



**Installation Instructions**  
**High Flow Intake System**  
**2001+ Lexus GS430**

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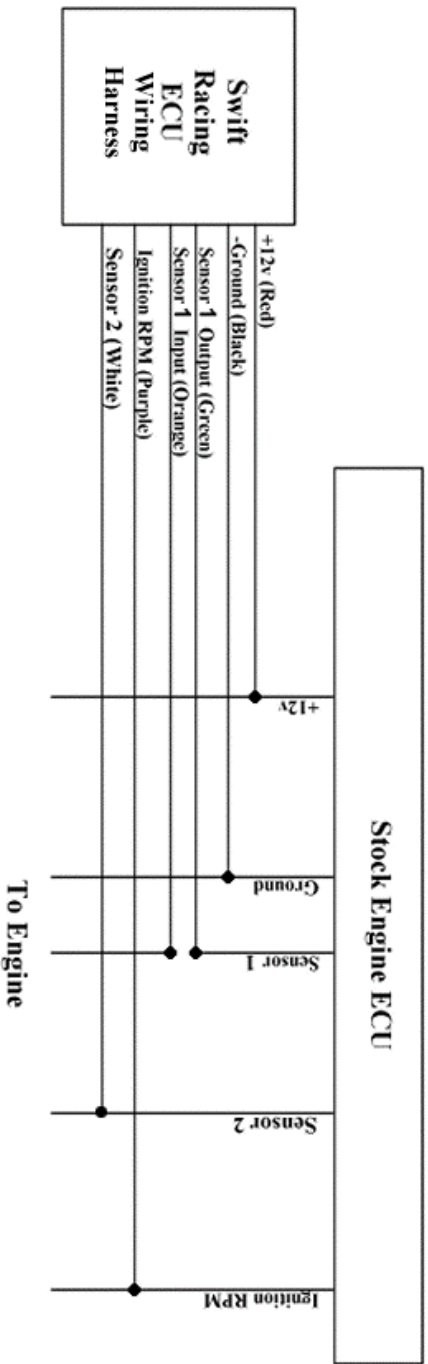
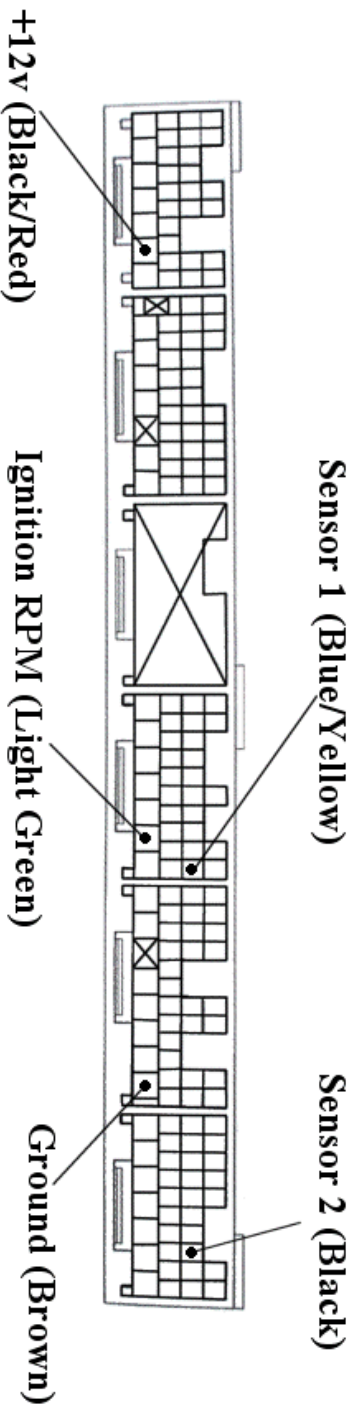
## Installation Instructions HFI System

