



HDI SUPER BOOST CONTROLLER - TYPE D
SBC-D-RX

Please read these instructions carefully before installing or using the device. Thank you very much.

HYBRID DEVELOPMENT INTERNATIONAL is proud to introduce
HDi SBC - D - RX
HDi SUPER BOOST CONTROLLER - TYPE-D-RX FOR SUBARU

Features of our all new, dual function, **HDi SBC - D - RX** electronic turbo boost controller:

- z Unique closed loop boost regulating program, the boost fluctuation is minimised .
- z Anti lag program minimises turbo spooling time so that fast, sharp acceleration is achieved while maintaining your ideal regulated boost level.
- z Simple 6 wires installation.

These functions are monitored and controlled by a high-speed micro-processor that can perform 4,000,000 instructions per second. At the push of a button, you can instantly select either normal boost or high boost.

Our rigid aluminium casing ensures that the **HDi SBC - D - RX** is strong enough for the toughest racing condition. All of our cases are designed to match each other for the addition of our other tuning devices, which allows you to design your own personal in car tuning station or combinations of controllers.

With its high quality black chrome front panel and cold blue light, our **HDi SBC - D - RX** is cool enough to fit right in with your sound and other in-dash systems.

At **HYBRID DEVELOPMENT INTERNATIONAL**, we pursue the utmost engine efficiency by spending enormous time on research and development. Our global partners, resources, technical and purchase teams ensure our entire line of products will be the most efficient, effective and cost competitive products on the market. We believe this intensive research and development will be your best guarantee for reliability and top performance.

⚠ WARNING

- ⚠ Although Installation of this product is designed to be simple we do recommend the installation be carried out by our dealer with a qualified automotive technician.
- ⚠ Disconnect the vehicle negative battery cable before and during this installation. Observe all routine safety precautions when working on or near the vehicle battery.
- ⚠ Do not install the controller that interfere the driver in any way.
- ⚠ Avoid contacts between all metal objects and the wires. Short circuit will cause severe damage to the vehicle and to the unit it self.
- ⚠ Do not over adjust the boost lever over the vehicle's safety limit, doing so will harm or damage to the vehicle.
- ⚠ **HYBRID DEVELOPMENT INTERNATIONAL (HDI)** is not responsible for any engine damage caused by over boost or improper installation or operation.
- ⚠ Never set the **HDI SBC - D - RX** when driving nor adjusting it in the highway or public road doing so is dangerous to yourself and to others be sure adjust it or set it on a Dynamometer.
- ⚠ Make sure adequate air ventilation is equipped during the indoor installation.
- ⚠ Remove any of the tools used after the installation.
- ⚠ All electronic controller units are to be used in cabin do not install it in the engine bay.

IMPORTANT

HDI's product is design for racing and off-road vehicle only not for public road.

Please read through all the instruction and practice all precaution in all aspect of safety and every step prior and during the installation. This installation menu is purely for **HDI SBC - D - RX** and is used as guide only. As different vehicles in different countries may have different specifications and engine arrangement. Therefore, it is important to make sure the connection is properly done by authorised person and dealer.

During the installation of this product, wear eye goggles and other safety apparel as needed to protect yourselves from the dirt and other sharp objects.

Make sure the vehicle is supported by jack stands on a hard, level surface. Set the vehicle parking brake If the vehicle must be risen to obtain the undercarriage access and use wheel chocks as necessary.

LIMITED WARRANTY

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ALL RIGHTS RESERVED.

