



Installation Instructions
High Flow Intake System w/ECU
2001-2005 Lexus IS300
Part #: HIFIS-IS300-01

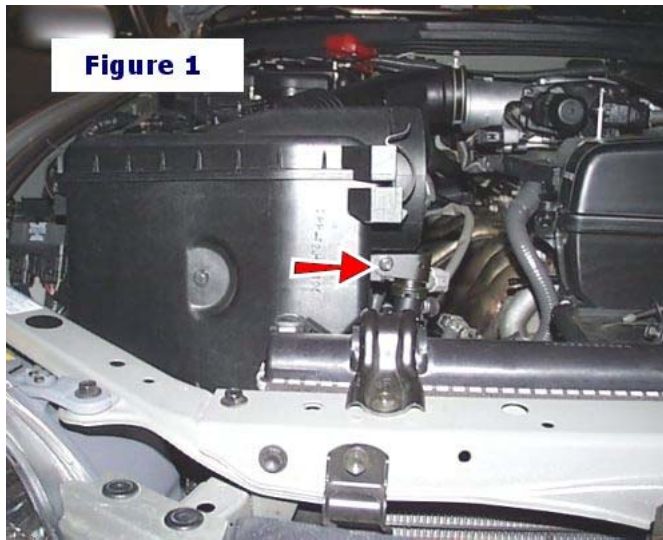
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Installation Instructions HFI System

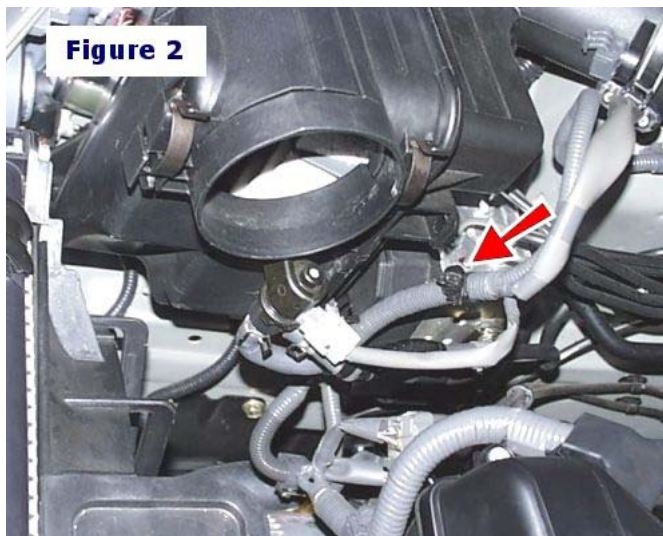
2001-2005 IS300

Congratulations! You have purchased the most advanced High Flow Intake System for your Lexus IS300. 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 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 four nuts that hold the engine cover in place and remove the engine cover and place aside.
4. Disconnect the one vacuum line (Vacuum Hose #1) from the crankcase to the intake tube near the throttle body. Undo the wiring harness clip for the Mass Air Flow (MAF) sensor and disconnect the wiring harness from the Mass Air Flow (MAF) sensor. Then remove the four bolts that hold the stock air box assembly in place, loosen the clamp that holds the stock air box to the engine throttle body. Remove the Ram air funnel unit and set aside.
5. Raise the entire Air box assembly just enough to reach the bolt shown in Figure 1. Undo the bolt and set aside (this bolt will be referred to as SHORT 10mm bolt).



6. Remove the vacuum hose (Vacuum Hose #2) from this sensor to the air box, and remove the wiring harness clip from the air box using a pair of needle nose pliers. See Figure 2.



7. Remove the entire stock air intake assembly as one unit.
8. Install the heat shield in the car. Use the bolt designated as SHORT 10mm bolt for the hole that is on the wheel well and one of the other factory longer bolts for the hole in the frame towards the front of the car. Take care to make sure that the wiring is routed in the slots of the bottom of the heat shield.
9. Remove the MAF sensor from the stock air box and install the MAF sensor with the factory o-ring and supplied 3/32 hex head bolts to the new MAF housing Note: be careful on inserting the sensor to the housing not to damage the o-ring, do not apply oil to the o-ring, but you can sparingly apply Windex with your fingers and make sure not to let any get to the sensor shaft. The sensor will only fit in one way. There is an arrow on the housing indicating the direction of air flow to the engine i.e. The arrow points to the engine.
10. Install the 3.5" to 2.75" transition hose to the engine throttle body and secure in place with the 3" clamp. Make sure it is tight.
11. Insert the Intake tubing straight end to the MAF housing (the housing already has the 3.5" silicone hose installed) that has the red hose attached but do not tighten the clamp yet. Now take the two pieces together and position in its proper place as seen in Figure 3.

