



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

## INSTALLATION INSTRUCTIONS

**PART NUMBER: 21-8209**

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2005-2006	DODGE	Dakota	V8-4.7L	C.A.R.B. E.O. # D-670
2006	MITSUBISHI	Raider	V8-4.7L	C.A.R.B. E.O. # D-670

\* **NOTE:** Legal in California only for racing vehicles which may never be used upon a highway

## PARTS LIST

Description	Qty.	Part Number
Air Filter Assy. 3.50 X 5" Dry Ele.	1	21-204DK
Inlet Pipe	1	2-82091
Heat Shield	1	20-8209
Hose, Adaptor 3.5/3.25x2.5 W/Nipple	1	5-352-N
Edge Trim, 17"	1	8-4017
Mount, Rubber 1" X 8mm	1	1228560
Spacer, .625 OD X .295 ID X .1	1	2-125
Nipple, Heat Shield Mount Pres.	1	2-780
Edge Trim; 1/16"Gap X 18"L	1	102504
Bolt, Hex M6 X 1.0 X 16mm	1	1-2030
Washer, 8mm Soft Mount	3	559960
Washer, 6mm Soft Mount	1	559999
Nut, M8 Hex Serrated	2	444.460.08
1/2" Bnd. Hose Clamp, 3.31"-4.25"	1	9460
1/2" Bnd. Hose Clamp, 3.15"-4.00"	1	9456
1/2" Bnd. Hose Clamp, 2.90"-3.75"	1	9452
Hose Clamp, 1 1/16" Narrow	1	4093-6
Elbow, 0.500" 90 Deg. Rubber	1	8-155

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.

The AEM<sup>®</sup> intake system is a performance product that can be used safely during mild weather conditions. During harsh and inclement weather conditions, you must return your vehicle to stock OEM air box and intake tract configuration. Failure to follow these instructions will void your warranty.

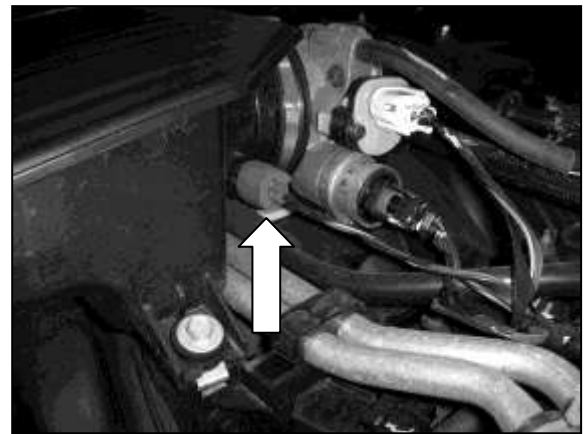
### 1. Preparing Vehicle

- a. Make sure vehicle is parked on level surface.
- b. Set 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.