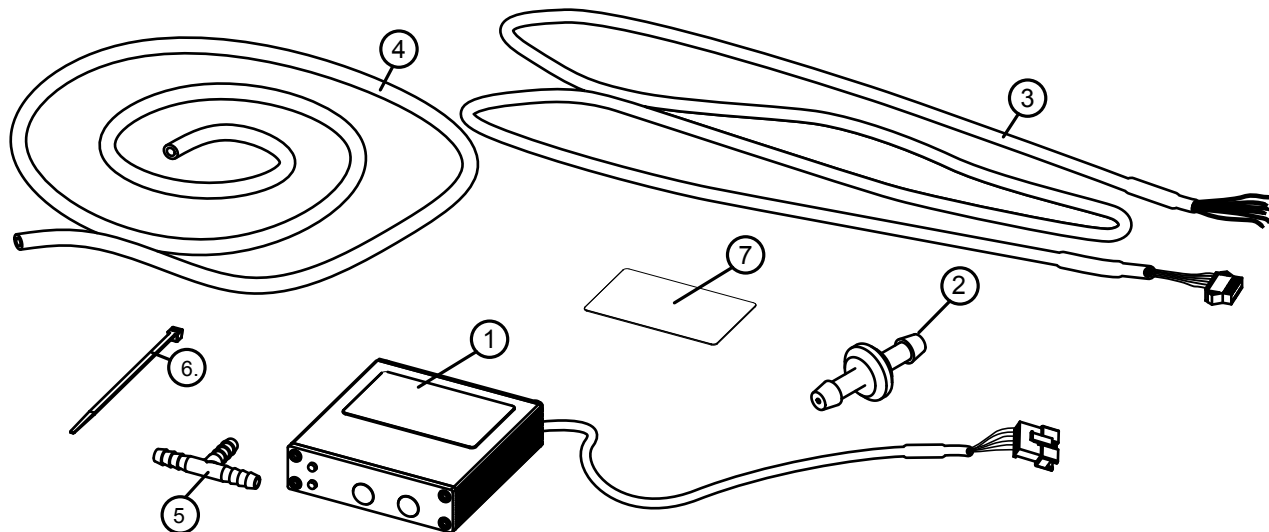
Customer service

If there is any suggestion or question about the installation on **HDI's** products please contact your local dealer or email us at tech@hybrid-power.com or check out our FAQ www.hybrid-power.com

FEATURING

- z Specially designed for subaru in-cabin boost adjustment
- z In-cabin boost adjustment
- z Full time closed loop boost regulation
- z Fast target boost locking
- z Minimise turbo spooling time
- z Dual boost adjustment
- z Detailed installation instructions
- z Microprocessor controlled
- z Rigid aluminium casing
- z High quality front panel
- z DUAL setting can be selected
- z Easy 6 wires installation

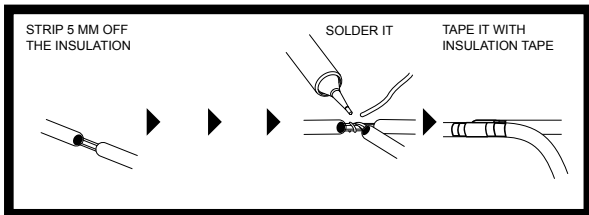
PARTS LIST



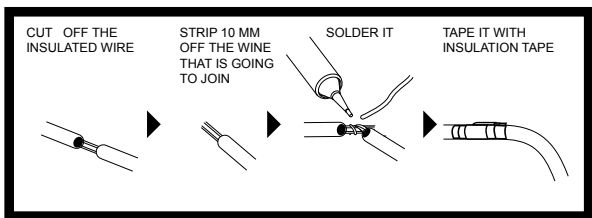
NO.	DESCRIPTION	QUANTITY
1.	HDi SUPER BOOST CONTROLLER TYPE - D - RX MAIN UNIT	1
2.	HDi BOOST ADAPTOR	1
3.	MAIN HARNESS	1
4.	VACUUM HOSE ID 4MM OD 7MM	1
5.	HDi T-PIECE	1
6.	ZIP TIGHT	10
7.	AUTHENTIC PLAQUE	1

