



Equipped with AEM® Dryflow™ Filter  
No Oil Required!

# **INSTALLATION INSTRUCTIONS**

## **PART NUMBER**

### **21-821DS**

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2009-2017

NISSAN

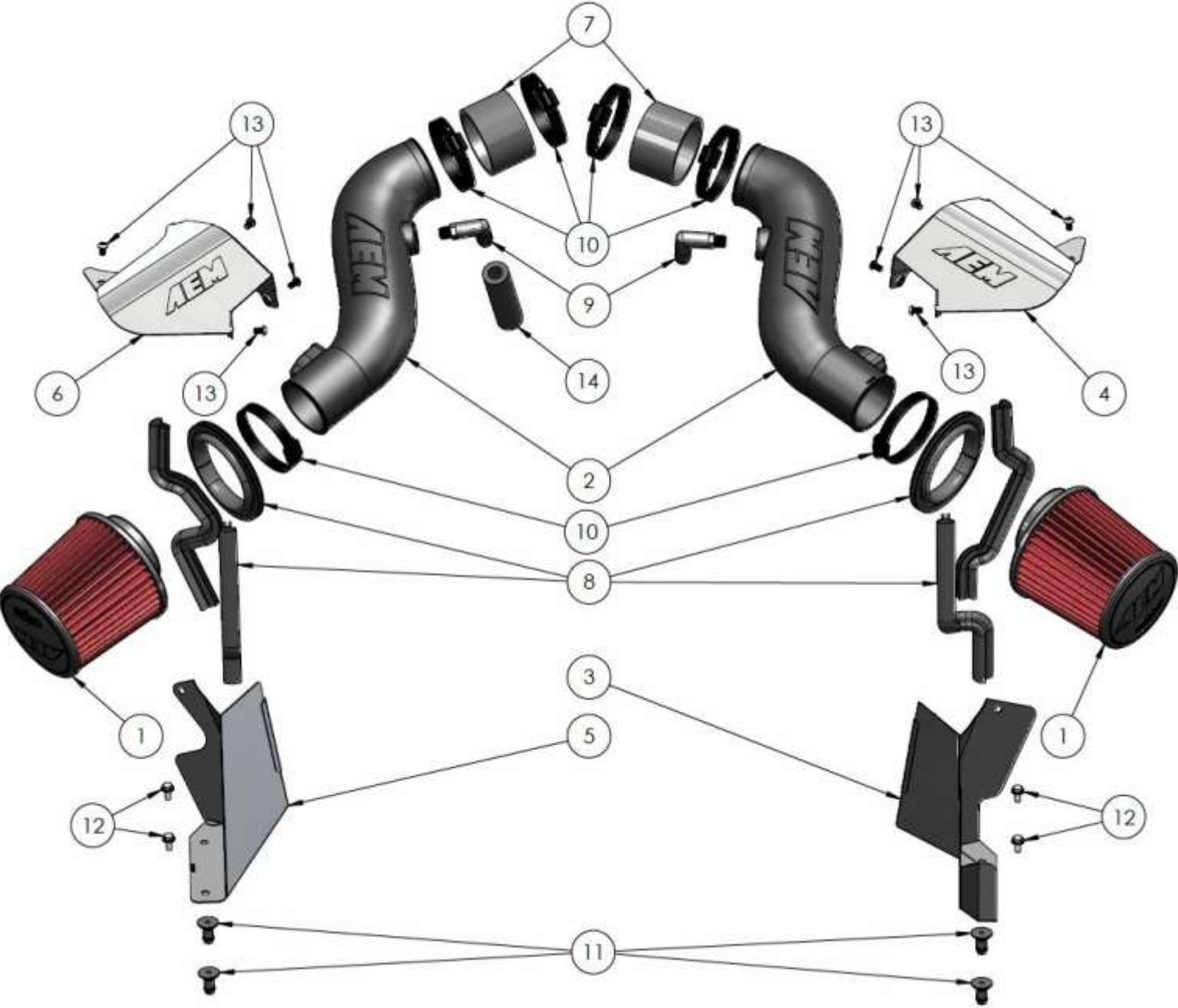
370Z

3.7L

# Parts List

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	21-202DOSK	AIR FILTER; OFFSET 2.75" X 5" DRYFLOW	2
2	9-0451	TUBE; 2015 INFINITI Q50, 3.7L V6	2
3	20-8595	HEAT SHIELD; DS; LOWER; 09-17 NISSAN 370Z, TB/PC	1
4	20-8596	HEAT SHIELD; DS; UPPER; 09-17 NISSAN 370Z, TB/PC	1
5	20-8597	HEAT SHIELD; PS; LOWER; 09-17 NISSAN 370Z, TB/PC	1
6	20-8598	HEAT SHIELD; PS; UPPER; 09-17 NISSAN 370Z, TB/PC	1
7	5-272	HOSE, SILICONE 2.75X2" BLACK	2
8	102472	EDGE TRIM; 3/4" BULB, 66"L	1
9	EL1458P	ELBOW; PLASTIC , 90 DEG, 1/4" NPT TO 5/8" BARB	2
10	08577K	HOSE CLAMP; #44, BLACK ZINC PLATED	6
11	8-186-1	MOUNT, PLASTIC AIRBOX, NYLON	4
