



99-00 Civic EK K-Series Swap Conversion Wiring Harness V 4.0 Installation Manual

This guide walks you through the steps to install your Hybrid Racing K-Series swap conversion harness for 99-00 Civic.

Written By: Hybrid Racing



INTRODUCTION

While the Hybrid Racing Conversion Wiring Harness is 99% plug-n-play, there are a few wires that need to be connected after the harness has been installed into the car. Because it involves electricity, there is always the risk of damaging electronic devices, such as fuse boxes, ECU's and sensors among other things. Hybrid Racing strongly urges the installer of this product to become familiar with wiring and common wiring procedures before attempting to install this product

If you are unsure of something, or have any questions regarding this product or its installation please feel free to create a support ticket at support.hybrid-racing.com or email us at support@hybridracing.com. Remember it's easier and cheaper to email us than damaging something and have to replace it.

This wiring harness is designed to integrate a K-series engine into the chassis specified on the first page of the install guide. It serves no other function. It allows the engine, ECU, and the chassis to communicate together. Without it, the car will not function.

Each engine wiring harness requires the use of a charging harness. You must have a charge harness installed or your car will not crank and run properly. This charge harness connects the alternator and starter directly to the battery and fuse box. ****All charging harnesses are NOT the same****. To avoid using the wrong charge harness use the charge harness from the same chassis that your motor and engine harness came from.

Introduction & Installation Notes

A little bit of K-series information to make sure you have the right parts before you get started

Please see the following links before proceeding to the steps:

- [Engine Harness Selection](#)
- [K-series ECU Options](#)

Know your conversion harness

- [C302 connector](#)
- [E plug connector](#)
- [C101 connector](#)
- [Data Link Connector "DLC"](#)
- [Primary Connector](#)
- [Oxygen Sensor Relay](#)

Quick Overview

1. Run stock K-series engine harness through fire wall.
2. Install conversion harness and ECU under dash.
3. Connect 4 wires from conversion harness.
4. Plug in all connectors and secure everything on passenger side.
5. Run conversion harness to driver side.
6. Route/Connect 3 wires into engine bay on driver side.
7. Route Oxygen sensors.
8. Setup Kpro.
9. Connect battery and confirm charge harness is in place.
10. Finished.



PARTS:

- [HYB-CWH-01-19](#) (1)

Step 1 — 99-00 Civic EK K-Series Swap Conversion Wiring Harness V 4.0 Installation Manual



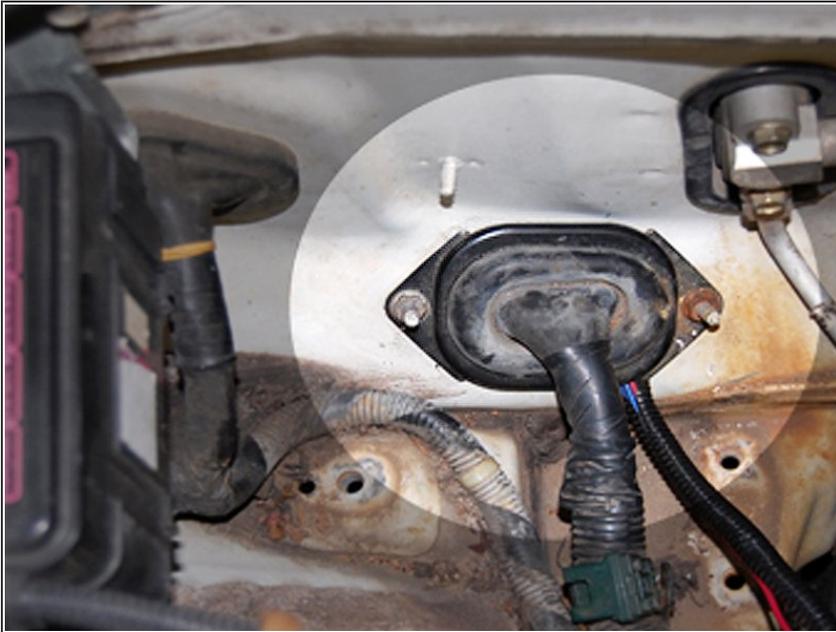
- Remove the battery, and battery tray. Once all of these things are out of the way you should be staring at a Grommet on your firewall held in with two (2) 10 mm bolts. This is where your OEM engine harness entered the cabin.

