

K&N® TYPHOON INTAKE SYSTEMS

INSTALLATION INSTRUCTIONS

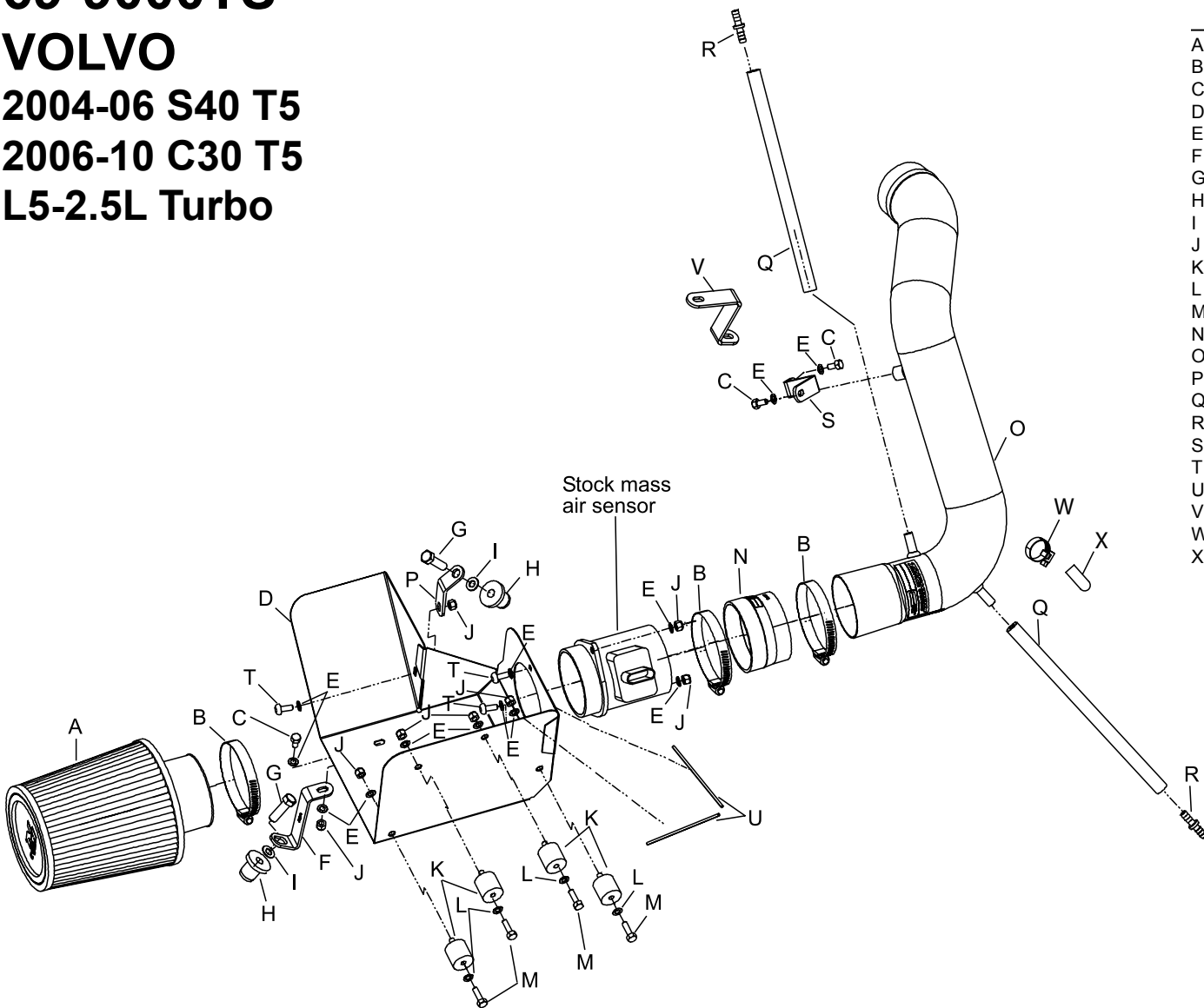
69-9000TS
VOLVO
2004-06 S40 T5
2006-10 C30 T5
L5-2.5L Turbo

