



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

# INSTALLATION INSTRUCTIONS

## PART NUMBER: 21-436

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2004-2005 MITSUBISHI Lancer Ralliart L4-2.4L Manual Trans. 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
Element Parts Kit 2.75 X 5" Dry Ele.	1	21-202DK
Upper Pipe	1	2-587
Lower Pipe	1	2-588
Hose, Silicone 2.75x3" Blk.	2	5-275
Hose; 3/8"ID X 12"L	1	5-1012
Mount, Rubber 1" X 8mm	1	1228560
Zip Tie,8" Tree Push-Mnt.	2	1-127
Drain Valve, 0.500"	1	8-145
Bolt, Socket 8-32 X 1/2"	2	1-2028
Washer, 8mm Soft Mount	2	559960
Nut, M8 Hex Serrated	1	444.460.08
1/2" Bnd. Hose Clamp, 2.31-3.25"	4	9444
Hose Clamp, 3/4"	2	4093-5
1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448

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® 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.

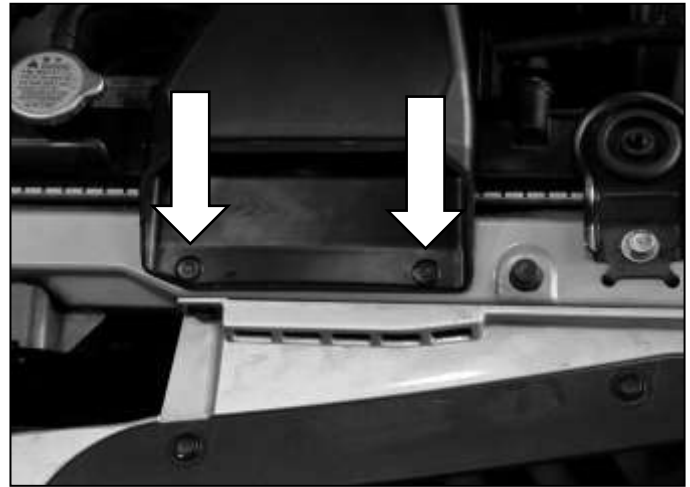
### 1. Preparing Vehicle

- 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 both positive and negative battery terminals.
- e. Do not discard stock components after removal of the factory system.

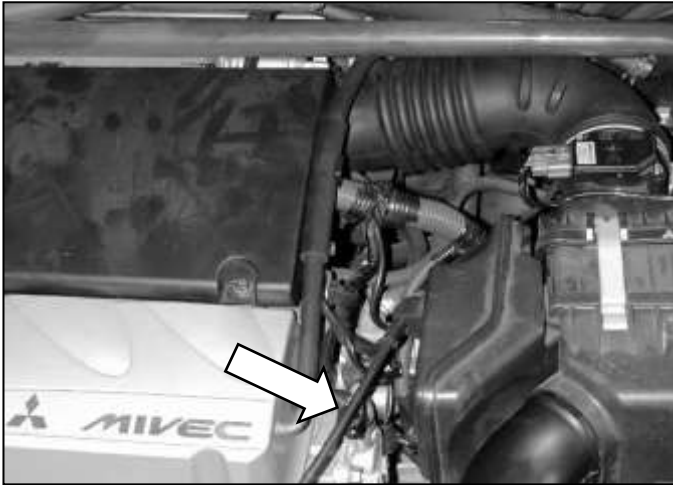
### 2. Removal of stock system



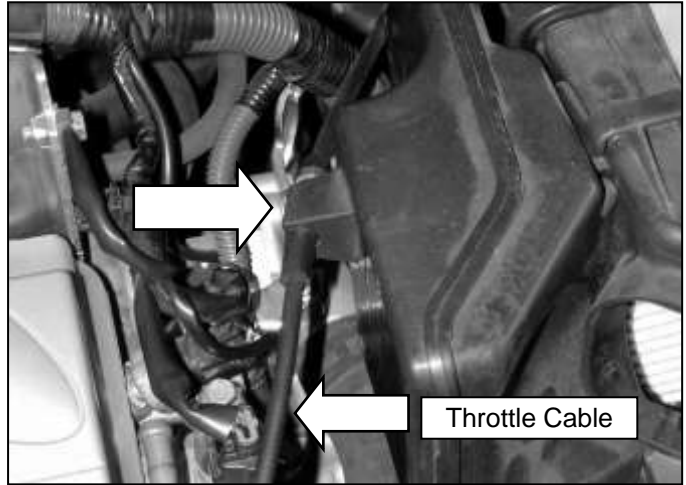
a. Before removing any of the O.E. components, label each individual part so that no components become mixed up during the installation process.