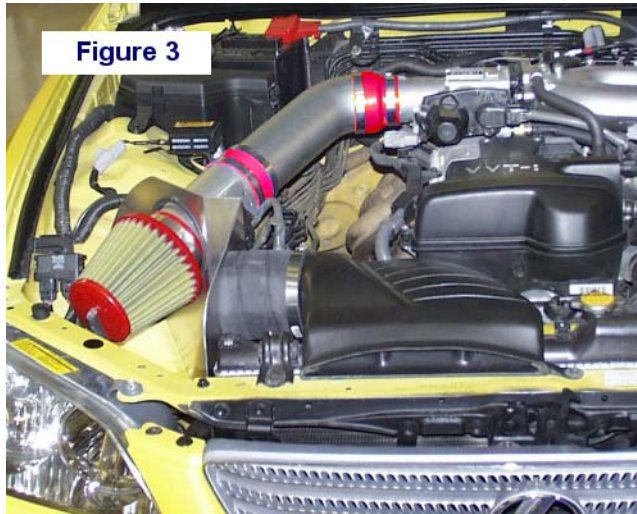


Figure 3

12. Connect the MAF wiring harness to the sensor. Twist the MAF housing to the approximate angle shown in Figure 4. While holding the intake tubing in place.

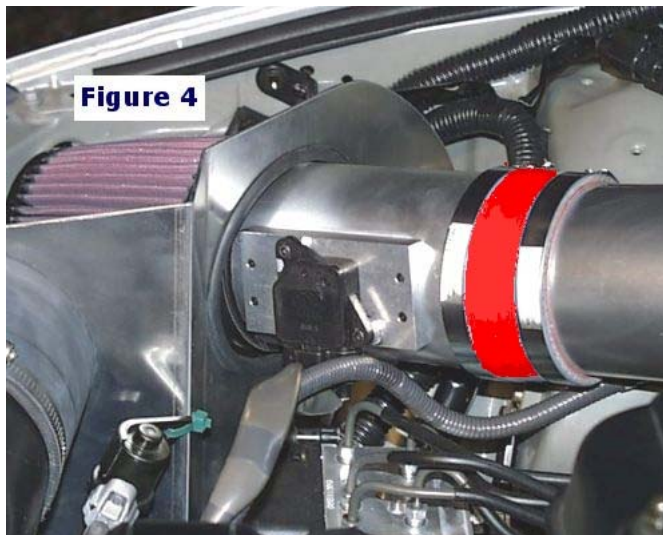
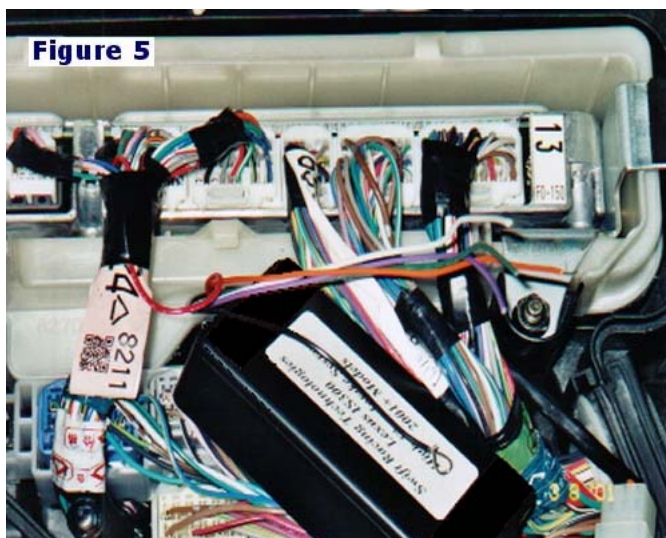


Figure 4

13. Attach the Air filter carefully on the MAF housing, with the outlet of the vacuum elbow facing the driver side of the car. Once the air filter is in place and your Intake system looks like Figure 3. Tighten all the clamps securely.
14. Remove Vacuum Hose #2 from the sensor and install the supplied 18" long 5/16" vacuum hose to the sensor, route the other end of the hose through the 3/4" hole in the heat shield and connect it to the elbow in front of the air filter (if necessary you can cut to fit if the cable is too long for a proper fit). Then using the supplied cable strap secure the sensor to the heat shield and make sure that the vacuum hose is clear of the cooling fan housing. Attach the Vacuum Hose #1 to the intake pipe make sure it is in and secure with the smallest metal clamp supplied.