Step 2



- Remove the OEM grommet from your K-series engine harness as well as from your stock D/B series engine harness. You are going to use the one from your old engine on the new K-series harness.

Step 3



- Using the stock grommet from your OEM D/B series engine harness run your engine harness connectors through the firewall. Secure the grommet back into the firewall and use a little electrical tape to wrap the grommet to the K-series engine harness. Once this is done you can reinstall your fuse box and battery tray.

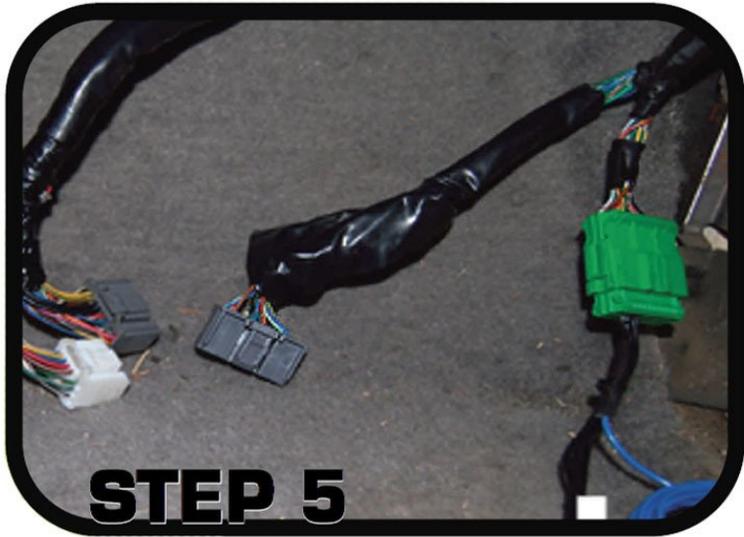
ⓘ We recommend you leave the battery disconnected until everything else is complete.

Step 4



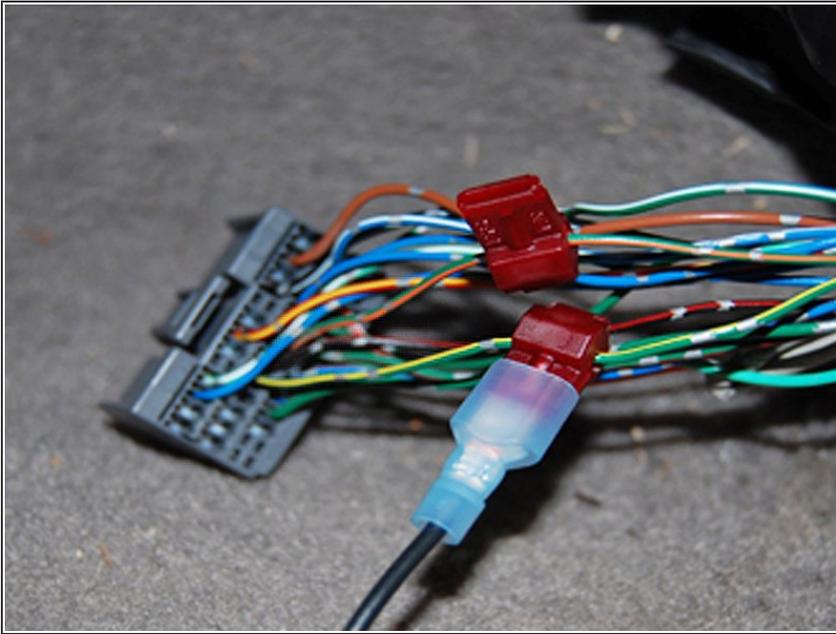
- Grab your ECU and HR conversion harness and move inside the car. Pull back the carpet, kick panel, and remove the stock ECU. You should now have your K-series engine harness, the STOCK K-series ECU, STOCK OEM ECU connectors and the HR conversion harness ready to go.