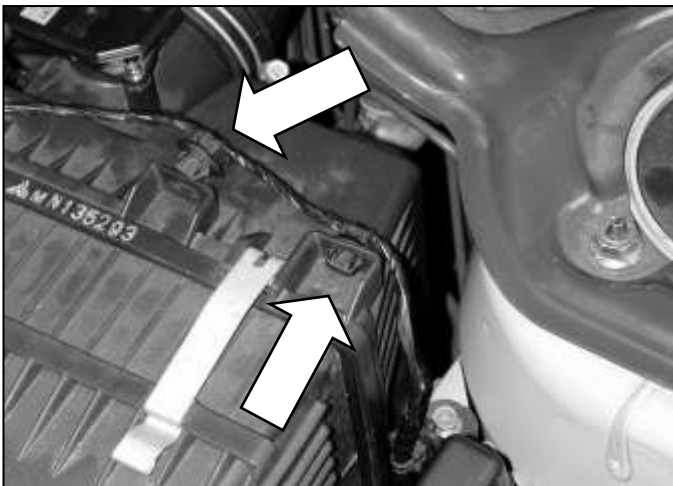
b. Remove plastic intake duct from the front of the engine by removing the plastic clips and pulling the duct straight forward. To remove the clips, use a pointed device and push in the middle of the clips.



c. Remove the breather hose from the valve cover by pulling it off.



d. Unclip the throttle cable from the side of the air filter housing.



e. Unclip the Mass Air Flow (MAF) sensor wiring harness from the air filter housing. These clips can be removed undamaged from the harness using a small flat head screwdriver.



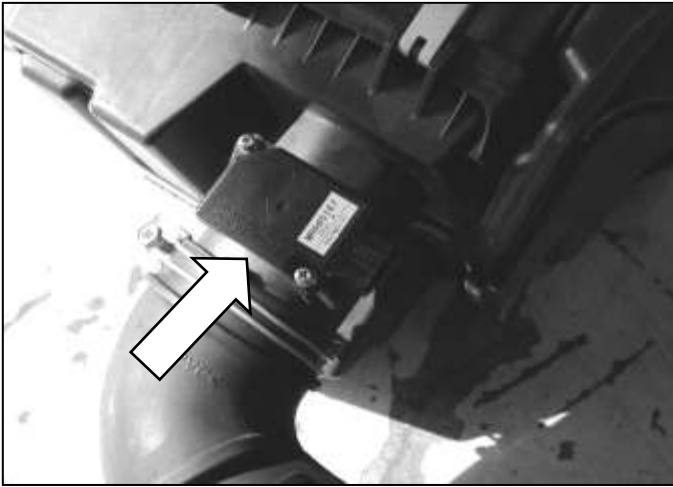
f. Unscrew the inlet tube from the throttle body and pull the inlet tube off the throttle body.



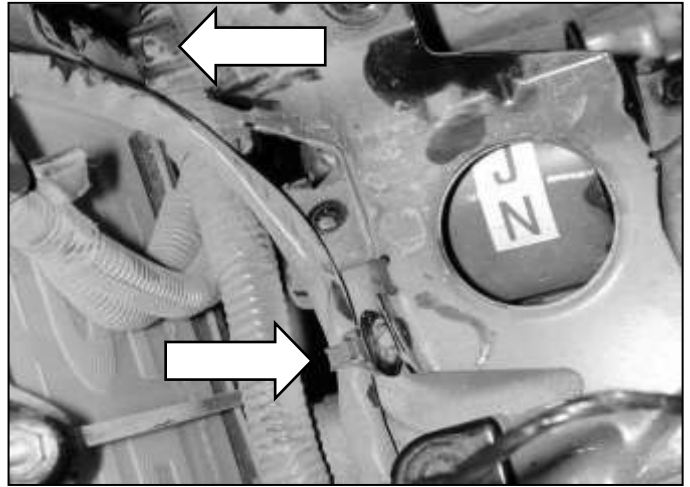
g. Unplug the MAF sensor from the engine harness.



