



WHEK01 K-series Conversion Harness Install Guide

Conversion harness installation manual Version 3.0:

1996-1998 Honda Civic EK

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Package Contents:	Conversion Wiring harness, Install guide, Zip ties and electrical connectors	
Parts Needed:	Factory engine wiring harness for O2 Sensor, Fan switch and coolant temp connectors.	
Tools Needed:	Crimp tool, wire strippers, electrical tape, 10mm, 12mm sockets, ratchet, pliers and a razor.	
Recommended Tools:	Soldering iron, solder, heat shrink, heat gun and a volt meter!	

Notes before installation:

- K20A Type R engine harnesses are for right hand drive (RHD) vehicles. If your car is not RHD consider extending the ECU connectors for easier installation.
- Solder joints are better than plastic connectors
- Use heat shrink over any and all soldered wires.
- Keep in mind that electrical tape is not a proper cover for an open wire!

Installation

1. Begin by removing the battery, battery tray and fuse box.



2. Locate and remove the factory ECU under the passenger side dash.



3. Remove the factory engine harness from the engine bay and under the dash. There will be 2 10mm bolts under the battery tray holding the harness in place. Remove this plate/grommet to reuse with your **K series engine harness**.



4. Route the **K series engine harness** through the firewall on the passenger side utilizing the factory grommet.

****You should remove this grommet from the K series engine harness.****



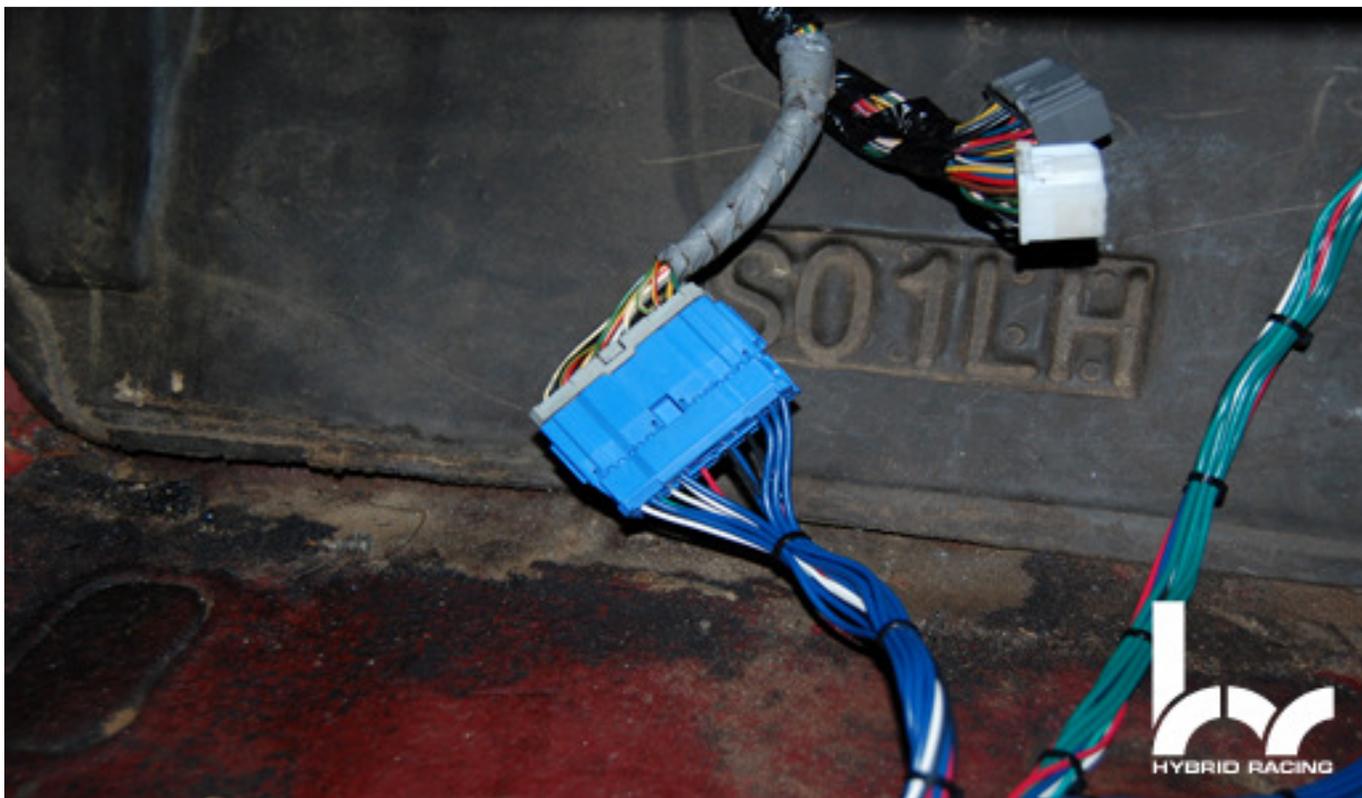
5. Run the hybrid racing harness along the inside of the floor, near the firewall. You should have all of the connectors in one area.