Step 5



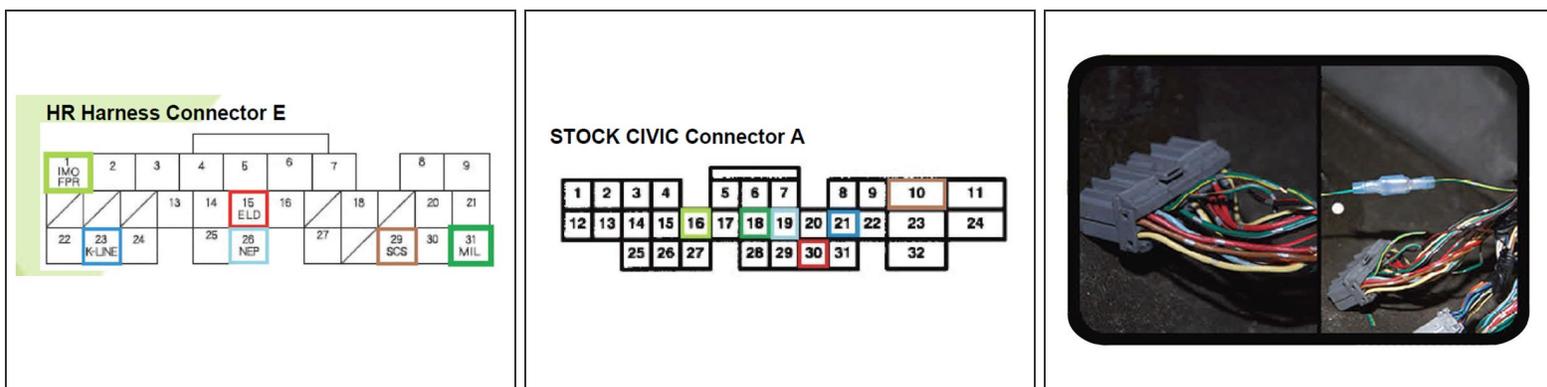
- Locate the factory A plug that remains in the car under the dash on the passenger side. This should be a grey connector with 32 pins and is located next to a GREEN CONNECTOR.

Step 6



- Locate the six (6) wires that run out of the white E plug connector. Go ahead and cut the zip ties holding them together and prepare to connect them to the A plug following the guide in the next step.

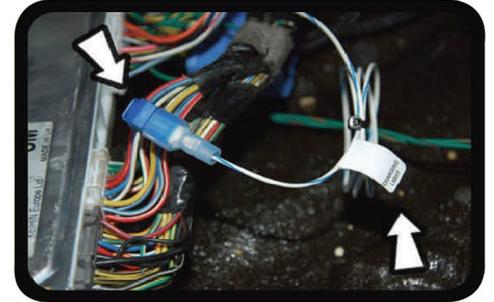
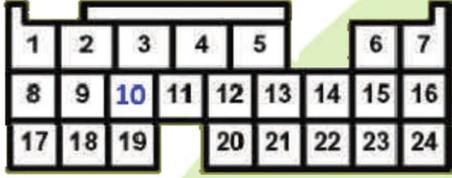
Step 7



- Find and locate the six wires that come off of the Hybrid Racing conversion harness at the ECU E PLUG and connect them using the following GUIDE.
- CONNECT THE SIX WIRES AS OUTLINED BELOW:
- Connect E1 a GRN/YEL wire on the HR conversion harness to A16 a GRN/YEL wire on the STOCK CIVIC ECU CONNECTOR A. This wire controls the FUEL PUMP. *FOR Type R ECU disregard E1 a GRN/YEL wire on the HR conversion harness and GROUND A16 a GRN/YEL wire on the STOCK CIVIC ECU CONNECTOR A.
- ^Connect E15 a GRN/RED wire on the HR conversion harness to A30 a GRN/RED wire on the STOCK CIVIC ECU CONNECTOR A. This wire controls the ELD.
- ^ Connect E23 a BLU/YEL wire on the HR conversion harness to A21 a LTBLU or BLU/YEL wire on the STOCK CIVIC CONNECTOR A. This wire controls the DATA LINK CONNECTOR.
- ^ Connect E26 a BLU wire on the HR conversion harness to A19 a BLU wire on the STOCK CIVIC CONNECTOR A. This wire controls the TACHOMETER.
- ^ Connect E29 a BRN wire on the HR conversion harness to A10 a BRN wire on the STOCK CIVIC CONNECTOR A. This wire controls the SCS DATA LINK CONNECTOR.
- ^ Connect E31 a GRN/ORN wire on the HR conversion harness to A18 a GRN/ORN wire on the STOCK CIVIC CONNECTOR A. This wire controls the CHECK ENGINE LIGHT.

