

Equipped with AEM[®] Dryflow™ Filter No Oil Required!

INSTALLATION INSTRUCTIONS PART NUMBER AEM-21-774DS

2014-16

INFINITI

Q50

3.7L

1			
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	20-8576	HEAT SHIELD, D/S, INFINITI Q50, MILD STL, TB/PC	1
4	20-8577	HEAT SHIELD, P/S, INFINITI Q50, MILD STL, TB/PC	1
5	5-272	HOSE, SILICONE 2.75X2" BLACK	2
6	08538	HOSE; 5/8" ID X 5" L	1
7	102469	EDGE TRIM; 3/4" BULB, 17"L	1
8	102460	EDGE TRIM; 3/4" BULB, 75"L	1
9	EL1458P	ELBOW; PLASTIC , 90 DEG, 1/4" NPT TO 5/8"	2
10	08577K	HOSE CLAMP #44; BLACK ZINC PLATED	6
11	784640	GROMMET,1"	2
12	8-186-1	MOUNT, PLASTIC AIRBOX, NYLON	2
13	22224	BOLT; M6X1.00X12 HEX; FLG, GRADE 10.9, GEO	2



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 the parking brake.
- c. If engine has run in the past two hours, let it cool down.
- d. Disconnect negative battery terminal.
- e. Do not discard stock components after removal of the factory system.
- f. Open the air intake kit package and make sure all parts are included.

Tools Needed:	Optional:
Screwdrivers	Small Torque Wrench
10mm Socket	
Socket Driver	
Pliers	
10mm Wrench	
Side Cutters	

2. Removal of stock system



a. Remove the front cover/air scoop by first removing the 8 push-in plastic rivets shown.



c. Unfasten the passenger side PCV line by removing the bolt shown and disconnecting the hose by releasing the pressure on the spring clamp shown.



b. Remove the engine cover by first removing the 5 bolts shown.



d. Loosen both factory air boxes by removing the two bolts shown. One bolt is covered by a plastic shroud that can be gently lifted for access. The driver side box is pictured , passenger side box is similar. **Note: two of these bolts will be reused in step 3e.**



e. Disconnect the driver side PCV hose by releasing the spring clamp as shown.



g. Remove both air box and intake hose assemblies by lifting them up and out of the engine bay. **Note: Do not discard your stock equipment.**



i. Remove the stock PCV hose from the passenger side and remove the spring clamps. **The spring clamps will be reused in step 3b.**



f. Disconnect the Mass Air Flow (MAF) sensor harness and remove the clip from the air box as shown on both air boxes.



h. Remove the MAF sensors from the factory air boxes. The screws will be reused in step 3a.

3. Installation of AEM[®] intake system.

a. When <u>installing the intake system</u>, do not completely tighten the hose clamps or mounting hardware until instructed to do so.



a. Install the MAF sensors into the AEM intake tubes using the hardware removed it step 2h. Then, install the provided plastic 90 degree fittings so they point in the orientation shown. **Do not over tighten the plastic fittings. No thread sealant is required.**



b. Install the provided hose where the stock PCV hose was located on the passenger side using the spring clamps removed in step 2i. Clamp the hose to the valve cover using the lower spring clamp at this time.



c. Install the provided couplers onto each throttle body using the provided hose clamps. Tighten the hose clamp on the throttle body side to 30 in-lb at this time.



d. Apply the provided edge trim onto the AEM heat-shields as shown. Note: Trim the 102460 into approx.
38" and 36" lengths and 102469 into two approx. 8"
pieces . Install the push-in studs using the provided bolts in the base of each heat shield as shown.



e. Install the heat shields by pushing the heatshield mount into the stock rubber grommet and bolting the front using the bolts removed in step 2d. Ensure the large wire loom is outside the heatshield when installed.



g. Slip the provided grommet over the MAF harness and fit it into the slot in the heat shields as shown.



i. Lower the passenger side intake tube into the engine bay and connect the hose installed in step 3b to the intake tube and secure using the factory spring clamp.



f. Pull the MAF harness through the hole in the heat shields and clip the harness to the outside of the heat-shield as shown. Note: the harness clip may need to be adjusted to be secured to the heat shield.



h. Install the driver side intake tube and connect the factory PCV hose. Push the tube completely into the coupler and down into the heat shield's cutout before tightening the hose clamp to 30 in-lb. Ensure clearance around tube once installed.



j. Install the passenger side intake tube by fully inserting the tube into the coupler and pressing the tube down into the heat shield's cutout before tightening the hose clamp to 30 in-lb.



k. Connect the MAF sensor harnesses to the MAF sensors on each tube at this time.



I. Install the AEM Dryflow filters using the provided hose clamps. Snug but do not fully tighten the hose clamps at this time so they may be adjusted in the final steps.



m. Reinstall the front cover/air scoop using the 8 pushin plastic rivets removed earlier. Rotate the filters for best fit and fully tighten the hose clamps to 30 in-lb.



n. Reinstall the engine cover using the 5 bolts removed earlier. Some minor interference between the engine cover and the tubes will be present. The cover may be trimmed for optimum clearance if desired however it is not required and the interference will not affect function.



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 ensured 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.