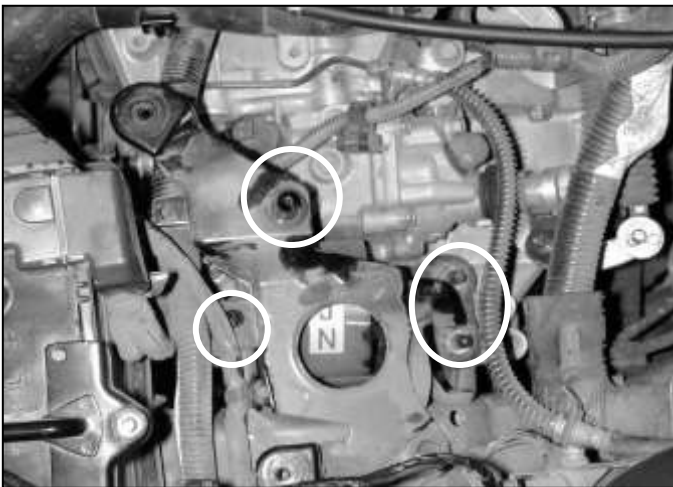
h. Remove the two bolts securing the stock air filter housing to the engine bay. Remove the air filter housing and the inlet tube.



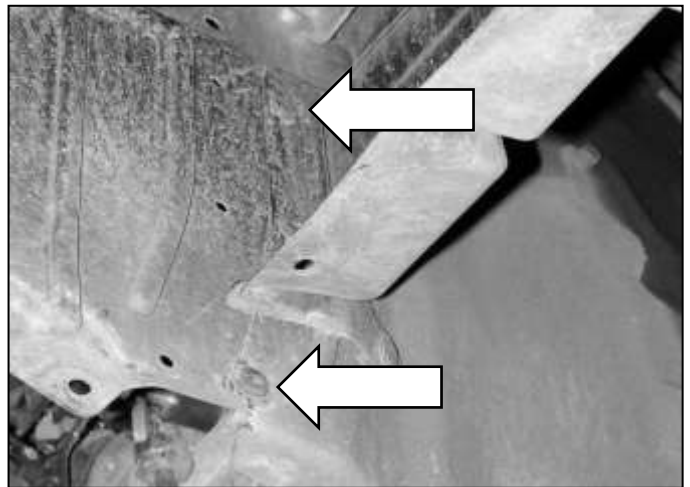
i. Remove the two bolts securing the MAF sensor to the air filter housing and remove the MAF sensor.  
**NOTE: Be careful not to damage the sensor.**



j. Unclip the wiring harness from the air box bracket behind the battery.



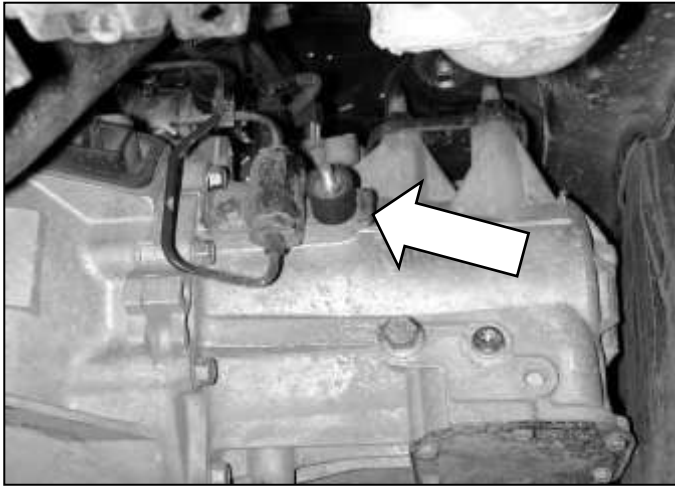
k. Remove the three bolts securing the air box bracket to the car. Remove the bracket.