15. Attach the 4" ID black tubing to the ram air funnel and secure in place with the supplied 5" clamp (largest). Install the ram air funnel in place and secure with the OEM bolt. Install the engine cover back in place with the four nuts.
16. Remove the 3 bolts from the cover for the ECU and remove the cover.
17. 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 wiring 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. After the wiring is complete, position the SRT ECU box as shown in Figure 5 and connect it to the SRT Harness (do not use force it should slide in fairly smoothly and lock in place, inspect to make sure it is in all the way and that no wire pins came off the harness then secure the harness with electrical tape).



18. 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).
19. 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

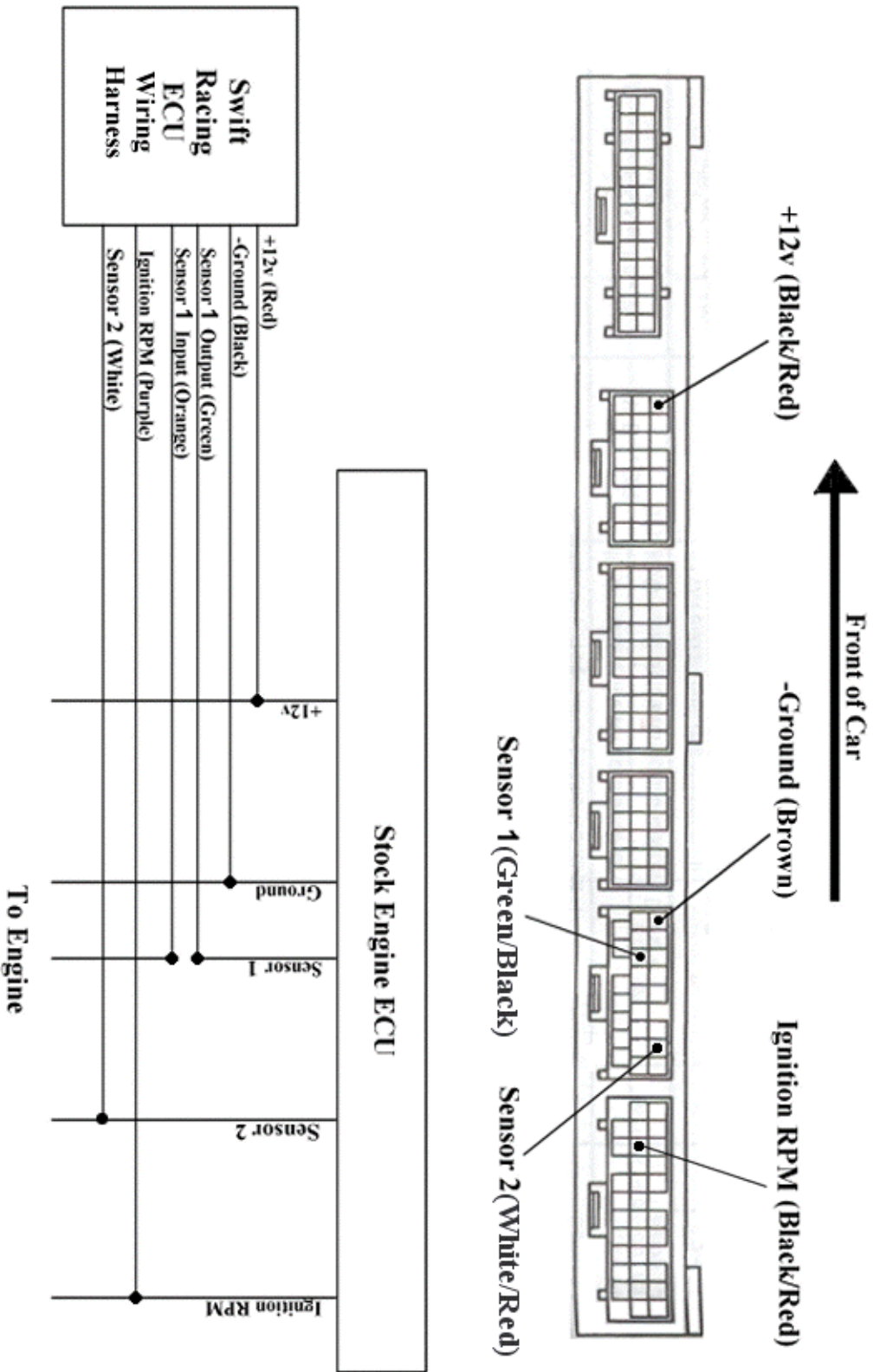
1. Vehicle does not start: Is the MAF sensor connected to the vehicle wiring harness.
2. Vehicle does not start: Is the MAF sensor and housing mounted in the right direction of airflow.
3. Vehicle does not start: Make sure the wiring is done correctly, and recheck all connections.

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 technical 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.

2001+ IS300 ECU Wiring Diagram



2002 IS300 ECU Wiring Diagram