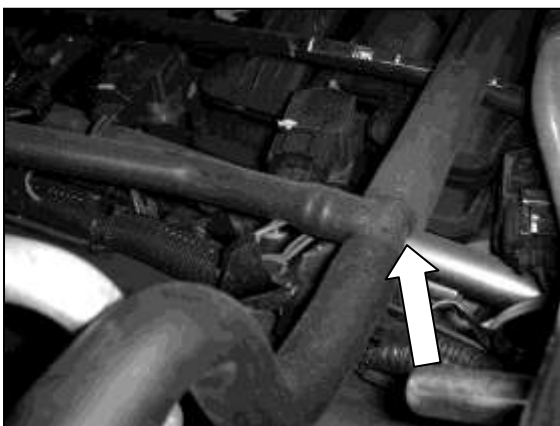
### 2. Removal of stock system



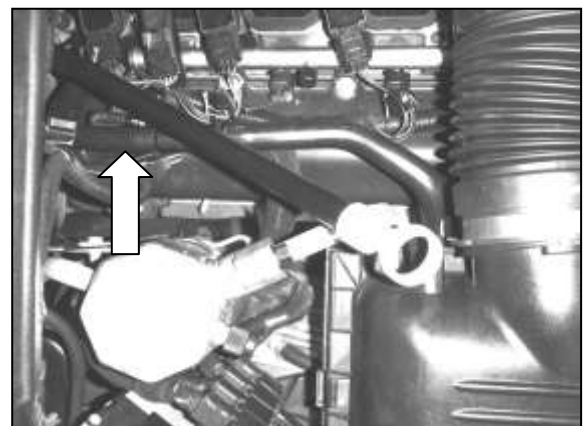
a. Stock air box system installed.



b. Unplug the Inlet Air Temperature Sensor (IAT) from the stock resonator box



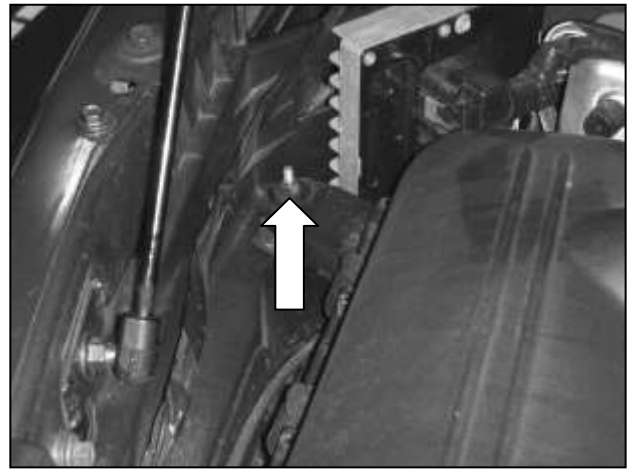
c. For vehicles equipped with a plastic tee: Remove the breather hose from the plastic tee.



d. For vehicles equipped with plastic connector: Remove the breather hose from the plastic connector.



e. Remove the two resonator bolts.



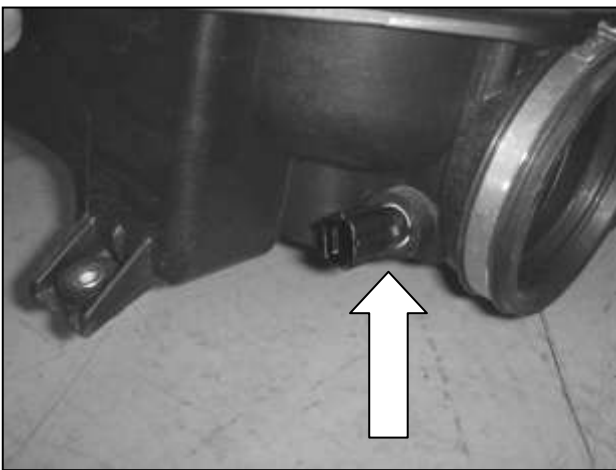
f. Remove the air box nut.



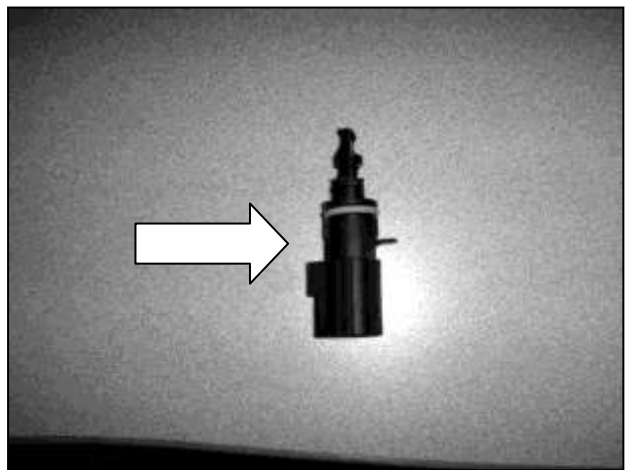
g. Slide the resonator off the throttle body