l. Raise the front of the vehicle with a jack. Refer to your owner's manual for proper jack and jack stand placement to properly support vehicle. Support your vehicle using properly rated jack stands before wheel removal or while working under the vehicle.  
**NEVER WORK UNDER A VEHICLE WITHOUT USING JACK STANDS.**  
Remove the driver side wheel and splash shields attached to the bottom of the bumper on the driver's side. Remove the splash shield separating the engine bay from the inner fender area by removing the three plastic retaining clips.

### 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. Remove the driver's side bolt securing the slave cylinder bracket to the transmission. Thread in the supplied rubber mount as shown.



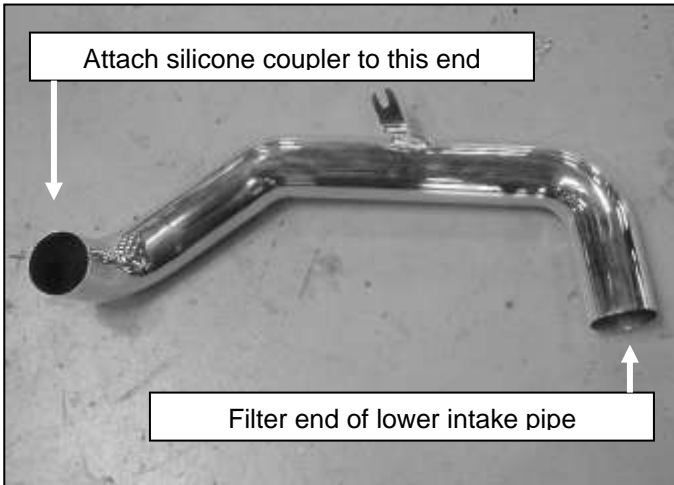
- c. Check to see that the inside of the upper intake pipe are clean and free from any foreign objects and/or obstructions. Install the 2.75" silicone coupler over the throttle body end of the pipe using the 2.75" hose clamp.



- d. Install the previously removed MAF sensor into the upper intake pipe using the two supplied allen bolts.



- d. Slide coupler attached to the upper intake pipe over the throttle body using the supplied 2.75" hose clamp.



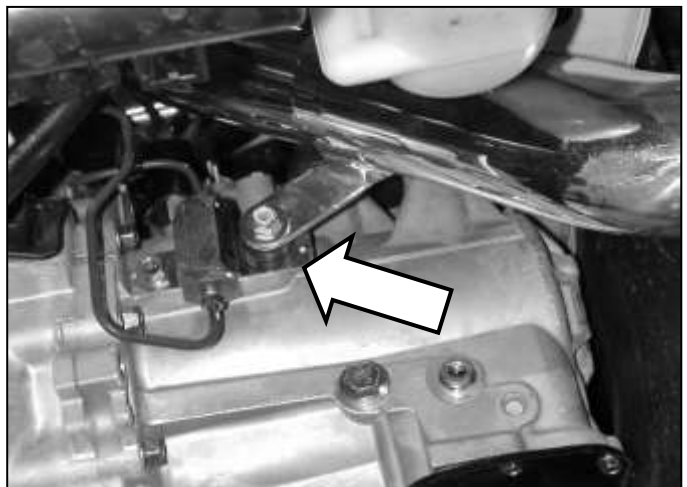
e. Ensure that the inside of the lower intake pipe and air filter are clean and free from any foreign objects and/or obstructions. Install the 2.75" silicone coupler over the end of the pipe using the 2.75" hose clamp.



