

COLD AIR SYSTEM

Installation Instructions for: Part Number 21-403 1994 - 2001 Acura Integra Exc. GSR & Type-R

ADVANCED ENGINE MANAGEMENT INC. 2205 126TH Street, Unit A Hawthorne, CA. 90250 Phone: (310) 484-2322 Fax: (310) 484-0152 www.aempower.com Instruction Part Number: 10-206 1994-1998 Acura Integra Exc. GSR & Type-R B18B1 C.A.R.B. E.O. #D-392-5 1999-2000 Acura Integra Exc. GSR & Type-R B18B1 C.A.R.B. E.O. #D-392-11 2001 Acura Integra Exc. GSR & Type-R B18B1 C.A.R.B. E.O. #D-392-12 © Copyright 2001 **Congratulations!** You have just purchased the finest Air Induction & Filtration system for your car at any price!

The **AEM** Cold Air System is the result of extensive development on a wide variety of cars. Each system is engineered for the particular application. The **AEM** Cold Air System differs from all others in several ways. We take the inlet air from outside of the engine compartment where the inlet air is considerably cooler than the hot underhood air. The cooler inlet air temperature translates to more power during the combustion process because cool air is denser than warm air. **AEM** has conducted extensive inlet air temperature studies and we have seen temperature reductions of up to 50 degrees by pulling air from outside of the engine compartment. The <u>air mass</u> flow to the engine is increased because of the increased airflow and reduced inlet temperature, which translates to more power. The **AEM** Cold Air Systems are **50 states Street Legal** (some models and years still pending) and come with complete instructions for ease of installation.

Our system is constructed of lightweight aluminum and then painted with a zirconia based powder coat for superior heat insulating characteristics. The aluminum will not crack in extended use like plastic and it is actually lighter than plastic. The tube diameter and length are matched for each engine to give power over a broad rpm range. Unlike the plastic systems that use a continually diverging cross section, we take advantage of the acoustical energy in the duct to promote cylinder filling during the intake valve-opening event.

Our Dyno testing as well as **independent dyno tests** (see 7/97 Sport Compact Car Magazine) prove that the **AEM** Cold Air System produces as much as twice the power gain than any other system on the market.

Read and understand these instructions <u>BEFORE</u> attempting to install this product.

1) Getting started

f)

- a) Make sure vehicle is parked on a level surface.
- b) Set parking brake.
- c) Disconnect negative battery terminal.
- d) If engine has run within the past two hours let it cool down.

2) Removing the stock air inlet system

- a) Remove the stock air box assembly and attaching hardware from inside the fender well.
- b) Disconnect breather hose from the air inlet tube.
- c) Disconnect the water bypass hose from throttle body or the fast idle thermo valve, where equipped, located at the lower portion of the throttle body. Disconnect the opposite side of the water bypass hose, which runs to either the intake manifold or the water outlet neck. Remove the entire water bypass hose and breather hose assembly from the vehicle.
- d) Loosen and remove the air inlet tube from the throttle body.
- e) Jack the front of the vehicle and support using properly rated jack stands.
 - i) Remove the lower front splashguard.
 - ii) Remove the front right tire and remove the inside splashguard (inner fender liner).
 - Remove the resonator from underneath the vehicle.

3) Installing the cold air system

- a) Install one orange connector hose on the throttle body end of the inlet tube. That is the end closest to the breather nipple.
 - i) Install two hose clamps on the connector hose and just snug them down on the hose.
- b) Install the tube from the engine compartment by first inserting the tube into the hole exposed by the removal of the resonator.
- c) Attach the tube to the throttle body while slowly turning or twisting the tube so that it does not touch any surrounding component along its path.
 - i) If required, further snug the hose clamps down so that you can still rotate the tube during the remainder of the installation but will not allow the tube to fall off.
 - ii) The support tab on the inlet pipe will line up with a threaded hole on the inner fender well. Install the rubber isolator mount and attach the air inlet tube onto the rubber mount. Install the large fender washer and the lock nut onto the isolator mount stud and snug it down. Failure to install the rubber mount will void all warranties of the Cold Air System. Below is a diagram of how the rubber mount should be installed.



d) Install the *AEM* filter on to the end of the inlet tube. Push the 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 filter on to the inlet pipe more or less depending on clearances. Tighten the hose clamp after this is done.

- e) Make sure there is at least a 1" gap between the air conditioning line and the air inlet pipe. Check underneath the bend in the pipe that is closest to the throttle body. Due to Honda's manufacturing tolerances, the AEM cold air system may slightly contact the A/C line. If this is the case, simply apply gentle downward pressure to the A/C line in order to allow for clearance.
- f) Check the placement of the air inlet tube for proper alignment. Make sure that the tube does not contact any component along its route nor should it interfere with the function of any other accessory.
 - i) Tighten the rubber isolator lock nut.
 - ii) Tighten the hose clamps on the throttle body.
- g) Connect the breather hose to the inlet tube using the black connector hose and two clamps supplied with the kit.
- h) Connect the new supplied water bypass hose and clamps to the throttle body or the fast idle thermo valve, where equipped, and either the intake manifold or the water outlet neck disconnected earlier.

4) Re-assemble the vehicle

- a) Install the right fender liner and the lower front splashguard. Failure to install the plastic splashguard will result in diminished performance and increase the potential for engine damage due to water ingestion in rainy conditions.
- b) Install the front right wheel and lower the vehicle.
- c) Inspect the engine bay for any loose tools and check that all fasteners that were moved or removed are properly tight.
- d) Start engine and perform a final inspection before driving the vehicle.

Bill of Materials for:

Part Number 21-403		1994 - 2001 Acura Integra Exc. GSR & Type-R
<u>QTY</u>	PART#	DESCRIPTION
1	21-201	2.5" AEM Air Filter & Hose Clamp
1	2-408	Inlet Pipe
1	444.460.04	6mm Nut
1	559999	6mm X 25mm X 1mm Washer
1	1228599	Rubber Mount
1	5-250	Connector Hose 62 X 2.5 X 3
2	103-BLO-4020	2.5" Hose Clamp
12"	65128	3/8" Breather Hose
16"	516-006	5/16" Water Hose
4	4093-5	3/4" Hose Clamp
1	10-206	Instructions
2	10-922S	AEM Decal
1	11-403	E.O. Decal, 21-403
1	10-905	Warning Decal
1	10-400W	Licence Plate Frame

For Technical Inquiries Please E-mail Us At tech@aempower.com