12	22224	BOLT; M6X1.00X12 HEX; FLG, GRADE 10.9, GEO	4
13	1-112	BOLT; BUTTON HEAD M6-1.0 X 10MM, SS	8
14	08244	HOSE; 5/8" ID X 4" L	1

# Exploded View



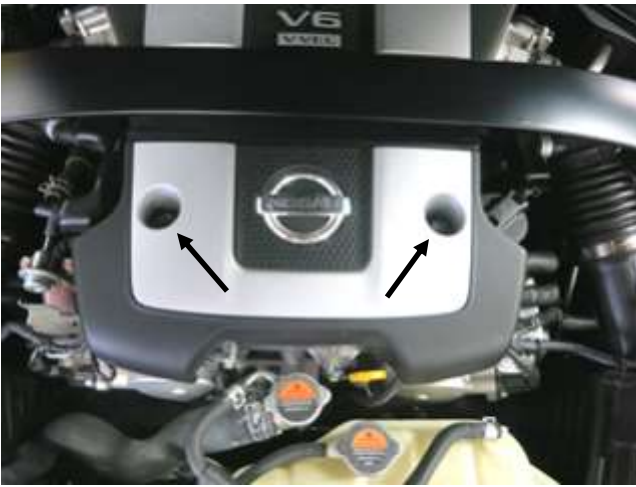
Read and understand these instructions **BEFORE** attempting to install this product. Failure to follow installation instructions and not using the provided hardware may damage the intake tube, throttle body and engine.

Tools Needed:	Optional:
Screwdriver	Small Torque Wrench
10mm Socket	
Socket Driver	
Side Cutters	
4mm Hex Key	
Needle nose Pliers	

## 1. Preparing Vehicle

- Make sure vehicle is parked on level surface.
- Set the parking brake.
- If engine has run in the past two hours, let it cool down.
- Disconnect negative battery terminal.
- Do not discard stock components after removal of the factory system.
- Open the air intake kit package and make sure all parts are included.