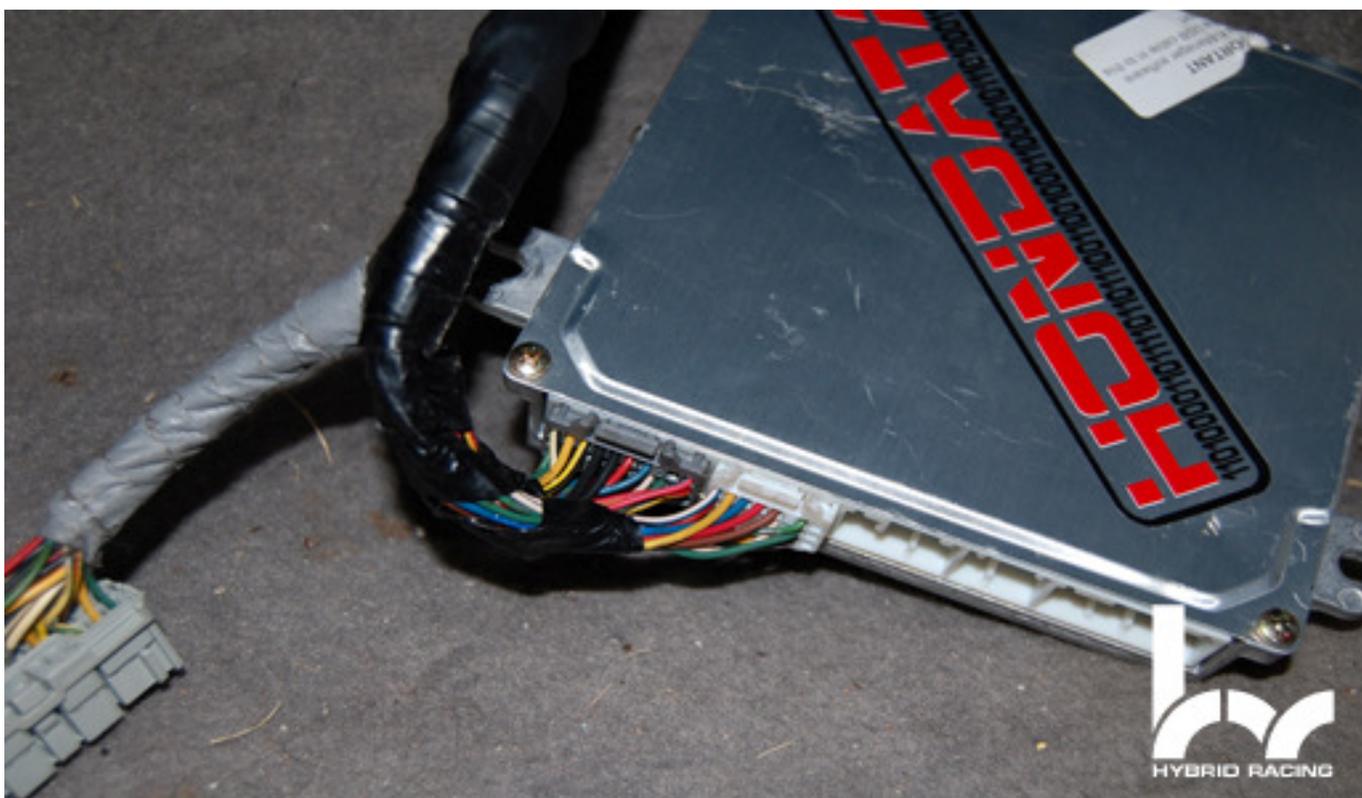
6. Connect the green C131 from your Hybrid Racing harness back to the dash harness.