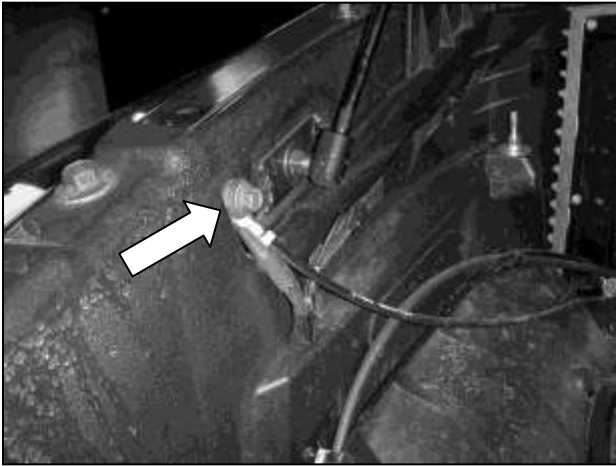
h. Gently pull the airbox out of the rubber grommets and remove the entire intake system from the engine bay.



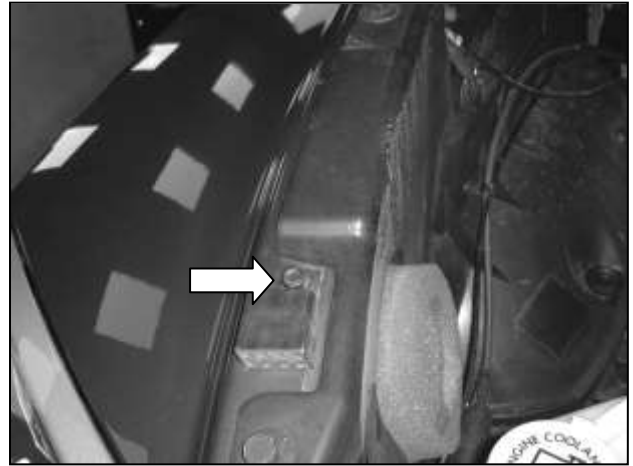
i. Twist the IAT sensor from the resonator box.



j. Remove the rubber o-ring from the IAT sensor.



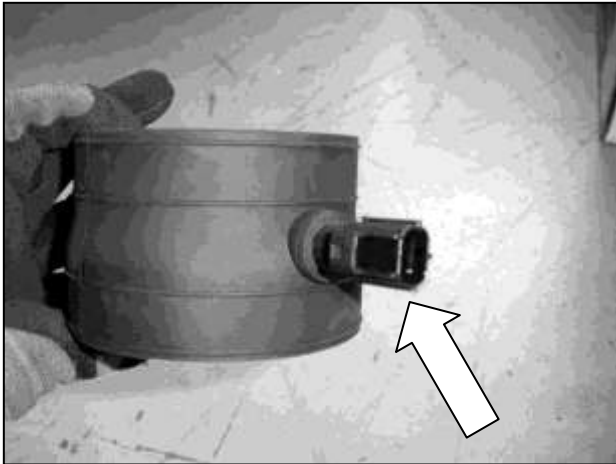
k. Remove the ground wire bolt on the side of the engine bay. Save for later use.



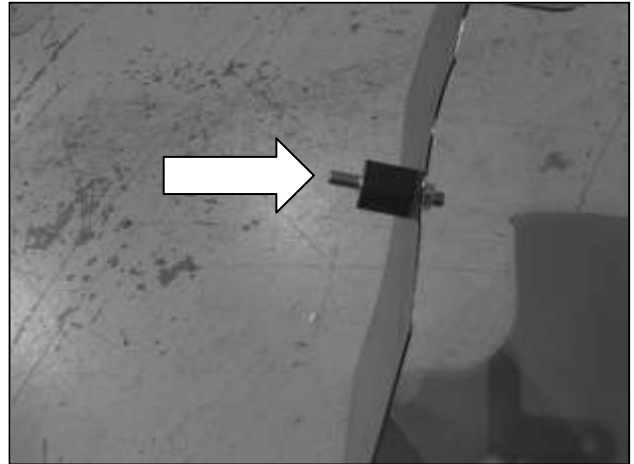
l. Remove one of the bolts on the fender. Save for later use.