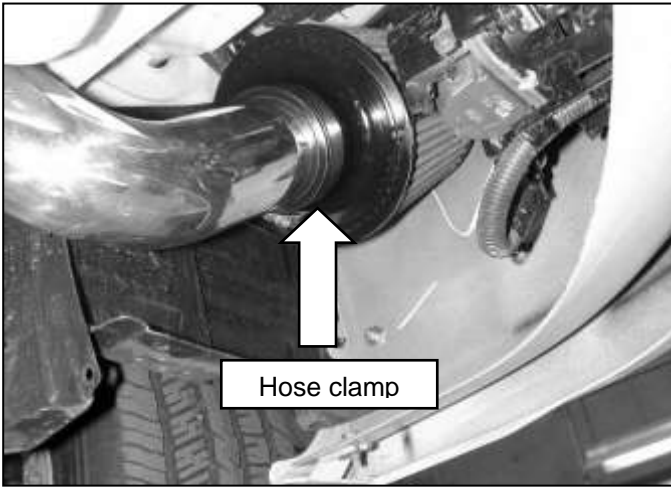
f. Install the supplied duck-bill drain into the 1/2" hole on the lower intake pipe. This drain prevents water from building up in the bottom of the intake pipe due to the angle in which the filter is placed.



g. Attach the upper and lower pipes together with the coupler installed in the previous step.  
**NOTE: If installing AEM® air bypass valve (sold separately), cut off exactly 1" from the end of the upper intake pipe. Next cut exactly 5/8" from the end of the lower intake pipe. Continue bypass valve installation according to instructions provided with the bypass valve kit.**



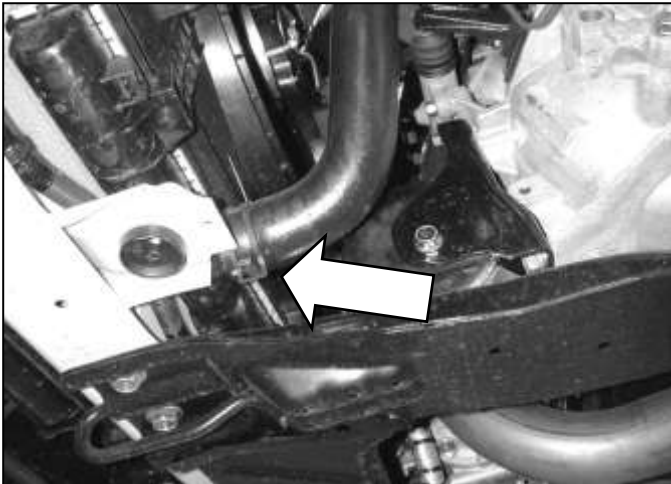
h. Align the intake mounting bracket with the rubber mount installed in step 3b. Secure using the supplied washer and nylok nut. Be sure that the bracket and intake do not contact the clutch lines or slave cylinder.



i. Install the AEM® air filter onto the end of the intake pipe. Push the air filter over the intake pipe until the stop in the air filter is reached. Then install one hose clamp to secure the air filter onto the intake pipe. Once proper fitment is achieved, tighten the hose clamp.



j. Plug in the MAF sensor and secure the wiring harness using the supplied tree mount zip tie. Install the supplied 3/8" breather hose onto both the valve cover nipple and the pipe nipple. Use the supplied 3/4" hose clamps to secure. Trim for proper fitment. Secure the throttle cable using the supplied tree mount zip tie. Trim the excess plastic zip strap.



k. For best fitment, it may be necessary to loosen the spring clamp on the lower radiator hose and rotate the hose away from the lower intake pipe.



l. Ensure the air filter is not touching any part of the vehicle. Position the AEM® intake for best fitment. Be sure that the pipe or any other component is not in contact with any part of the vehicle. Tighten the hose clamps at the throttle body and silicone coupling. Tighten the nut on the mounting bracket. Re-adjust the pipe if necessary.





Factory air box system installed



AEM intake system installed

#### 4. Reassemble Vehicle

- a. **Fender liner:** Install the driver side fender liner and any hardware removed in steps 21.  
**NOTE: Failure to install the fender liner will result in diminished performance and increase the potential for engine damage due to water ingestion in rainy conditions.**
- b. **Wheel:** Install the driver's side wheel using the factory torque specification (see owner's manual).
- c. 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.
- d. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- e. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- f. Reconnect positive battery terminal, then the negative battery terminal 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™ 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.