

Equipped with AEM<sup>®</sup> Dryflow™ Filter No Oil Required!

# INSTALLATION INSTRUCTIONS PART NUMBER 21-806C (GUN METAL GRAY FINISH)

2014-15

Lexus

GS350

3.5L

| ITEM NO. | PART NUMBER | DESCRIPTION   | QTY. |
|----------|-------------|---|------|
| 1        | 21-2113DK   | AIR FILTER; 3.25" X 7" DRYFLOW                      | 1    |
| 2        | 2-1539C     | INTAKE TUBE; 3.25"OD X 20", 21-759; GUNMETAL GRAY   | 1    |
| 3        | 20-8588     | HEAT SHIELD, LEXUS GS350 3.5L 2015, MILD STL, TB/PC | 1    |
| 4        | 5-325       | HOSE; SILICONE 3.25 X 3.00" BLK                     | 1    |
| 5        | 102472      | EDGE TRIM; 3/4"BULB, 66"L                           | 1    |
| 6        | 9452        | 1/2" BNDHOSE CLAMP,2.90"-3.75"                      | 3    |
| 7        | 559960      | WASHER, 8MM SOFT MOUNT                              | 1    |
| 8        | 21685       | WASHER; 1" X .300 X .100 RUBBER                     | 2    |
| 9        | 22224       | BOLT; M6X1.00X12 HEX; FLG, GRADE 10.9, GEO          | 2    |
| 10       | 07733       | BOLT; M4 - 0.07 8MM, A/H CAP, SS                    | 2    |
| 11       | 1-2108      | BOLT; HEX/FLANGE M8-1.25 X 12                       | 1    |



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:              |
|--------------------|------------------------|
| Screwdriver        | Small Torque<br>Wrench |
| 10mm Socket        |                        |
| Socket Driver      |                        |
| Needle Nose Pliers |                        |
| 4mm Hex Key        |                        |
| 12mm Wrench        |                        |

## 2. Removal of stock system



a. Remove the plastic shroud over the air box by depressing the 4 plastic rivets and removing them.



c. Disconnect the vent hose by pinching the spring clamp while pulling it from the factory tube.



b. Remove the plastic engine cover by pulling up gently to release the rubber grommets.



d. Disconnect the Mass Air Flow (MAF) sensor by depressing the clip.



e. Use needle nose pliers to release the first wire tie clip on the factory air box.



g. Loosen the factory hose clamp at the throttle body and remove the end of the factory tube from the throttle body.



i. Pull the air box base upwards and to your left to release it from the fresh air scoop and rubber grommet.Rotate the box upside down so the last two wire clips are accessible. Disconnect them and remove the box from the engine bay.



f. Remove the two bolts securing the factory air box.



h. Release the 4 latches on the air box securing the lid and factory tube. Remove the lid, factory tube, and filter from the engine bay.



J. Remove the core support bolt. This bolt will be reused in step 3f.



k. Remove the MAF sensor from the upper part of the factory air box. The sensor will be reused in step 3a. Note: Do not discard any of your stock equipment.

# 3. Installation of AEM<sup>®</sup> intake system.

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



a. Install the MAF sensor using the supplied bolts, then install the AEM DryFlow filter using the supplied hose clamp.



c. Thread the included large bolt and washer onto the location shown on the side of the motor. Leave roughly 1/4" of space for the intake tube bracket.



b. Apply the edge trim to the heat shield as shown.



d. Install the provided coupler and hose clamps onto the throttle body. Tighten the hose clamp closest to the throttle body at this time. Move the tube-side hose clamp as close to the throttle body as possible to allow room for tube installation.



e. Place the two included rubber washers over the mounting holes on the shock tower.



g. Install the AEM intake tube into the coupler first, then lower the bracket into the gap between the washer installed in step 3c and the engine. Torque the hose clamp to 30 in-lb at this time.



i. Connect the factory vent hose to the AEM intake tube and secure with the factory spring clamp.



f. Install the heat shield as shown using the two provided bolts and the core support bolt removed earlier. The scoop position may need adjusting during installation.



h. Tighten the bracket using a 12mm wrench. This area can be accessed from the front of the engine. This picture is as seen from the shock tower looking downward.



j. Connect the MAF sensor harness.



k. Reinstall the plastic shroud over the heat shield and filter using the plastic rivets removed in step 2a. Push the rivets into the popped-up position before installing them, then push them flush to secure.



I. Replace the plastic engine cover by lining up the rubber grommets with the posts on the engine and pushing down to secure.



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 <u>cleaning the intake system's air filter element every 100,000 miles</u>. 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.