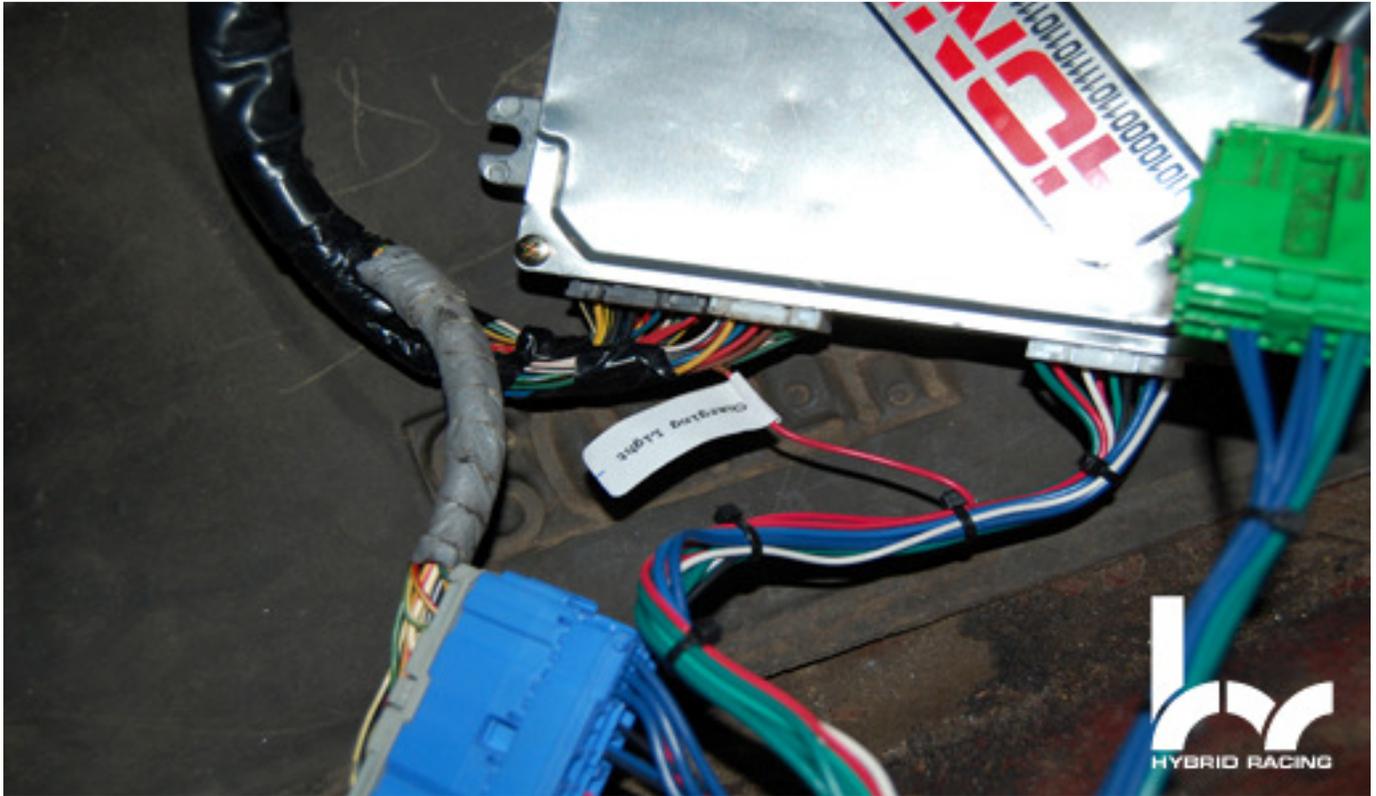
7. Connect the C302 from your Hybrid Racing harness to the connector on the K series engine harness.