PARTS LIST:

| Description | Qty. | Part # |
|--------------------------------------|------|---------|
| A Air Filter | 1 | RU-4730 |
| B Hose Clamp #48 | 3 | 08601 |
| C Bolt M6-1.0X12mm, SS | 3 | 07727 |
| D Heat Shield, STL, FB/PC | 1 | 07335 |
| E Washer 6mm Wave, SS | 13 | 08277 |
| F Bracket, "Z", Large, STL, FB/PC | 1 | 020004 |
| G Bolt 3/8"-16 X 1-1/4" L SS Hexhead | 2 | 07779 |
| H Insert 3/8-16 X 3/4 X 15/16L | 2 | 08163 |
| I Washer 3/8", Flat, SS | 2 | 08134 |
| J Nut 6mm Nylock, SS | 8 | 07553 |
| K Stud M6 X 1, 1" T, M/F | 4 | 02033 |
| L Washer 6mm Flat, SS | 4 | 08269 |
| M Bolt M6-1.0X20mm, SS | 4 | 07795 |
| N Hose 3"ID-3-1/8"IDx2"L, TPRD | 1 | 084031 |
| O Intake Tube | 1 | 27509-1 |
| P Bracket, "L", STL, FB/PC | 1 | 020002 |
| Q Hose 5/16"ID X 21"L | 1 | 08409 |
| R Vent Straight, 1/4"Hose | 2 | 08042 |
| S Bracket, "Z", Small, STL | 1 | 020003 |
| T Bolt M6x1.00x16mm, Btnhd. | 3 | 07730 |
| U Edge Trim 7"L | 1 | 102452 |
| V Bracket, "Z", STL | 1 | 083110 |
| W Hose Clamp #004 | 1 | 21850 |
| X Cap; 3/8"ID X 1-3/8"L | 1 | 08214 |

TOOLS NEEDED:

| | |
|------------------------|----------------------|
| Flat Blade Screwdriver | 12mm Socket |
| Phillips Screwdriver | 13mm Socket |
| 3mm Allen Wrench | 14mm Socket |
| 4mm Allen Wrench | 10mm Open End Wrench |
| Ratchet | 14mm Open End Wrench |
| Extension | T25 Torx |
| 8mm Socket | T27 Torx |
| 10mm Socket | T30 Torx |



NOTE: FAILURE TO FOLLOW INSTALLATION INSTRUCTIONS AND NOT USING THE PROVIDED HARDWARE MAY DAMAGE THE INTAKE TUBE, THROTTLE BODY AND ENGINE.

TO START:



1. Turn the ignition OFF and disconnect the vehicle's negative battery cable by first removing the battery cover as shown.
NOTE: Disconnecting the negative battery cable erases pre-programmed electronic memories. Write down all memory settings before disconnecting the negative battery cable. Some radios will require an anti-theft code to be entered after the battery is reconnected. The anti-theft code is typically supplied with your owner's manual. In the event your vehicles' anti-theft code cannot be recovered, contact an authorized dealership to obtain your vehicles anti-theft code.



2. Remove the two bolts that secure the stock intake tube.



3. Loosen the two hose clamps that secure the stock intake tube.



4. Lift slightly and remove the EVAP recirculation line. Remove the carbon filter vacuum hose by depressing the two locking tabs as shown, then remove the intake tube from vehicle.



5. Disconnect the mass air sensor electrical connection as shown.



6. Using a Torx T25, remove the two bolts that secure the mass air sensor to the air box and remove from the vehicle.



7. Remove the bolt that secures the main wiring harness to the air box, then unclip the harness from the air box.



8. Lift and remove the plastic ECM cover from the air box.



9. Depress the release tabs on the upper and lower electrical harness and disconnect from the ECM as shown.

NOTE: There may be a zip-tie holding the harnesses together, cut if present.