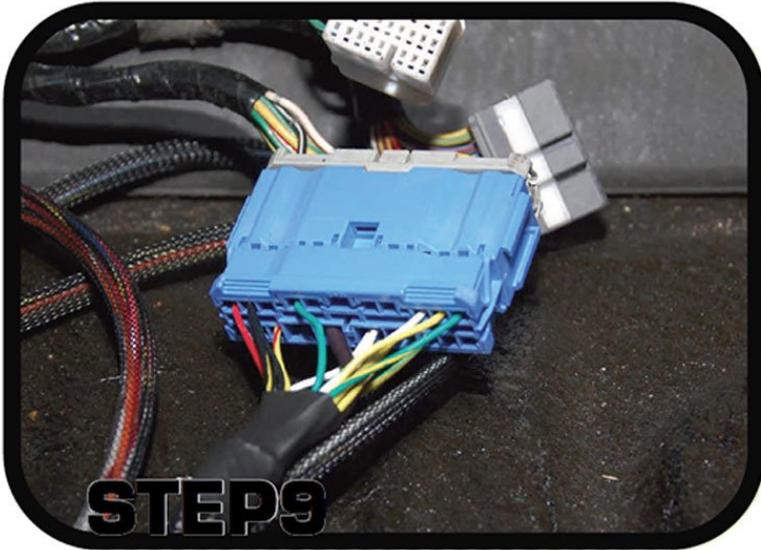
Step 8

K-SERIES ECU CONNECTOR B



- Connect the wire labeled charging light to B10 a WHT/BLU wire located on Kseries ECU CONNECTOR B using the supplied "T" taps DO NOT CUT. This wire controls the battery light on the gauge cluster.

Step 9



- Plug the blue C302 connector from the HR harness into the grey C101 connector from the K-series engine harness and connect the GREEN C131 connector on the HR Harness to the GREEN C131 connector on the chassis harness.

Step 10



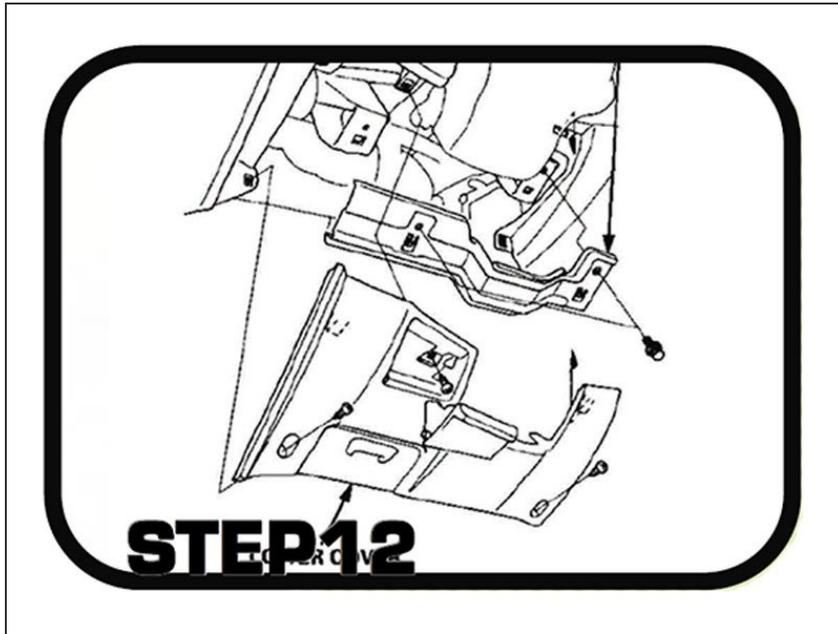
- Plug the K-series engine harness into the K-series ECU. Plug the white E plug connector from the Hybrid Racing harness into the ECU.

Step 11



- Go ahead and secure the DLC, Oxygen Sensor Relay and mount the ECU. You are now done on the passenger side.

Step 12



- Now that everything on the passenger side is complete, go ahead and move to the drive side and remove the lower dash panels so you can gain access to where C101 on the Hybrid Racing harness plugs in.