### 3. Installation of AEM® intake system.

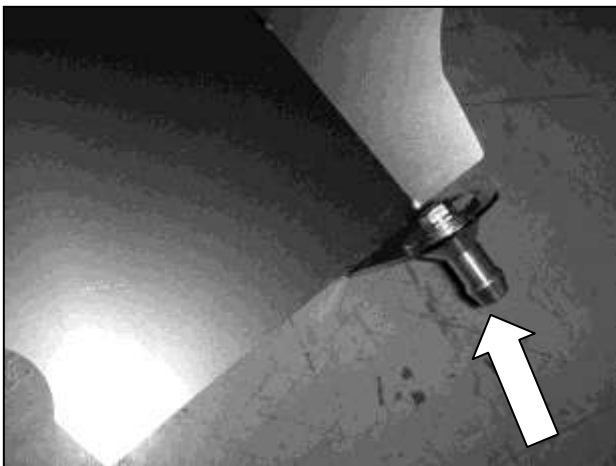
a. When installing the intake system, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



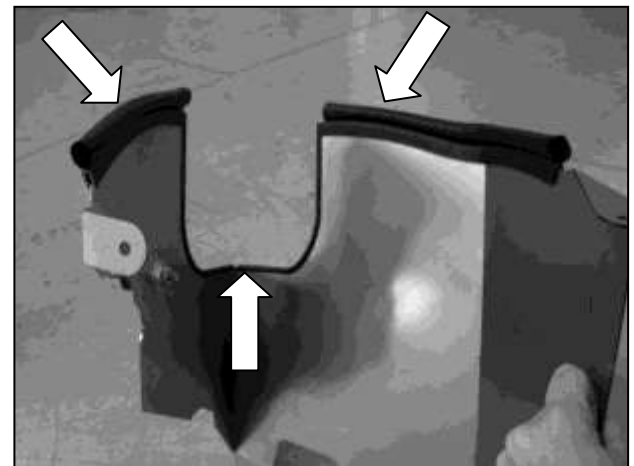
b. Gently insert the IAT sensor into the nipple on the side of the rubber reducer coupler.



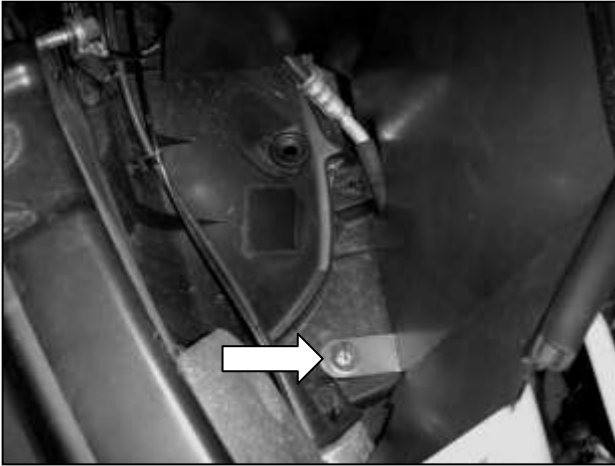
c. Attach the rubber mount to the outside of the heat shield using the supplied washer and nut.



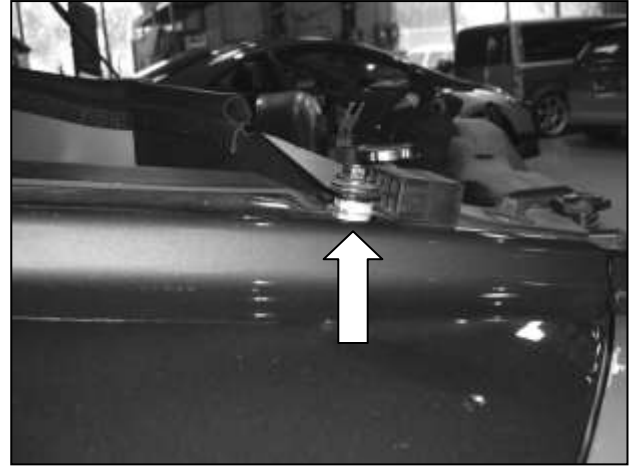
d. Attach the metal push-in to the heat shield using supplied washer and M6 bolt.



