

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

# INSTALLATION INSTRUCTIONS PART NUMBER: 22-445

2000-2002	CHEVROLET	Cavalier	L4-2.4L	Manual Trans.	C.A.R.B. E.O. # D-670
2000-2002	CHEVROLET	Cavalier	L4-2.4L	Auto Trans.	C.A.R.B. E.O. # D-670
2000-2002	PONTIAC	Sunfire	L4-2.4L	Manual Trans.	SEE * NOTE
2000-2002	PONTIAC	Sunfire	1 4-2 41	Auto Trans	SEE # NOTE

The installation of this AEM<sup>®</sup> intake system on manual transmission model year vehicles will also require the installation of the AEM<sup>®</sup> clutch reservoir bracket, part # 20-445. The clutch reservoir bracket is necessary as it is needed to properly support the clutch fluid reservoir.

# **PARTS LIST**

Description	Qty.	Part Number
Element Parts Kit 2.75 X 5" Dry Ele.	1	21-202DK
Short Pipe	1	2-4451
Elbow, 2.75" 90 Degree	1	30217
Hose; 5/8"ID X 21"L	1	5-7021
Grommet, 1/2"	1	784634
Washer, 6mm Soft Mount	1	559999
Nut, M6 Hex Serrated	1	444.460.04
1/2" Bnd. Hose Clamp, 2.31-3.25"	2	9444
Hose Clamp, 1"	2	99024.032
1/2" Bnd. Hose Clamp, 2.56"-3.50"	1	9448

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

## 2. Removal of stock system

- a. Disconnect the wire that goes to the Inlet Air Temperature sensor. Remove the sensor from the stock inlet pipe to avoid any possible damage to the sensor.
- b. If the vehicle is equipped with the manual transmission remove the clutch master cylinder reservoir from the stock air box.
- c. Remove the battery for ease of disassembly of the stock inlet system and for the installation on the AEM<sup>®</sup> intake system.
- d. Remove the stock air box assembly and attaching hardware.
- e. Remove the air box that is located on top of the throttle body.
- f. Disconnect the breather hose from the air box. Remove the stock breather hose from the black canister, on the side of the block, behind the intake manifold.

# 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. Install the black rubber elbow onto the throttle body. The short end of the rubber elbow should be attached to the throttle body.
- c. Install two hose clamps on each end of the rubber elbow.
- d. Insert the inlet pipe into the rubber elbow. The end that is further from the hole for the Inlet Air Temperature sensor should go to the throttle body. Twist the inlet pipe as necessary to allow the pipe to have proper clearance on all sides.
- e. The mounting tab should line up with a stud on the power steering pump. Install a nut and washer over the tab.
- f. Install the AEM<sup>®</sup> air filter on to the end of the inlet pipe. Push the air filter on around 2 inches over the inlet pipe and install one hose clamp to secure the filter on to the inlet pipe. Once fitment is checked, you can either push the air filter on to the inlet pipe more or less depending on clearances. Tighten the hose clamp after this is done.
- g. Connect the breather hose between the inlet tube and the black canister, on the side of the block, behind the intake manifold. Use the black breather hose and two clamps supplied with the kit.
- h. Install the rubber grommet supplied in the kit into the hole in the inlet pipe. Insert the Inlet Air Temperature sensor into the rubber grommet and reattach the wire harness.
- i. Check the final fit of the intake system. The pipe should not contact any components along its path.
- j. Mounting the clutch master cylinder reservoir (if applicable).
  - i. If the vehicle is equipped with a manual transmission install the AEM<sup>®</sup> clutch master cylinder reservoir mounting kit (sold separately), part number # 20-445. Secure the assembly to the firewall.

### 4. Reassemble Vehicle

- a. Battery: Reinstall the battery that was removed in step 2c.
- b. 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.
- c. Check for proper hood clearance. Re-adjust pipes if necessary and re-tighten them.
- d. Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tightened.
- e. Reconnect the positive and 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® 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.