

Equipped with AEM<sup>®</sup> *Dryflow*™ *Filter*No Oil Required!

# INSTALLATION INSTRUCTIONS PART NUMBER: 22-436

2004-2005 MITSUBISHI Lancer Ralliart L4- 2.4L C.A.R.B. E.O. # D-670

# **PARTS LIST**

Part Number	Qty.	Part Number
Element Parts Kit 2.50 X 5" Dry Ele.	1	21-201DK
Short Pipe	1	2-4361
Hose, Adapter 2.50/2.75 X 3" Bl.	1	5-257
Hose; 3/8"ID X 12"L	1	5-1012
Rubber Edge Trim 7"	1	8-3007
Bracket, Air Duct	1	20-436
Bolt, Socket 8-32 X 1/2"	2	1-2028
Bolt, Hex/Flange M6-1 X 20	1	1-2038
Washer, 6mm Soft Mount	1	08160
Hose Clamp, 3/4"	2	4093-5
1/2' Bnd. Hose Clamp, 2.15-3.00"	1	9440
1/2" Bnd. Hose Clamp, 2.31-3.25"	2	9444

Read and understand these instructions <u>BEFORE</u> 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.

# 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 all negative battery terminals.
- e. Do not discard stock components after removal of the factory system.

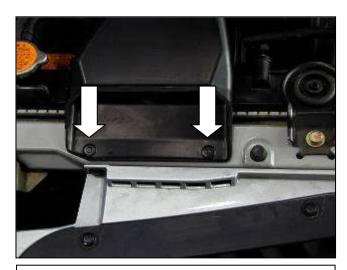
### 2. Removal of stock system



a. Factory air box system.



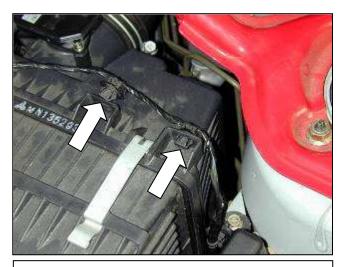
c. Remove the breather hose from the valve cover.



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



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.



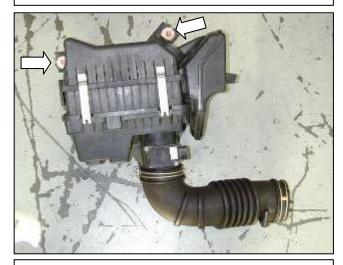
g. Unplug the MAF sensor harness connector.



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



f. Unscrew the inlet tube clamp and remove the inlet tube from the throttle body.



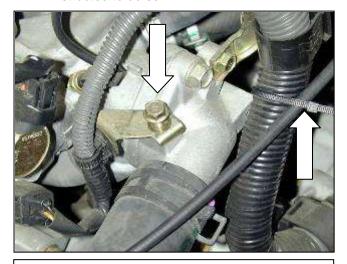
h. Remove the two bolts securing the stock air filter housing to the engine bay. Remove the air filter housing and the inlet tube from the vehicle.



j. Unclip the MAF sensor wiring harness from the bracket on the shock tower.

# 3. Installation of AEM<sup>®</sup> intake system.

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



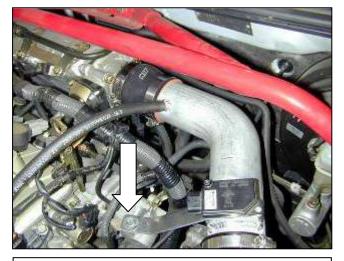
b. Use the supplied zip-tie to secure the throttle cable to the main wiring harness. Also remove the bolt securing the coolant temperature sensor bracket to the top of the thermostat housing.



c. Check to see that the inside of the AEM<sup>®</sup> intake pipe and air filter are clean and free from any foreign objects and/or obstructions. Install the 2.5"-2.75" silicone reducer over the throttle body end of the intake pipe using the 2.5" hose clamp.



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



e. Install the silicone reducer over the throttle body. Install the supplied 3/8" breather hose onto the valve cover nipple and the intake pipe nipple. Secure the breather hose ends with the supplied 3/4" hose clamps. Also secure the intake pipe bracket using the supplied M6 washer and M6 bolt.



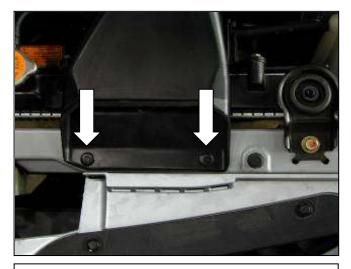
f. Install the AEM<sup>®</sup> air filter on to the end of the intake pipe. Push the air filter over the intake pipe until the stop in the air filter is reached, then secure the air filter onto the inlet pipe with a hose clamp. Once fitment is checked, tighten the hose clamp.



g. Using the bolt removed during step 3b, install the air duct support bracket where the stock air filter housing was removed. Install the supplied rubber edge trim on the inside of the bracket.



h. Align the duct outlet with the bracket installed in step 3g.



i. Install the previously removed stock air duct as shown. Use the stock plastic rivets as shown.



j. Install the supplied AEM® sticker onto the air duct as shown.



k. Check the fitment around the air filter and intake pipe. Tighten the hose clamps at the throttle body and silicone reducer. Tighten the bolt on the mounting bracket. Re-connect the MAF wiring



Factory air box system installed



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 truck 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 intake tube.
- c. Use window cleaner to clean your powder coated AEM intake tube. (NOTE: DO NOT USE aluminum polish on powder coated AEM intake tubes)