



## Gen 4 1.8T BCS (Boost Control System)

Audi A4 and Volkswagen Passat installation instructions for the 1.8T engine.

### **Installation Instructions**

- 1) In order to gain access to the engine computer, it is helpful to reposition the windshield wipers. Turn the ignition on and turn on the windshield wipers. When the wipers reach the vertical position, turn off the ignition. Make sure the ignition is turned off and the key is removed before continuing with the installation.
- 2) Inside the engine compartment there is a plastic box near the firewall on the driver side. In order to access the back screw, remove the plastic cap located adjacent to the driver side wiper arm. Remove the screws that hold down the plastic cover.
- 3) Remove the black plastic cover to access the ECU.
- 4) Find a suitable location to mount the BCS. In most cases the unit is installed in the opening of the center console near the car stereo. The unit is held in place with the Velcro that is provided.
- 5) Route the wires through the center console to an opening located near the clutch or brake pedal.
- 6) Route the BCS wires from the pedal area to the open hole in the side of the ECU box.
- 7) Remove the ECU connector covers by cutting the zip ties and pulling off the covers from the connector housings.
- 8) Remove about eight inches of the cloth tape around the ECU wiring harness.
- 9) Make the connections about six inches away from the ECU connectors.
- 10) Use the ECU pin diagram below to help you locate the correct wires to connect into.
- 11) Verify the correct wire for each connection by pin number and wire color code.

See the reverse side of this page for wiring instructions.

### **Calibration Procedure**

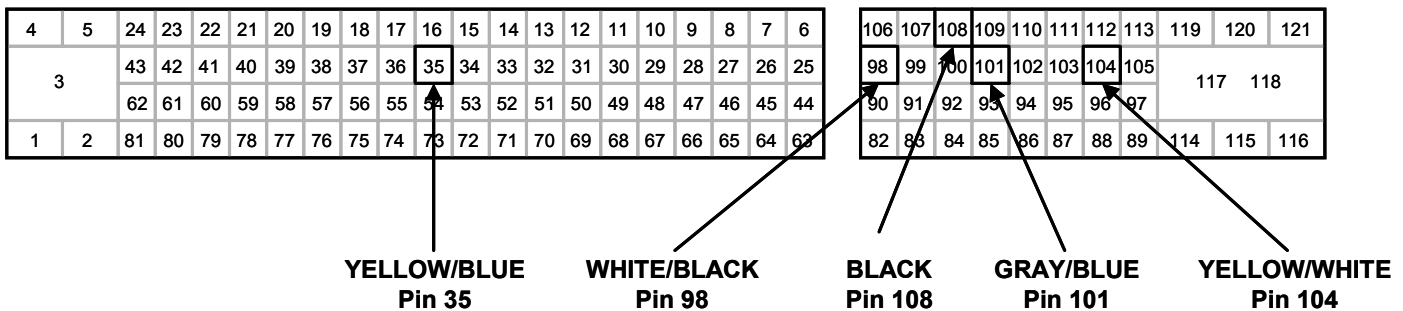
The rear panel calibration adjustment allows you to fine tune the BCS for your vehicle. If the setting is too high or too low, your car will not make full power. After the BCS is installed, the rear panel adjustment can be set during a short test drive. Start with the setting on maximum (100). See if the car pulls strongly to redline. Turn down the setting until the cars pulls strongly to redline in all gears. If the cars surges (cyclic variation in power), turn down the setting a little bit.

## **Wiring Instructions**

The diagram below shows the location of the wires on the ECU connector plugs that are used to tie in the BCS. **Be sure to trace the wires to the ECU pins to insure that connections are made to the correct wires.** Do not go by wire color alone. You must confirm the correct wire by connector location. Connections will be made to the wiring harness a few inches from the side of the engine computer. All connections are made using the crimp connectors that are provided.

The T-tap connectors are in two parts. The dark red piece is clamped onto the wire with a pair of pliers. After stripping the corresponding wire from the BCS, crimp on the male spade connector. Make sure you crimp onto the bare wire and not the insulation. Shrink the insulation onto the wire with a heat gun. Inspect the male spade connector to make sure that the spade terminal is centered inside the insulator. This will insure that it mates properly with the T-tap connector. Push the male spade onto the T-tap connector until it snaps into place.

**ECU Connector Diagram – Wire Side View**



- 1) Connect the BCS **BROWN** wire to the harness **BLACK** wire leading to ECU pin 108 using a T-tap connector.
- 2) Connect the BCS **WHITE/BLACK** wire to the harness **WHITE/BLACK** wire leading to ECU pin 98 using a T-tap connector.
- 3) Connect the BCS **YELLOW/BLUE** wire to the harness **YELLOW/BLUE** wire leading to ECU pin 35 using a T-tap connector.
- 4) Locate the **YELLOW/WHITE** wire leading to ECU pin 104. Cut the **YELLOW/WHITE** wire.
- 5) Connect the BCS **YELLOW** wire to the side of the cut **YELLOW/WHITE** wire that leads to the ECU with a butt splice connector.
- 6) Connect the BCS **YELLOW/WHITE** wire to the cut **YELLOW/WHITE** wire that leads to the engine with a butt splice connector.
- 7) Locate the **GRAY/BLUE** wire leading to ECU pin 101. Cut the **GRAY/BLUE** wire.
- 8) Connect the BCS **GRAY/BLUE** wire to the side of the cut **GRAY/BLUE** wire that leads to the ECU with a butt splice connector.
- 9) Connect the BCS **GRAY** wire to the cut **GRAY/BLUE** wire that leads to the engine with a butt splice connector.
- 10) Finish the installation by reconnecting all items that were removed to install the 1.8T BCS.
- 11) Place the EO sticker near the factory emission stickers located at the front of the engine compartment.
- 12) If you would like to display your Split Second stickers, a popular location is on each rear side window.

Note that the first green LED on the boost gauge will stay on at half intensity for approximately 15 minutes after turning off the ignition. If you have any difficulty with installation, please call us at (949) 863-1359 for assistance. We hope you enjoy the enhanced power of your 1.8T engine.

**THANK YOU FOR CHOOSING SPLIT SECOND**