Step 13



- Route the C101.1 Grey connector on the Hybrid Racing harness to the driver side of your chassis. You can use the supplied zip ties to secure it nicely under the dash.

Step 14



- Locate the Grey 10 pin connector in your engine bay. Go ahead and push this connector inside your firewall and connect it to the HR conversion harness.

Step 15



- Connect the C101 connector to the HR harness and cut the zip tie on the bundle of wires. Go ahead and secure the connectors with zip ties and move to the next step.

Step 16



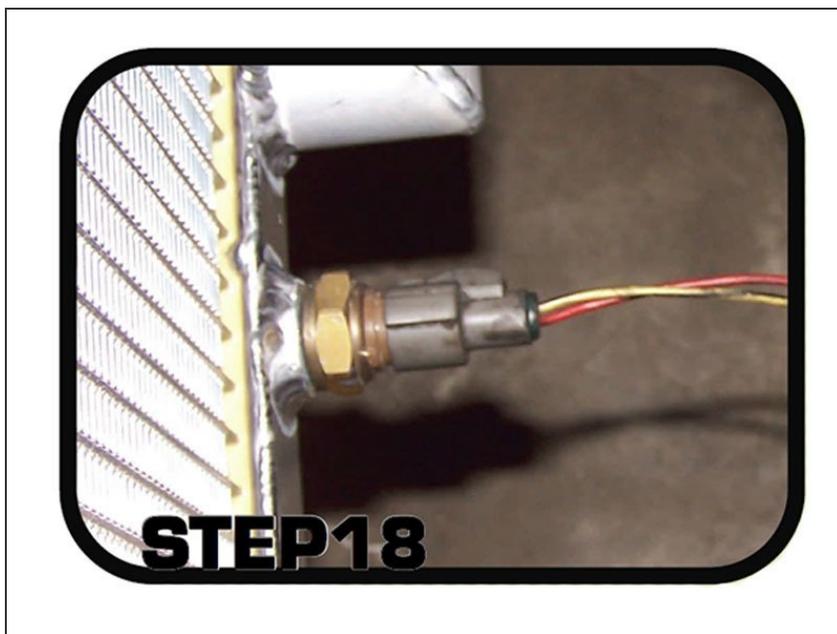
- Route the three (3) loose wires through the grommet located on the driver side firewall. Once the wires are in the engine bay, follow the instructions on the remaining pages to connect them (NOTE: You can also pull the large engine harness connector inside the cabin to clean things up.)

Step 17



- Locate the GRN/WHT wire labeled FAN SWITCH. If you are using a Hondata KPRO, the connection of the fan switch is NOT necessary. It is only necessary if you want to have the OEM sensor switch turn the fans on and off. If you would like to have KPRO, turn the fan on and based off a temperature you can skip the fan switch install steps.

Step 18



- Connect the GRN/WHT wire on the HR conversion harness to ONE wire on the fan switch sensor connector. The other wire on the fan switch sensor connector gets grounded to the chassis. You can locate this connector on your OEM STOCK engine harness. You will need to cut and remove it. Make sure to leave at least 1in of wire to make your connections.

Step 19



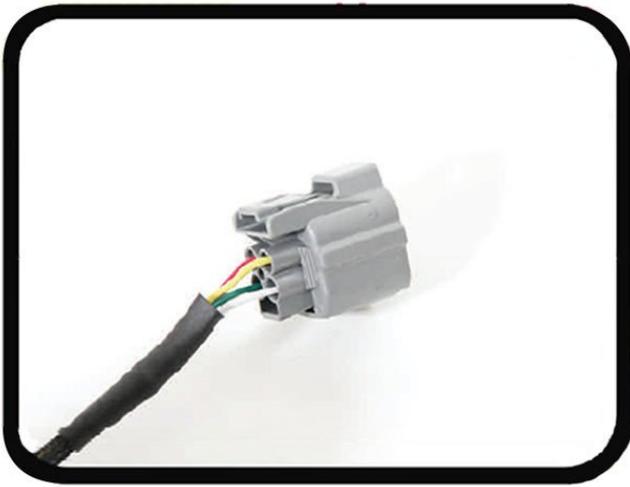
- Locate the YEL/GRN wire labeled COOLANT TEMP on the HR conversion harness and connect it to the coolant temp sensor connector. You can locate this connector on your OEM STOCK engine harness, you will need to cut and remove it. Make sure to leave at least 1in of wire to make your connections.