8. Insert connector A and B on your K series engine harness into your K series ECU.



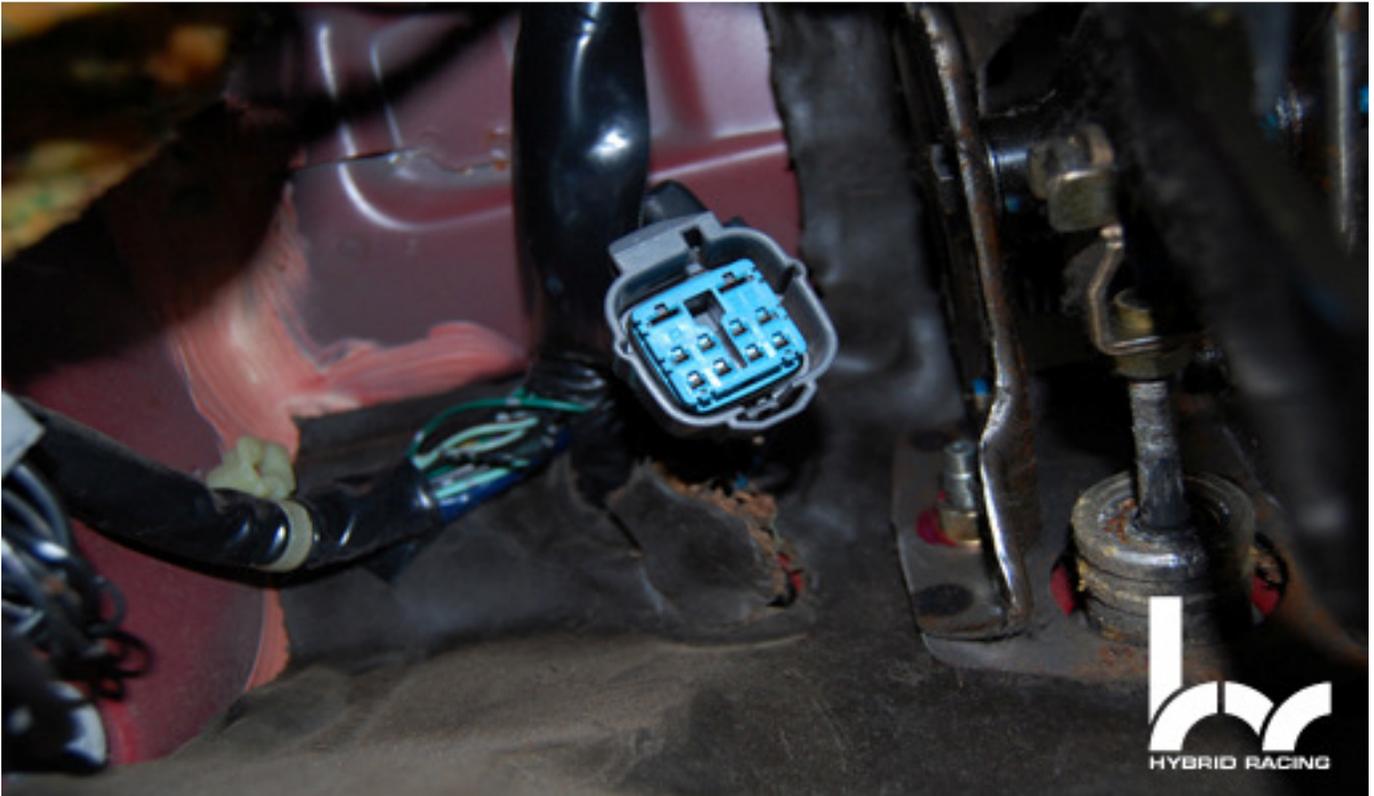
9. Insert the E plug (white), located on your **Hybrid Racing conversion harness**, into the K series ECU.



11. Locate C101 (gray) 10pin connector located on the driver side shock tower.



12. Pull the connector through the firewall.



13. Connect the other end of the Hybrid Racing harness



Oxygen Sensor Wiring

- If you are running a KPRO you do not need to run the secondary Oxygen sensor. This can be disabled inside the KPRO software, for more information refer to the help section in the HONDATA software.
- The Primary sensor located on the K20A, A2, Z1, Z3 engines are factory wideband. These sensors **CAN NOT** be replaced with any other factory O2 sensor. (i.e. stock Civic, Integra, ect)
- Sensor information: (02-04 RSX Type S)
 - **Denso Sensor # DU2 Denso 192400-1091 10G14**
 - **Honda Pt# 36531-PRB-A01**

If you do not have this sensor, please call us we have them in stock!



Primary (Wideband) Oxygen Sensor

Located on your **Hybrid Racing conversion harness** are 2 sets of heat-shielded wire. Locate the one labeled PRIMARY. Next remove the Female O2 connector from your stock EG/DC engine harness (leaving 2-3 in of wire). Connect the plug to the **Hybrid Racing conversion harness** as outlined below.