## 2. Removal of stock system



a. Remove the front half of the engine cover by loosening its two bolts.



b. Remove the bolt securing the PCV hose on the passenger side.



c. Release the Mass Air Flow (MAF) sensor harness and disconnect the connector on both sides of the vehicle.



d. Disconnect the PCV hose on the driver side by releasing pressure on the spring clamp.



e. Remove the bolts securing the factory air box on each side of the vehicle.



f. Loosen the four hose clamps on the factory air hoses.



g. Lift the air box up and out of the vehicle, releasing them from their grommets. Then, remove the air hoses.



h. Remove the passenger side PCV hose. Remove the hose clamps; these will be used later.



i. Remove the driver side PCV hose and set aside. This will be reused.



j. Remove the 14 plastic push-rivets and then remove the plastic radiator shroud. **Note: The push-rivet denoted by a white arrow is a unique size.**



k. Remove the bolt securing the passenger side air ducting.



l. Remove the bolt securing the driver side air ducting.



m. Release the wiring harness from the passenger side air ducting.



n. Use needle nose pliers to squeeze the retaining clip to release the air ducting on both sides of the vehicle. Remove the air ducting.



o. Remove both MAF sensors from their factory air boxes. **Note: Do not discard any of your stock equipment.**

### 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.



a. Assemble the heatshields as shown using the supplied hardware and nylon push-in clips. Apply edge trim as shown and trim as needed.



b. Install the hose clamp into the tube as shown. Do not over tighten. Insert the tube into the passenger side heatshield as shown.



c. With the tube inserted through the heatshield, install the AEM Dry Filter onto the tube using the par line and filter media clip as a reference as shown. **Note: The MAF sensor mount is opposite of this view.**



d. Install the hose clamp into the tube as shown. Do not over tighten. Insert the tube into the driver side heatshield as shown.



e. With the tube inserted through the heatshield, install the AE w r onto the tube using the MAF mount and lter media clip as a reference as shown.



f. Pull the tubes so the MAF mounts are on the outside of the heatshields and install the MAF sensors using the factory hardware.



g. Install the provided hose using the factory spring clamps on the passenger side valve cover.



h. Install the PCV hose removed in step 2i, reversing its orienta as shown.



i. Install the provided couplers and hose clamps onto each thro le body. Tighten the thro le-body-side hose clamps at this me.



j. Install the tube and heatshield assemblies as shown, maneuvering the tubes under the strut tower brace rst. Do not insert the tubes into the couplers un the heatshields are in pos on and seated into the grommets.





k. Push the passenger side heatshield down into the grommets as shown. Then, connect the PCV hose and secure it with the spring clamp. Then, insert the tube into the coupler.



l. The fuse box on the driver side can be released to aid in install by depressing the clip. Seat the heatshield into the grommets and then replace the fuse box.



m. Connect the PCV hose and insert the tube into the coupler. Secure the PCV hose with the spring clamp at this e.



n. Route the MAF harness under each tube and connect the harness to the sensor on each side of the vehicle.



n. Pull the passenger side heatshield into position and secure with the provided hardware. The heatshield should clear the power steering reservoir and the power steering hose should route through the cutout.



n. Pull the driver side heatshield into position and secure with the provided hardware. Ensure the fuse box latch is below the heatshield lip.



k. Position the tubes for best fit and seat them fully into the couplers before securing with the hose clamp. The passenger side tube should be positioned so that the MAF sensor connector is not contacting anything.



l. Reinstall the radiator shroud and the front half of the engine cover by reversing steps 2a and 2j.



STOCK INTAKE INSTALLED



AEM INTAKE INSTALLED

#### 4. Reassemble Vehicle

- a. Position all kit components for best fitment. Ensure that no components contact any unintended part of the vehicle.
- b. Check for proper hood clearance. Re-adjust components if necessary and re-tighten them.
- c. Inspect the engine bay for any loose tools and ensure that all fasteners that were moved or removed are properly tightened.
- d. Reconnect negative battery terminal and start engine. Let the vehicle idle for 3 minutes. Perform a final inspection before driving the vehicle.

#### 5. 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 the screen is still visible. When the screen is no longer visible some place on the filter element, it is time to clean it. To clean, purchase our Synthetic air filter cleaner, part number 1-1000 and follow the easy instructions.
- b. Use window cleaner to clean your powder coated AEM<sup>®</sup> intake tube.

**NOTE: DO NOT USE aluminum polish on powder coated AEM<sup>®</sup> intake tubes.**