



## INSTALLATION MANUAL

# RAPID FLOW

*Cold Air Intake*



Applications

RFI Part Number

Dodge Ram 6.7L '07-'12

52103

Not legal for sale or use in California on pollution-controlled vehicles.



**POWER**



FUEL-ECONOMY

**ECONOMY**

## Introduction

This manual provides step-by-step installation instructions for the Bully Dog Rapid Flow Induction (RFI) Cold Air Intake for 2007-2012 6.7L Dodge Ram trucks. Installation requires a few basic tools and takes about 20 minutes.

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## Parts Included

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### **2010-2012 Trucks:**

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## Tools

- Flat-head screwdriver
- Phillips screwdriver
- 10 mm socket
- Short flat-head screwdriver (optional)

## Parts Description

### ***RFI Lid***

The easy-to-remove lid replaces the stock lid and allows for hassle-free filter maintenance. When the lid is installed, the latch mounts should line up with the latches on the base to ensure that the lid creates a good seal with the enclosure base.



### ***RFI Base***

The base of the enclosure is designed to bring in large amounts of cool air from outside the engine bay and keep it separate from the hot environment under the hood. It also holds the air filter and directs the airflow to the turbo unit. There are three features to notice about the enclosure to ensure a smooth and effective installation: (1) the round hole where the RFI MAF tube will snap into the back of the base, (2) the foam secured to the inlet of the box, which seals the RFI base to tightly to the side of the truck and (3) the mounting pegs on the bottom of the base which secure the base to the stock mounting plate in the engine bay.



## ***RFI Tube***

The RFI tube comes with precisely manufactured mounts for the mass airflow (MAF) and temperature sensors. The mounts have inset screw mounts that are designed to work with the black oxide screws provided by Bully Dog. The tube is also designed with a snap-fit feature that will secure it tightly to the RFI base.



## ***Air Filter with Band Clamp***

The Rapid Flow Induction Cold Air Intake system includes an ISO 5011 certified eight-layer oil filter. The air filter is housed within the intake enclosure and secured onto the end of the air intake tube using the included filter clamp and a flat-head screwdriver.



### ***Black Oxide Phillips Screws***

Bully Dog provides three black oxide screws to secure the MAF and air temperature sensors to the RFI tube.



### ***T20 Security Torx® Bit***

The MAF and air temperature sensors are attached to the stock intake tube using tamper resistant pin-in-Torx® screws. Bully Dog includes a Torx® bit for convenience. If the bit is lost it can be purchased at any auto parts store.



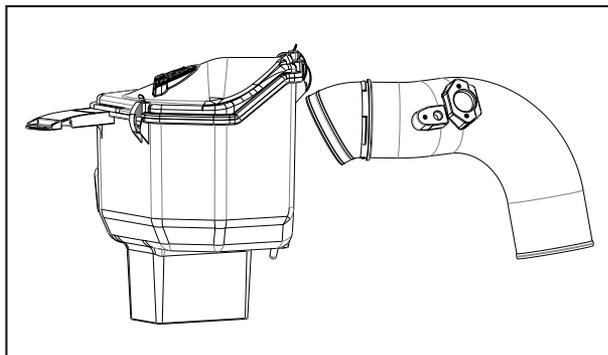
### ***Bolt and Silicone Spacer***

The bolt and silicone spacer will not be used on '07-'09 vehicles; they will only be used on '10-'12 vehicles. They are used to fasten the RFI base support arm to the bolt hole on the vehicle frame.



## Installation

Installation is very simple and can be separated into three parts: Removing the Stock Intake, Preparing the Bully Dog RFI Intake and Installing the Bully Dog RFI Intake.

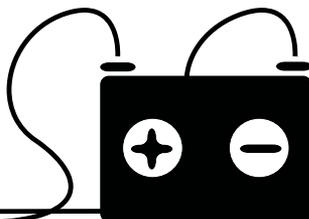


The complete installation of the RFI Cold Air Intake system should take about 20 minutes. The assembly diagram shows how the parts of the intake fit together in sequence.

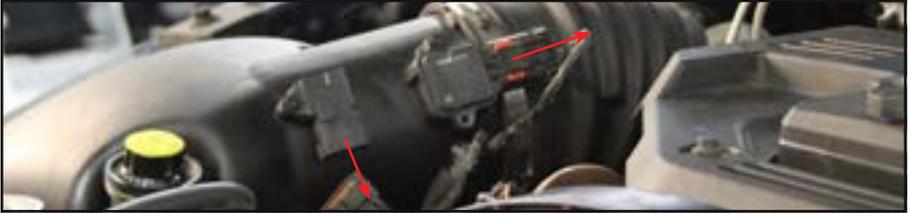
## Removing the Stock Intake



1. **IMPORTANT:** Before beginning installation, disconnect your battery at the negative terminal. *Failure to disconnect the battery could result in personal injury and/or damage to your vehicle.*



2. Unplug the mass airflow (MAF) and temperature sensors.



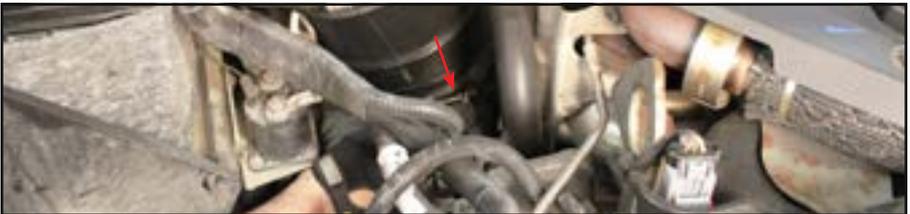
3. Disconnect the plug clip from the stock intake tube.