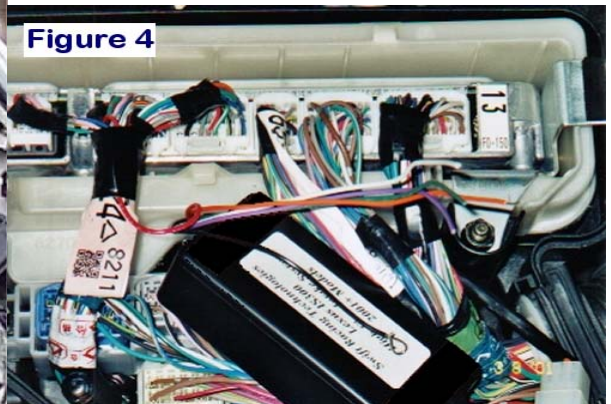
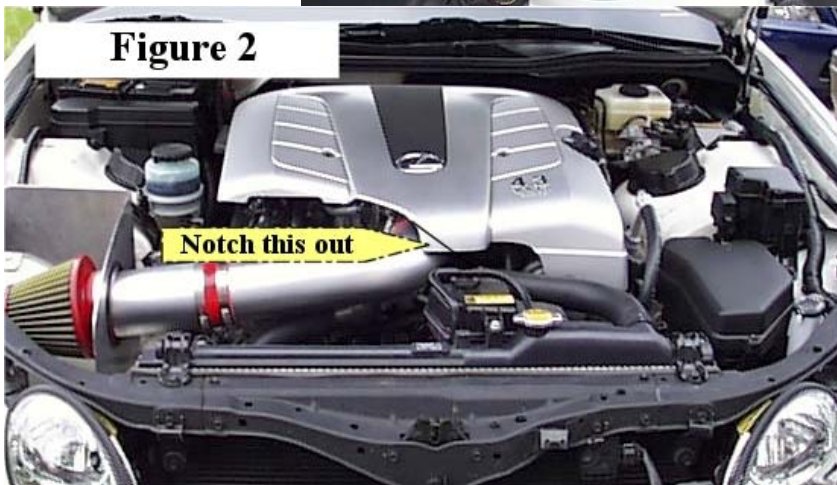
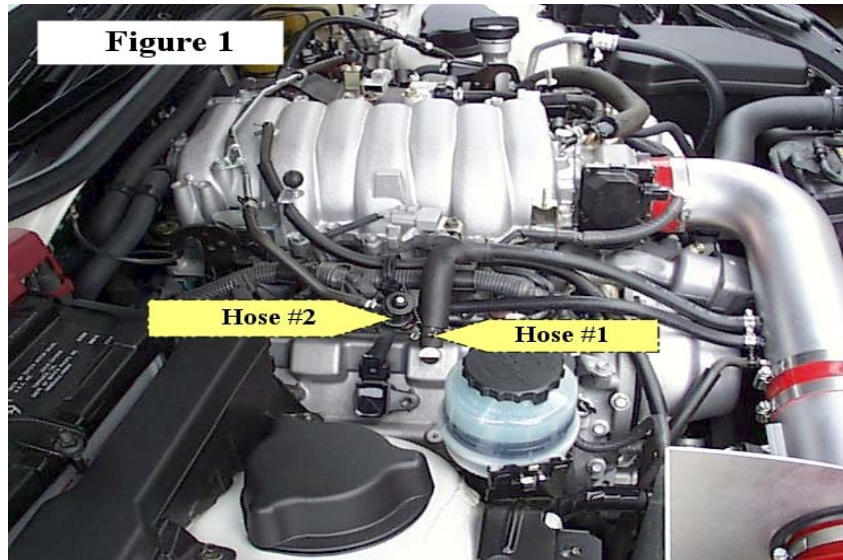
### 2001+ GS430

Congratulations! You have purchased the most advanced High Flow Intake System for your Lexus GS430. We hope you enjoy the performance and reliability of the intake for many years to come as much as we enjoyed the many hours we spent perfecting and tuning it for you. Please take the time to read and fully understand the instructions before you begin, if you have any questions please call us at (301) 982-4600.