Hybrid Racing Harness	RSX Primary O2
Green	White
Red	Green / Blue
White	Black
Black	Black

- Green wire in pin location 1
- Red wire in pin location 2
- Black wire in pin location 3
- White wire in pin location 4



Secondary Oxygen Sensor

Located on your hybrid racing harness are 2 sets of heat-shielded wire. Locate the one labeled secondary. Next remove the Male O2 connector from your stock EG/DC engine harness (leaving 2-3in of wire). Connect the plug to the **Hybrid Racing conversion harness** as outlined below.

Hybrid Racing Harness	RSX Secondary O2
White	Grey
Red	Black
Green	White
Black	White

- White wire in pin location 1
- Red Wire in pin location 2
- Green wire in pin location 3
- Black wire in pin location 4



13. Next you will need to modify the K series charging harness located under the intake manifold of your K series engine. Check the other document on this installation disk for the step-by-step guide!

14. If you are running a KPRO ECU make sure to disable your Immobilizer, Multiplexer and OBD2 functions. Check the Hondata Help section for more information on how to do this.

15. Make sure you have at least three good grounds on your K series engine.

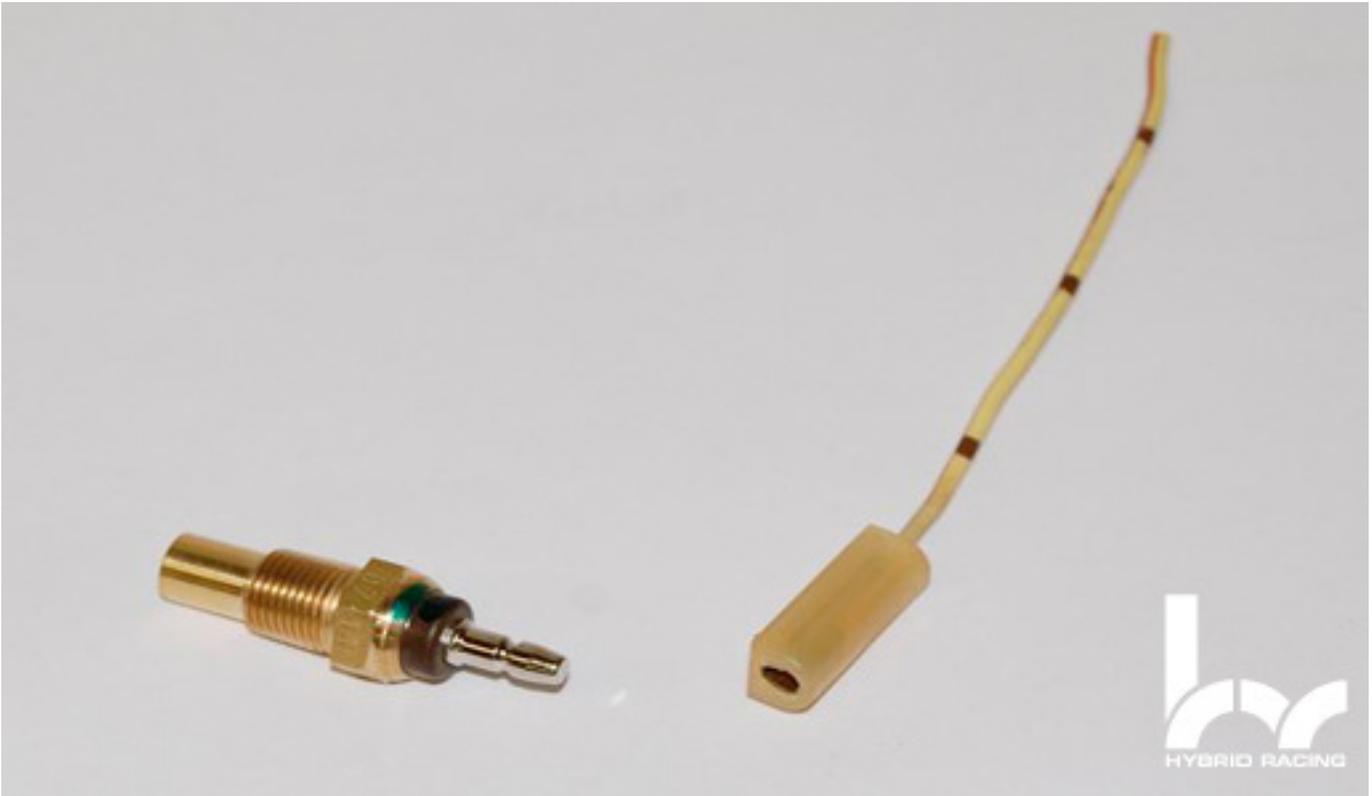
16. Connect the battery back and test start the car. If the car starts continue to next section. If the car does not start, continue to the trouble shooting section.