4. Loosen the band clamps. (Use a flat-head screwdriver.)
  - Between the intake and tube.



- Between the tube and the turbo coupler. (This connection is hard to reach, so you may need to use a short flat-head screwdriver.)



5. Remove the intake tube.



6. Disconnect the support arm with a 10mm socket.
  - **2007-2009:** Remove nut (used later in installation).
  - **2010-2012:** Remove bolt (not used in installation).



7. Remove the intake box.
  - Gently pull upward; the box is held in place by rubber grommets and should easily pop out.



## Preparing the RFI Intake

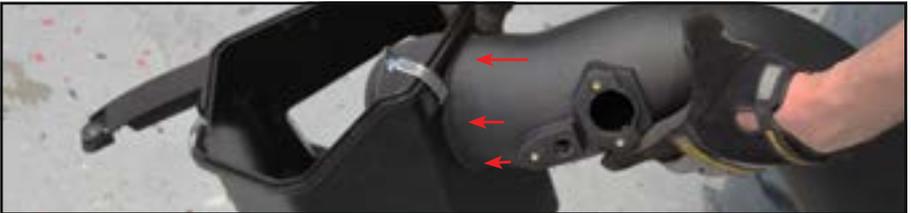
1. Remove the grommet assembly from the stock intake box.



2. Install the grommet assembly on the support arm of the RFI base.



3. Snap the RFI tube into the RFI base.



4. Remove the MAF and temperature sensors from the stock intake box. (Use the T20 Torx® bit.)



5. Install the MAF and temperature sensors on the RFI tube. (Use the black oxide screws and a Phillips screwdriver.)



## ***Installing the RFI Intake***

1. Install the RFI base assembly.
  - a. Mount the base in the engine bay space where the stock intake box sat.



- b. Place the pegs in the rubber grommets.
- c. Secure the RFI base support arm to the vehicle frame.
  - **2007-2009:** Use the stock nut set aside on step 6 (page 7).



- **2010-2012:** Use the spacer, washer and nut provided by Bully Dog.



2. Connect the RFI tube to the turbo coupler. (Use a flat-head screwdriver; this connection is hard to reach, so you may need to use a short one.)



3. Install the air filter.
  - a. Connect it the end of the RFI tube that is inside the RFI base.
  - b. Tighten the band clamp. (Use a flat-head screwdriver.)



4. Install the RFI lid.
  - a. Make sure the lid is properly aligned.
  - b. Snap the latches over the mounts on the lid.



5. Reconnect the sensor plugs (MAF and temperature) and the battery. Start the vehicle, listen for leaks and check all connections. Go for a ride and enjoy!



## Filter Maintenance

The intake system should be cleaned with the Bully Dog RFI Cleaning Kit at least once every three months; in dusty climates, the filter should be cleaned more often. Cleaning the intake is a two part process: cleaning and oiling the filter.

### (1) *Cleaning the Filter*

1. Remove the filter from the RFI enclosure. Clean the enclosure if necessary.
2. Remove surface dirt (this step can be avoided if a Bully Dog RFI Prefilter has been installed).
  - Lightly tap the filter.
  - Use a soft-bristle brush to remove any loose particles.
3. Spray the cleaner generously over the filter and let it soak for 10 minutes.
4. Thoroughly rinse the filter.
  - Use regular tap water.
  - Avoid high-pressure hoses.
  - Prevent dirt from entering the filter by rinsing from inside out or from the clean side to the dirty side.
5. Let the filter air dry.
  - Do not use any method to speed up the drying process.
  - Using a blow dryer or compressed air can disfigure the filter and allow particles to pass through.



### (2) *Oiling the Filter*

1. Apply a small amount of oil to the soft-bristle brush and gently spread the oil over the filter. Be sure to apply only a small amount of force so the filter is not damaged.

2. Continue applying the oil to the filter until the entire filter is covered in an even amount of oil. Apply enough oil to make the filter a solid and uniform blue, but do not go beyond that.
3. Allow the oiled filter to sit 20 minutes. Re-oil any dry spots that appear. Do not oil the filter excessively. Excessive oiling can cause damage to intake sensors.

## Prefilter

The Bully Dog RFI Prefilter is a semi-water-repellent barrier that will keep bugs and debris out while lengthening the time between filter cleanings and reducing the amount of time you spend cleaning the filter.





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