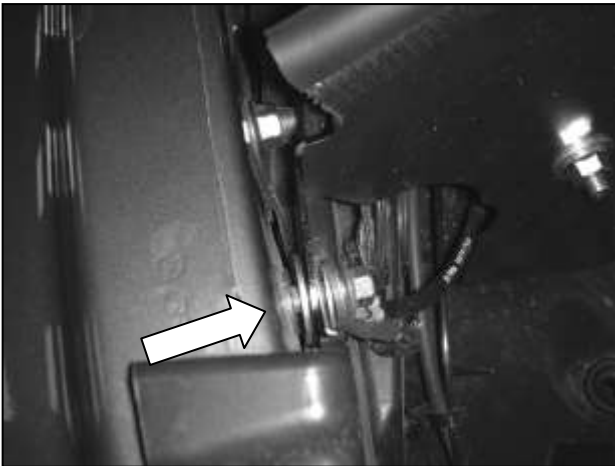
e. Attach the rubber foam gasket and rubber edge trim pieces to the heat shield, cut to fit.



f. Place the heat shield in the engine bay. Gently push the heat shield bracket down into the rubber grommet.



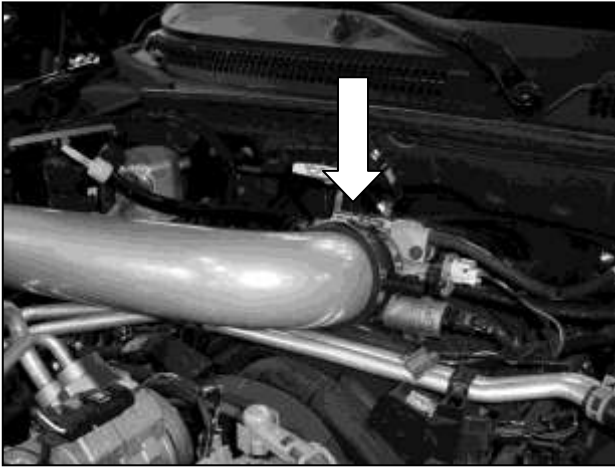
g. Place supplied washer between heat shield bracket and engine bay sidewall. Secure with bolt, running the bolt back through the ground wires.



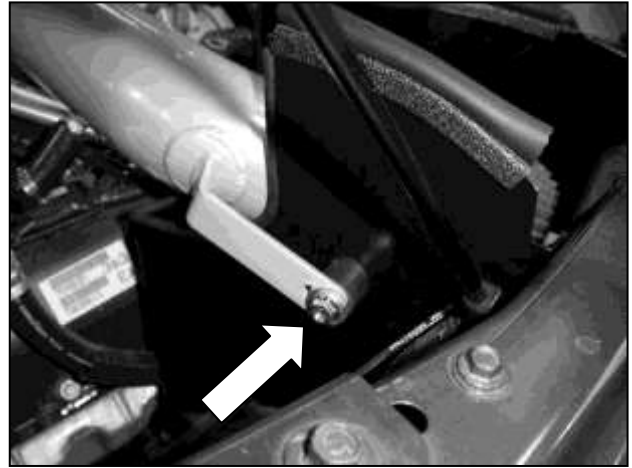
h. Place supplied spacer between the fender and the heat shield bracket. Secure with bolt.



