to determine which components to use in each step.



a. Install the airbox mounts on the airbox and trim the supplied edge trim to fit the front air inlets in the airbox.



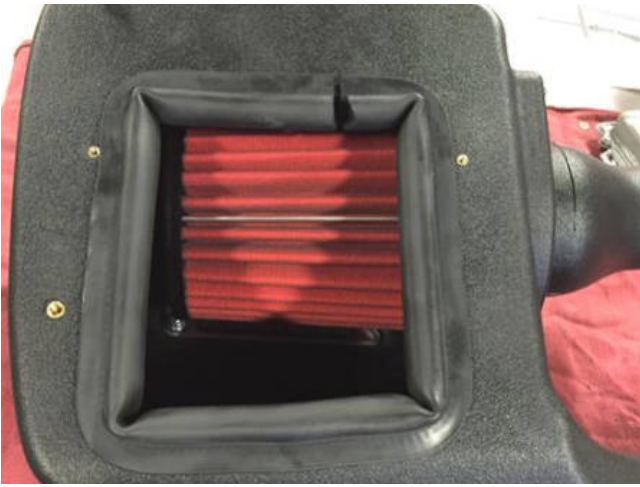
b. Mount the logo plate with the included hardware.



c. Load the filter through the opening in the bottom of the airbox and pass the retainer ring over the filter with the smooth side facing the filter opening.



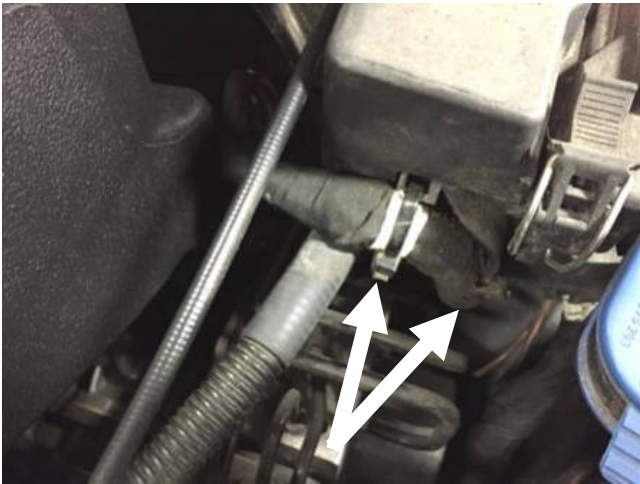
d. Tighten all three mounting screws with uniform torque until about 12mm of the fastener protrudes through the retainer ring.



e. Trim 40mm of the remaining edge trim to be used in the next step and install the remainder on the bottom of the airbox as shown.



f. Install the 40mm trim piece on the airbox stand-off and assemble remaining components onto it as shown above.



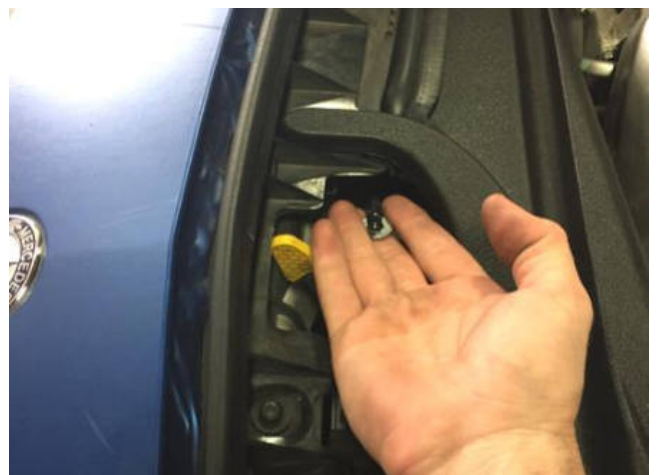
g. Cut the zip ties shown above to free the ECU harness. Take care to not cut the wiring.



h. Disconnect the two wiring harnesses circled above and pass them under the conduit indicated by the arrow above. Reconnect them both before proceeding.



i. With the assembly carefully positioned as shown in the vehicle, use the included M4 bolts and the stand-off assembly to fasten the ECU to the bottom of the airbox. Then, maneuver the entire assembly into position.



j. Optionally, if the support "finger" on the airbox is not sitting flush with it's mating surface, the included tree clip and washer can be pushed in to the bottom of the "finger" to hold it flush.



STOCK AIRBOX INSTALLED



AEM INTAKE INSTALLED

#### 4. Reassemble Vehicle (where applicable)

- a. Position all kit components for best fitment. Ensure that no components contact any unintended part of the vehicle.
- b. Check for proper hood clearance. Re-adjust components if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and ensured that all fasteners that were moved or removed are properly tightened.
- d. Reconnect negative battery terminal and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. Service and Maintenance

- a. AEM Induction Systems requires cleaning the intake system's air filter element every 100,000 miles. When used in dusty or off-road environments, our filters will require cleaning more often. We recommend that you visually inspect your filter once every 25,000 miles to determine if the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 1-1000 and follow the easy instructions.
- b. Use window cleaner to clean your powder coated AEM<sup>®</sup> components.

**NOTE: DO NOT USE aluminum polish on powder coated AEM<sup>®</sup> components.**

For technical inquiries  
e-mail us at  
[sales@aemintakes.com](mailto:sales@aemintakes.com)  
or  
call us at  
800.992.3000

## **AEM Performance Product Warranty Policy**

AEM® warrants that its performance products will last for the life of your vehicle. AEM® will not honor this warranty due to mechanical damage (i.e. improper installation or fitment), damage from misuse, accidents or flying debris. AEM® will not warrant its powder coating if the finish has been cleaned with a hydrocarbon-based solvent. The powder coating should only be cleaned with a mild soap and water solution. Proof of purchase of both the vehicle and AEM® intake system is required for redemption of a warranty claim.

This warranty is limited to the repair or replacement of the AEM® part. In no event shall this warranty exceed the original purchase price of the AEM® part nor shall AEM® be responsible for special, incidental or consequential damages or cost incurred due to the failure of this product. Warranty claims to AEM® must be transportation prepaid and accompanied with dated proof of purchase. This warranty applies only to the original purchaser of product and is nontransferable. Improper use or installation, use for racing, accident, abuse, unauthorized repairs or alterations voids this warranty. AEM® disclaims any liability for consequential damages due to breach of any written or implied warranty on all products manufactured by AEM®. Warranty returns will only be accepted by AEM® when accompanied by a valid Return Merchandise Authorization (RMA) number. Credit for defective products will be issued pending inspection. Product must be received by AEM® within 30 days of the date RMA is issued.

If you have a warranty issue, please call (800) 992-3000 and our customer service department will assist you. A proof of purchase is required for all AEM® warranty claims.

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