



Coil Upgrade
Installation Instructions
For
UrS4/S6/S2 (AAN/ABY)

Required Tools: 5 mm hex tool, hands

Dear Enthusiast,

Thank you for the purchase of our custom AAN/ABY coil upgrade harness designed for the UrS4/S6 and the S2. We assemble all of our wiring harnesses from OEM electrical connectors, automotive grade wiring, barrel crimp terminals and a high temp protective sheath for protection and for a professional look to add to your engine.

Higher mileage cars can be plagued with ignition system problems such as mis-firing at part to full throttle boost conditions or a complete misfire. These symptoms are often caused by a failed or failing ignition coil or a bad Power Output Stage (POS) unit. The POS units are used as a "trigger" for the ignition coils. Other things to look at before suspecting an ignition coil or POS failure can be found in our "Ignition system trouble-shooting guide".

Installation Procedure:

- 1) Remove the old ignition coils by removing the four M6 bolts on the top-center of the valve cover.
- 2) Disconnect all four connectors off of the two Power Output Stage (POS) units.
- 3) Disconnect the two white/gray power connectors. Slide the two white/gray connectors forward out of the bracket on the firewall.
- 4) Unscrew the single M6 bolt holding the brown ground wire ring terminal to the rear corner of the valve cover and remove the this ground wire. If the bolt removed was on the passenger side rear of the valve cover, reinstall the bolt.
- 5) Install the new coils to the wiring harness by pushing the connectors onto the wiring harness until there is a firm "click".
- 6) Install the coils into the cylinder head and press down until you feel a faint click, which indicates the coil "snapped" onto the spark plug. Cylinder #1 is at the front of the vehicle and coil pack number one is furthers from the electrical connectors. Furthermore, while standing in front of the car looking into the engine bay the coils should be oriented as per Figure 1 below (remove zip-ties from harness) to install our optional coil cover plate. If you aren't using the cover plate, the harness can be installed as it was shipped .
- 7) The ground wires are to be installed sandwiched together on the rearmost M6 valve cover bolt on the DRIVERS side of the engine compartment. The factory ground wire is often attached on the passenger side. Our harness lengths are designed to use the driver side rear bolt to keep the wiring away from the exhaust manifold as well as to reduce the length of the wires.
- 8) Slide the two 3-pin black connectors into the bracket on the firewall until they bottom (Match the orientation of the other connectors on the bracket) and connect to the white connectors on the factory harness. Both connectors are the same (All are

power wires for the coils) and cannot be mistakenly swapped. Note, the 3-pin black connectors will not seat as far in as the OEM connectors. When properly plugged in, it will appear as if the connector is half way out of the metal connector holder.

- 9) Connect the two 4-pin connectors from the Apikol harness to the two 4-pin POS connectors on the firewall. You must note which connector has three electrical contacts (one un-used slot) in it and which has four contacts and pairing the Apikol harness to the factory connectors appropriately. These connectors are best put behind the factory POS bracket to keep them from falling down towards the exhaust.
- 10) Congratulations! You just completed the install of your Apikol ignition coil upgrade. Start your car and enjoy full boost and likely better fuel mileage!

Trouble-shooting:

No start condition:

- Are the ground wires attached to the valve cover? Is the bolt tight?
- Are the 2 white/gray power wires completely plugged in all the way?
- Are the coil connectors installed all the way?
- Are the coils installed in the head firmly until the spark plug engages?
- The POS connectors need to be swapped.



Figure 1