Fan Switch Wiring



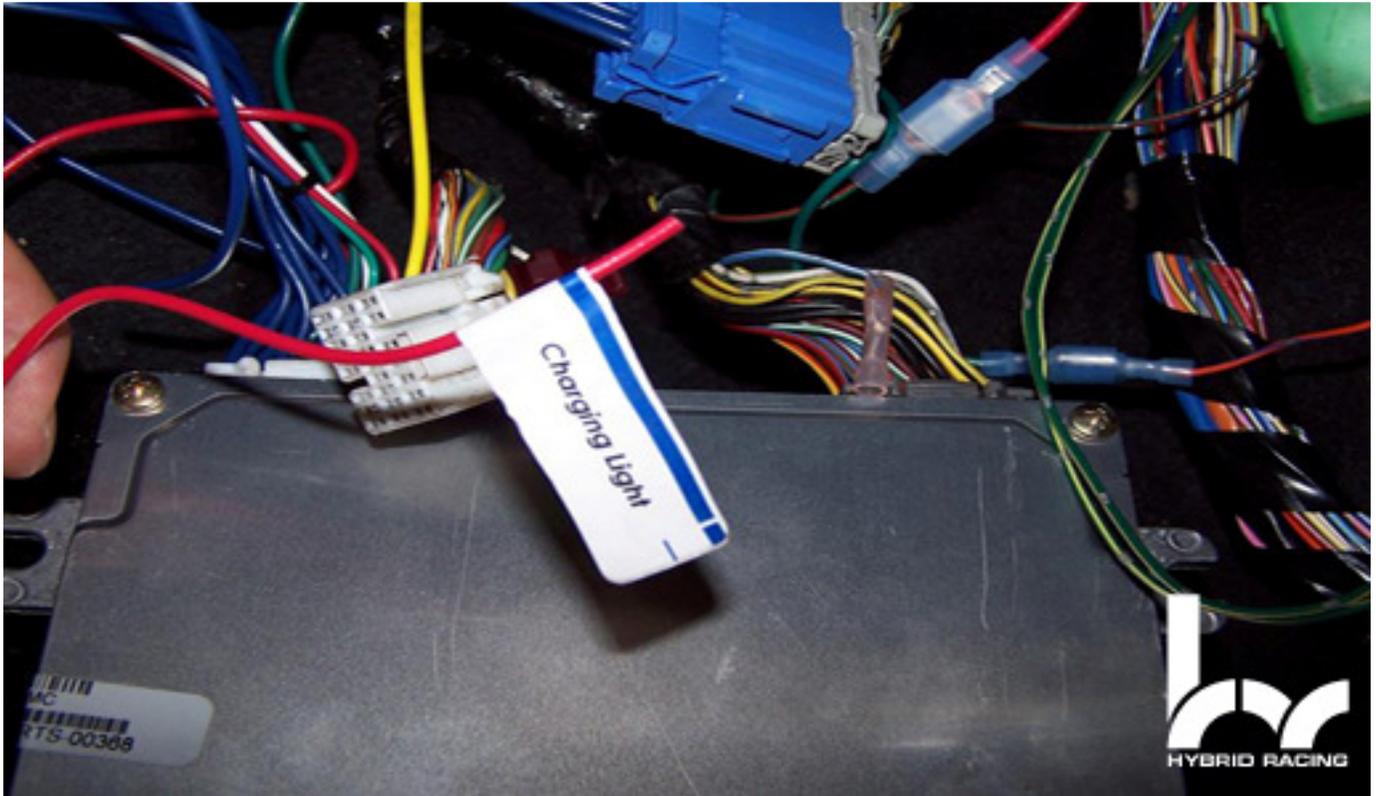
1. Install the fan switch into your radiator or radiator hose insert. If you do not have the fan switch or the insert you can order these parts from Hybrid Racing.
2. Locate the 2-pin connector from your D/B series engine harness. It should be located behind the distributor connectors. Cut the connector off making sure to leave 2-3 in of wire.
3. Ground one wire from the connector to the chassis. Connect the other wire to the **YELLOW** wire labeled **FAN SWITCH**. You will need to run the yellow wire through the firewall on the driver side.
4. Connect the connector to the Fan Switch.
5. To test if the fans are functioning, ground the yellow wire.