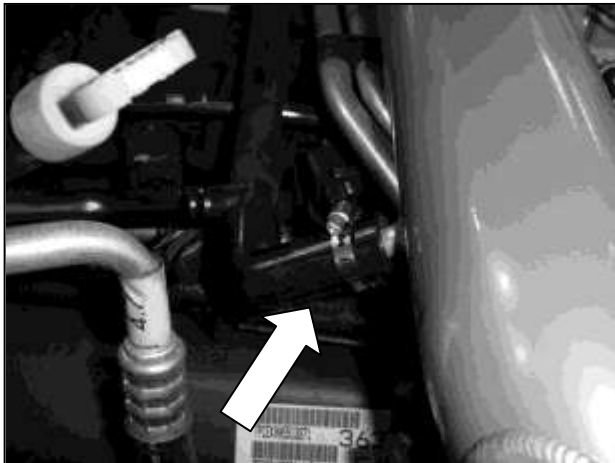
i. Place the #52 hose clamp on the smaller end of the reducer coupler. Attach the smaller end of the reducer coupler to the throttle body with the IAT sensor directed to the right of the throttle body.



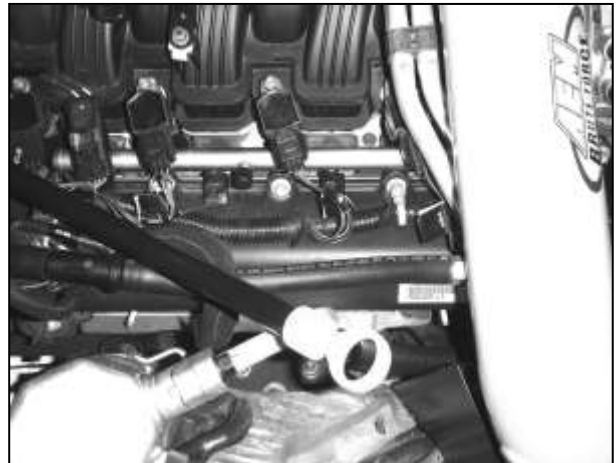
j. Place the #56 hose clamp on the large end of the coupler. Insert the short end of the intake piping into the coupler. Do not fully tighten the hose clamps at this time.



k. Be sure that the pipe bracket is in a flat position over the rubber mount. Loosely install the supplied washer and nut over the bracket.



**l. For vehicles equipped with a plastic tee:** Connect the rubber elbow hose to the stock plastic connector exposed in step 2c in the removal process. Use the small hose clamp to secure it to the pipe breather nipple.



**m. For vehicles equipped with plastic connector:** Connect the rubber elbow hose to the stock plastic connector exposed in step 2d in the removal process. Use the small hose clamp to secure it to the pipe breather nipple.



n. Insert the air filter onto the end of the intake pipe. Secure with the supplied hose clamp.



o. Plug harness into IAT sensor.



AEM intake system installed

#### 4. Reassemble Vehicle

- a. Position the inlet pipes for the best fitment. Be sure that the pipes or any other components do not contact any part of the vehicle. Tighten the rubber mount, all bolts, and hose clamps.
- b. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- d. Reconnect negative battery terminals and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. CARB Sticker Placement

- a. The C.A.R.B. exemption sticker, (attached), must be visible under the hood so that an emissions inspector can see it when the vehicle is required to be tested for emissions. California requires testing every two years, other states may vary.

#### 6. Service and Maintenance

- a. It is recommended that you service your AEM<sup>®</sup> Dryflow<sup>™</sup> filter every 20,000 miles for optimum performance. Use AEM Dryflow cleaning kit part # 21-110.
- b. Use aluminum polish to clean your polished AEM<sup>®</sup> intake tube.
- c. Use window cleaner to clean your powder coated AEM<sup>®</sup> intake tube. **(NOTE: DO NOT USE aluminum polish on powder coated AEM intake tubes).**

For technical inquiries  
e-mail us at  
sales@aemintakes.com  
or  
call us at  
800.992.3000

**AEM Air Intake System Warranty Policy**

AEM® warrants that its intake systems 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.