1. Unpack all items completely, check packing list to make sure you did receive all the items listed, if there are parts missing call Swift Racing immediately at (301) 982-4600.
2. Make sure that the inside on the intake pipe is clean (wipe with a clean rag if necessary) and no debris is inside the filter.
3. Disconnect the negative battery terminal of the car (this step is VERY important and it should remain disconnected until the entire installation is completed). Remove the two nuts that hold the engine cover in place and remove the engine cover and place aside.
4. Disconnect the three vacuum lines at the intake resonator and then remove the six bolts that hold the stock air box assembly in place, loosen the clamp that holds the stock air box to the engine throttle body, disconnect the wiring harness from the Mass Air Flow (MAF) sensor and remove the entire stock airbox as one unit.
5. Remove the stock vacuum lines from the locations shown "Hose #1" and "Hose #2". Connect the 1/2" vacuum hose supplied to the "Hose #1" nozzle (secure both ends of this hose with the supplied 7/8" clamps) and the 3/8" hose to the sensor end of "Hose #2" nozzle (secure both ends of this hose with the supplied 3/4" clamps) as shown in Figure 1 below.
6. Install the heat shield in the car. The heat shield should be installed in place using one of the factory housing bolts and one 10mm bolt provided (the provided bolt is used in the wheel fender well location, same two positions used by the factory air box, it will be a tight snug fit and it is easier to just loosely fit one bolt and then put in the other before tightening).
7. Carefully install the AFE filter to the MAF sensor housing through the hole in the heat-shield (make sure the clamp is in the inside of the heat-shield) and secure in place. Remove the MAF sensor from the stock air box and Install the MAF sensor with the factory gasket and factory bolts to the new MAF housing (the Sensor fits in only one direction, do not force the sensor in, it will have a snug fit and be careful to not to destroy the o-ring seal, the sensor will have a flat precise fit in the assembly).
8. Install the Intake housing pipe to the MAF housing, then tighten the clamp. Install the 2" hose on the end of the intake pipe and clamp in place. Use the factory 4" clamp for the throttle body to secure in the throttle body. Install the whole assembled unit as a one piece unit and install it to the throttle body.
9. Once everything is in place and secured reinstall the MAF wiring harness on the sensor. Connect the 1/2" vacuum hose to the intake pipe on the nozzle closest to the throttle body (cut to size accordingly, do not make it too short just enough to take away too much slack but still give it a nice radius) and use one of the 7/8" clamps here, connect the 3/8" hose to the intake pipe on the center nozzle (cut to size accordingly) and use one of the 3/4" clamps here, connect the 1/4" hose (from the power steering pump) to the remaining vacuum nozzle on the intake pipe and reuse the factory clamp. Once complete make sure that there is no interference with the belts, etc and secure all vacuum hoses using two of the cable ties provided (do not overtighten such that it kinks the hoses).
10. Carefully notch the engine cover in the location shown in Figure 2, this makes all the necessary clearance for the new intake piping (this is needed as the new intake piping is larger in diameter and has a smoother curve to it).
11. Install the engine cover back in place with the two nuts. Your installation of the High Flow Intake is now complete move on to installing the ECU.
12. Remove the 3 bolts from the cover for the ECU and remove the cover.
13. Remove the white plastic cover from the factory harness, then connect the wiring harness using solder (connections must be soldered, no crimps allowed) to the wiring on the factory harness using the diagram shown below (make sure the correct wires are stripped and cut, only one wire is actually cut [sensor 1], the rest of them are stripped of the insulation only and not cut [this is very important] also use good quality electrical tape to cover up after you are done, it is also helpful to disconnect the factory harnesses from the factory ECU and remove the tape that holds the wires together).
14. Once the wiring is complete, recheck the wiring to make sure the correct wires were tapped and cut (use the color codes to verify), replace the white cover back in place and carefully replace the stock ECU cover back in place making sure that no wires are getting caught in the process, and secure the cover with the three bolts (Do not use excess force on the cover, reposition the SRT ECU if necessary). The completed wiring picture should look as in the picture.

## 2001+ GS430 ECU Wiring Diagram





15. Then replace the negative battery cable. Remove all tools and do a visual inspection. After all is complete then start the car (make sure it starts right away if you need several cranks and it does not start then remove the key and go to trouble shooting) and make one final visual inspection. Go for a test drive (remember that you should let the vehicle reach proper operation temperature before applying full throttle) and have fun and drive safe.

### **Troubleshooting**

1. Vehicle does not start: Is the MAF sensor connected to the vehicle wiring harness.
2. Vehicle does not start: Is the MAF sensor and housing mounted in the right direction of air flow.
3. Vehicle does not start: Make sure the wiring is done correctly, and recheck all connections.

***Important Notes: DO NOT TRY TO OPERATE THE VEHICLE WITH ONLY THE INTAKE AND WITHOUT THE SRT ECU INSTALLED, SERIOUS ENGINE DAMAGE MAY OCCUR. ALSO DO NOT TRY TO OPERATE THE CAR WITH ONLY THE ECU INSTALLED AND STOCK INTAKE.***

For further assistance call Swift Racing Technologies at **(301) 982-4600**

***Thank you*** for purchasing from Swift Racing Technologies and we hope you enjoy our products as much as we enjoy making them. Also look for the newly released Torque Converters and ~~Superc~~ **Supercharger Systems** made specifically for your Lexus.