Coolant Temperature Gauge



1. Install the coolant temperature sending unit into your Hybrid Racing radiator or radiator hose insert. If you do not have the temp switch or the insert you can order these parts from Hybrid Racing.
2. Run the **BLUE** wire labeled **TEMP SWITCH** through the driver side firewall.
3. Locate the 1 pin connector from your D/B series engine harness. It should be located below the distributor connectors. Cut the connector off making sure to leave 2-3 in of wire and connect to the blue wire labeled temp switch.
4. Finally connect the connector to the sending unit.
5. Ground the blue wire labeled Coolant temp and the gauge should read HOT. If it does the coolant sensor wire is working properly.

Charging System Indicator Light



1. Locate the red wire labeled Charging light.
2. Locate B10 (B plug, pin location 10) WHT/BLU on the K series engine harness. **NOTE:** Do not cut B10, Tap into it utilizing the connectors provided.



Trouble Shooting

In order for your car to start, it must have all of the following:

1. Fuel
2. Ignition
3. Compression

First, determine which of these 3 you do not have. Then address the issue accordingly.

How do I check my ECU codes?

Connect an OBD2 scan tool to the black connector (DLC) on the Hybrid Racing conversion harness. If you do not have access to a scan tool contact your local automotive shop or parts store for additional help.

I have a stored code P0600? I have a CEL, code 39?

All K series swaps will have a stored code p0600/Code 39 (Serial Communication Link Malfunction/Multiplex) unless disabled with a Hondata Kpro or other K series ECU software. This code does not throw a CEL and does not affect performance.

To erase this code using the Hondata KPRO, make sure the OBDII, multiplexer and the immobilizer are DISABLED. Re-upload the map, turn the ignition off and then back on. Start the car.

What is the Multiplex control unit?

The system controls these functions in the stock RSX/CIVIC SI chassis:

Entry light control	Wiper washer
Interlock system	Keyless/Power door lock
Temperature gauge	HVAC
Key in reminder	Lights on reminder
Seat Belt reminder	

To reduce the overall number of wires needed for the car Honda implemented a system using digital signals sent through the multiplex communication lines opposed to normal electrical signals sent through individual wires.

My car idles up and down?

Start by cleaning the idle air control valve located under the throttle body and make sure that you have adequate coolant in your radiator system.

My fuel pump is not turning on?

Using a JDM ECU:

Locate pin 20 on the C131 Connector. It should be a green wire with a yellow stripe. Ground the wire sides of this wire to the chassis to kick the fuel pump on, when the ignition is turned on.

Using a Hondata KPRO

Check step 8 and make sure everything is properly connected. Make sure the immobilizer and multiplexer functions are disabled inside the KPRO software.

I'm using a KPRO and my TPS does not fluctuate when I rev the engine.

- Make sure the TPS plug is connected
- Check for any cut or broken wires
- Typically if the TPS is not functioning correctly when you are data logging the sensor needs to be replaced. The K series TPS is widely known to be a very fragile piece so handle with care!

I have error codes P1166 and P1167?

- P1166 – Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater Circuit Malfunction
 - Check step 19a and make sure everything is connected properly.
 - Make sure a Primary Oxygen Sensor from an RSX Type S or equivalent is present.
 - Make sure there is at least 12 inches of exhaust pipe AFTER the sensor.
- P1167 – Air Fuel Ratio (A/F) Sensor (Sensor 1) Heater System Malfunction
 - Check step 19a and make sure everything is connected properly
 - Make sure a Primary Oxygen Sensor from an RSX Type S or equivalent is present.
 - Make sure there is at least 12 inches of exhaust pipe AFTER the sensor.

I have connected everything properly, when I try to crank the car nothing happens?

- Make sure you have the proper engine ground (at least 3)
- Make sure you have converted the charging harness properly
- Check all the fuses in the under hood and under dash fuse boxes.
- If the car was equipped with an automatic transmission, make sure the necessary wiring changes have been preformed.

You have successfully completed your K series conversion harness wiring!!

If you have any questions or comments please email

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Should you need to contact us our details are as follows:

Hybrid Racing LLC, 3348 Drusilla Lane, Suite 2C, Baton Rouge, LA 70809

www.hybrid-racing.com