10. Loosen and remove the Delphi clamp bolt that secures the main wiring harness to the EVAP pump.



11. With a screwdriver, push down and out to release the slide clip that secures the harness bracket to the air box.



12. Loosen and remove the two screws that secure the upper air inlet duct, then remove from vehicle.



13. Twist and remove the accordion hose from the lower air inlet duct as shown.



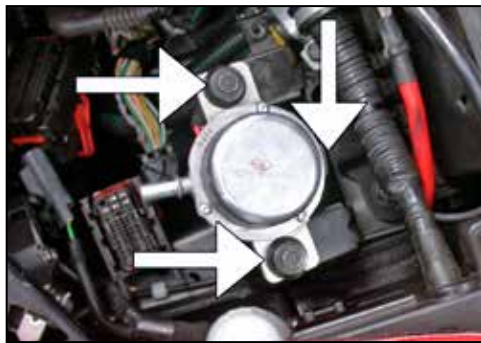
14. Pull upwards to remove the lower air inlet duct from the air box as shown.



15. Depress the locking tab on the EVAP hose to release from the EVAP pump.



16. Disconnect the EVAP pump electrical connection by inserting a small flat blade screwdriver and depressing the locking clip while pulling the connector away from the harness.



17. Loosen the two EVAP pump bracket mounting bolts and the main battery harness c-clamp bolt, then remove the EVAP pump from vehicle.



18. Pull firmly upwards to release the air box from the rubber mounting grommets, then carefully slide the air box towards the battery side of the vehicle; slowly remove from vehicle.

NOTE: K&N Engineering, Inc., recommends that customers do not discard factory air intake.



19. Remove the four bolts that secure the ECM to the air box using a T30 torx.



20. Remove the mass air sensor O-ring from the mass air sensor.



21. Install the mass air sensor onto the heat shield and secure it with the provided hardware.



22. Install the "L" bracket onto the heat shield and secure it with the provided hardware.



23. Mount the ECM onto the heat shield with the provided hardware as shown.



24. Remove the large air box mounting grommet from the vehicle.



25. Install the provided threaded insert into the mounting hole from step 24.



26. Secure the large "Z" bracket to the threaded insert as shown.

NOTE: As you tighten the bolt, the insert will expand locking securely into mounting hole.



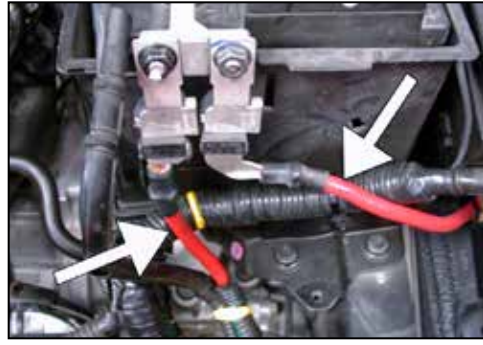
27. Remove the air box mounting grommet sitting on the right side of the engine.



28. Install the threaded insert into the air box mounting hole from step 26.



29. Secure the "L" bracket to the heat shield as shown but do not tighten completely at this time.



30. Remove the positive battery terminal, then remove the negative ground wire. Re-route the battery cables to come up on top of the main electrical harness.

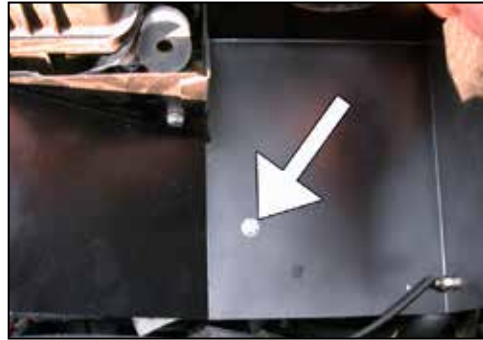


31. Re-connect the two electrical wiring harness to the ECM.

NOTE: The electrical harness will only lock if plugged in correctly, make sure that the harness is installed in the correct direction.



