



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

# **INSTALLATION GUIDELINES**

## **PART NUMBER: 21-5011**

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**4" UNIVERSAL INTAKE**

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

Qty.	Description	Part Number
1	TUBE,4.00 DIA. AL, 120 DEG BEND, 1D	2-007-120
1	TUBE,4.00 DIA. AL, 90 DEG BEND, 1D	2-007-90
1	TUBE,4.00 DIA. AL, 45 DEG BEND 1D	2-007-45
1	TUBE,4.00 DIA. AL, STRAIGHT PIPE 36	2-007-00
1	HOSE; 3/8"ID X 35"L	5-1035
1	AIR FILTER; 4" X 9" DRYFLOW	21-2059DK
2	BRACKET; 12" BLANK, STYLE A	7-80012
1	ELBOW, 4.00 TIGHT 90 DEG	5-490
4	HOSE, SILICONE 4.00X3" BLK	5-400
2	HOSE, ADAPTER 4.0/3.75X3.0" BL	5-438
1	TUBING; 3/8"OD X .065 X 1-3/4"L, ALUMINUM	240020
2	HOSE CLAMP, 5/8"	4093-3
1	ADAPTER, MAF HITACHI A 3.25" OD	2-699
2	MOUNT, RUBBER 1" X 8MM	1228560
4	WASHER, 8MM SOFT MOUNT	559960
4	NUT; M8 HEX SERRATED	444.460.08
6	1/2" BNDHOSE CLAMP,3.56"-4.50"	9464



## **AEM UNIVERSAL 4" INLET INTAKE GUIDELINES**

- The battery negative cable must be disconnected before starting construction of the intake system.
- When designing the intake system, the filter needs to be in a location that has at least 4" clearance around the whole filter for the best performance and filtration. The filter should be mounted in a location that protects the filter from direct contact with debris and water.
- There must be at least 1" straight at the end of any tube where a coupler or filter is attached.
- When choosing a Mass air flow sensor (MAF) location for the BLADE style sensor, It is very important to place the sensor in the middle of a straight section. If the MAF sensor is directly after a bend in the inlet tract, high fuel trims may cause a check engine light to illuminate.



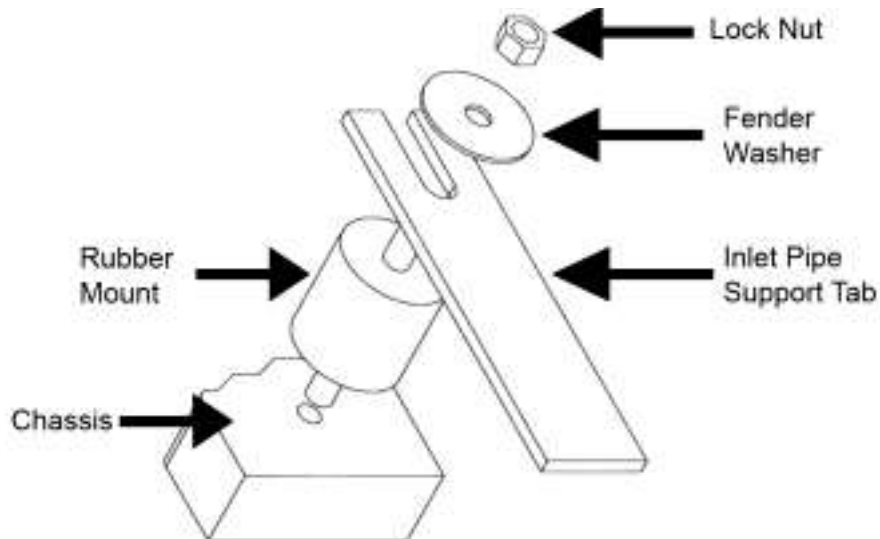
**Blade style MAF**

- The tubular MAF sensor must be placed directly after the air filter.



**Tubular style MAF**

- With the AEM universal intake we provide two couplers AEM-5-438 for installation using a tubular MAF sensor. We also Provide a weld on aluminum MAF pad for the blade style MAF sensor.
- The routing of the inlet system must be clear of any moving engine component. Additionally, before making the inlet tract permanent, Perform an "engine rock " test to ensure there is no contact with the body or chassis when the engine torques over when under load. This check is done by starting the engine and putting it in gear WITH THE PARKING BRAKE ON AND THE BRAKES APPLIED. Raise the engine speed in forward and then reverse gear to 2000 RPM and having someone observe there is no contact with any part of the vehicle including hoses or wiring of any kind.
- The location of the mounting bracket used to stabilize the inlet duct should be placed as close to the filter end of the intake tube as possible to minimize the moment load at the weld attachment point on the duct.
- There is a rubber soft mount included with the kit to isolate the movement of the intake tube from the body of the vehicle. This mount MUST be used to ensure the mount bracket does not crack.



- To construct a working prototype of the intake system, it is best to cut the tubing to an approximate size leaving a little extra at the ends of the bends. Use the couplers to connect the pipes. For the blade style MAF sensor, use double sided foam tape to attach the MAF pad to the pipe so that it can be easily relocated if the fuel trims are unacceptable. Once the configuration of the system is complete, and the fuel trims are acceptable, the mounting bracket can be mounted, and if applicable the MAF pad can be welded to the inlet tube.

## 1. Final Steps

- 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 removed are properly tightened.
- d. Reconnect the negative battery terminal and start the engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

## 2. 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 it needs to be cleaned. Purchase our Synthetic air filter cleaner, part number 1-1000 and follow the easy instructions. For best filter performance use the AEM remote mount filter minder for under hood placement AEM PN:30-5111 or the AEM dash mount filter minder AEM PN:30-5110

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