Step 20



- If you have not already done so go ahead and install your charge harness and reconnect your battery.
- If you are running a Kpro move to step 20 if not congrats you are done. We have included an FAQ if you run into problems. If you find that you still need help please email us at support@hybrid-racing.com or go to support.hybrid-racing.com and create a support ticket. STEP19 Thanks for choosing HR!

Step 21



- Run the connector under the car. You can use one of the small holes already located in your chassis or if you can not find one you can drill a small hole on the top of the tunnel under the radio location. Drop the connector through the floor and plug it into your Oxygen sensor.
- The below information is useful information for making sure you have the correct sensor.
- One of, if not the most important sensors on the K series motor is the A/F ratio sensor. This sensor is located in the factory exhaust down pipe, closest to the motor. This is often called the “primary o2 sensor” or “wideband o2 sensor.”
- You **MUST** have this sensor connected properly for the engine to run correctly. Without it, you will have a CEL and will suffer from sluggish performance and terrible fuel economy. There are exceptions to this, like having the car tuned in open loop or running an aftermarket WB (innovative, AEM ect) sensor installed into the harness.

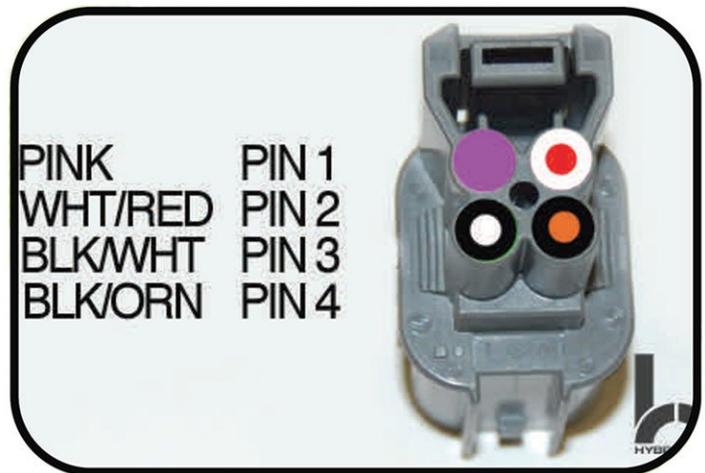
- ***Note:** Some chassis may have a hole in the floor pan of the car that the AFR sensor connector can go through. If your chassis does not

have this, you can drill a hole in the floor to run the harness to the sensor in the exhaust.

- The ONLY OEM style AFR sensors that are applicable are: 2002-2004 RSX Type R: OEM Part Number 36531-PRB-A01- Replacement Denso Part Number 13680 2001-2006 Integra Type R (JDM)
- Sensors that ARE NOT compatible for Primary application are: 2005-2006 RSX Type S 2002-2006 RSX BASE 2003-2005 Civic Si (EP3, & UK CTR) 2006+ Civic Si Any K24 sensor Secondary Sensors
- International user notes: The European Civic Type R K20A engines use a narrowband o2 sensor and is NOT compatible with this conversion harness.

Step 22

Hybrid Racing Harness	RSX Secondary O2
PINK	Grey
WHT/RED	Black
BLK/WHT	White
BLK/ORN	White



- If you are running a KPRO ECU you can SKIP THIS STEP. You will need to source this connector from your OEM engine harness make sure to leave 2-3in of wire for you to make all of your connections.
- Unlike the primary AFR sensor, the secondary o2 sensor is not necessary in most cases. If you are using the Hondata KPRO you can disable this sensor and you do not need to connect it. If you are using a "SWAPECU-K," this may not be necessary to connect either. Check to make sure the sensor has been disabled before continuing.
- Secondary o2 sensor compatibility: 2002-2004 RSX Type S (& Base 5spd) 2001-2006 Integra Type R & Type S 2002-2005 Civic Si EP3
- Sensors that ARE NOT compatible: 2005-2006 RSX Type S 2006+ Civic Si
- For a guide on how to disable the secondary o2 sensor in the KPRO software, please go to the Hondata KPRO setup section of the guide.