32. Secure the "L" bracket to the threaded insert as shown.



33. From underneath the heat shield, secure the large "Z" bracket installed in step 25 to the heat shield using the provided hardware.



34. Install the silicone hose and provided hose clamps to the K&N intake tube.

NOTE: Before installing the silicone hose, inspect the inside of the tube for any debris, then clean the inside out with water and a towel. Inspect the tube one more time before proceeding to the next step.



35. Install the "Z" bracket to the intake tube as shown.

NOTE: Due to manufacturer tolerances, it will be necessary to choose one of the two brackets (#02003 or #083110) for proper fitment of the intake tube.



36. Secure the K&N air filter onto the stock mass air sensor using the provided hose clamp.

NOTE: Drycharger air filter wrap; part # RX-4730DK is available to purchase separately.



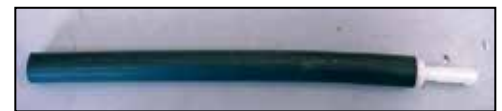
37. Using the supplied edge trim, cut to size and fit over the heat shield as shown.



38. Install the K&N intake tube into the stock intake hose, attaching the other end onto the mass air sensor. Secure the intake tube to the stock hose with the stock hose clamp and secure the intake tube to the mass air sensor with the provided hose clamp.



39. Secure the intake tube to the bracket with the provided hardware as shown.



40. Measure and cut the supplied silicone hose into two 9 inch pieces, then insert the supplied hose mender into one end of each hose.



41. Insert the hose mender into the stock EVAP recirculation line as shown.



42. Connect the other end of the EVAP recirculation line hose to the vent tube on the intake tube as shown.

NOTE: Some models are not equipped with two EVAP vent lines and the provided cap plug should be installed and secured with the provided hose clamp.



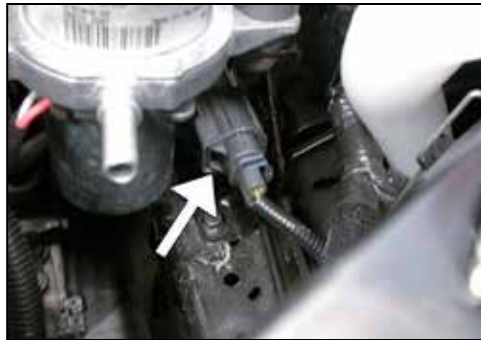
43. Insert the carbon filter vacuum hose onto the stock crank case hose as shown.



44. Route the hose underneath the intake tube and connect it to the vent tube on the intake tube as shown.



45. Reinstall the EVAP pump and secure with the two mounting bolts removed in step 17.



46. Reconnect the EVAP pump electrical connection detached in step 16.



47. Reconnect the EVAP pump hose to the EVAP pump removed in step 15.



48. Reconnect the mass air sensor electrical connection.



49. Reconnect the vehicle's negative battery cable. Double check to make sure everything is tight and properly positioned before starting the vehicle.

50. The C.A.R.B. exemption sticker, (attached), must be visible under the hood, so the emissions inspector can see it when the vehicle is required to be tested for emissions. California requires testing every two years, other states may vary.

51. It will be necessary for all K&N® high flow intake systems to be checked periodically for realignment, clearance and tightening of all connections. Failure to follow the above instructions or proper maintenance may void warranty.

ROAD TESTING:

1. Start the engine with the transmission in neutral or park, and the parking brake engaged. Listen for air leaks or odd noises. For air leaks secure hoses and connections. For odd noises, find cause and repair before proceeding. This kit will function identically to the factory system except for being louder and much more responsive.

2. Test drive the vehicle. Listen for odd noises or rattles and fix as necessary.

3. If road test is fine, you can now enjoy the added power and performance from your kit.

4. K&N Engineering, Inc., 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 and re-oil, purchase our filter Recharger® service kit, part number 99-5050 or 99-5000 and follow the easy instructions.