HDI SUGGESTED METHOD OF JOINING WIRES

● — T - JOIN METHOD

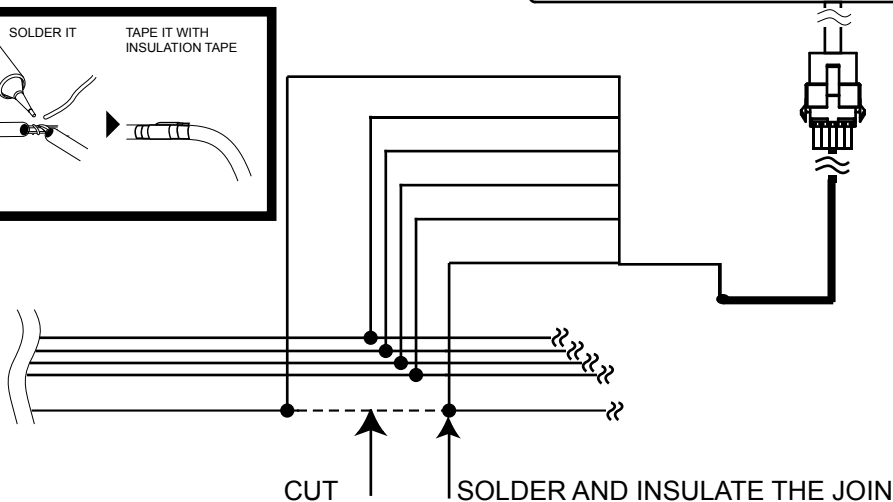
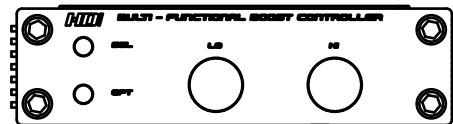


----- DASH LINE MEAN THE WIRE PORTION NEED TO BE CUTED



WARNING:

Please note it is important to cut and join specific wires correctly and accordingly.
**WRONG CONNECTION MAY CAUSE
 SERIOUS DAMAGE !!**

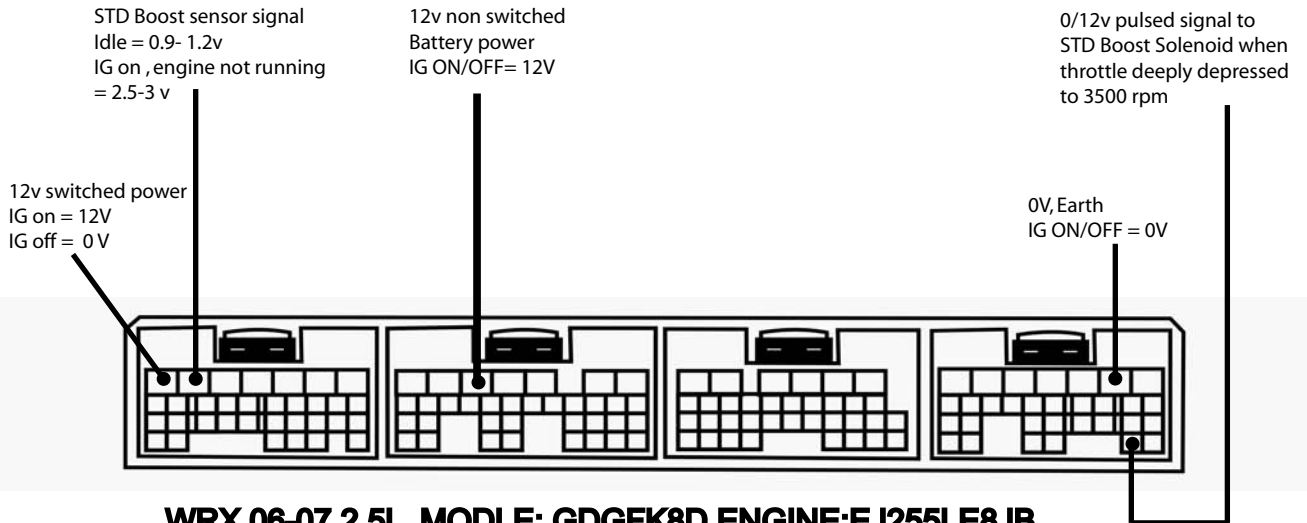


HDi SBC - D- RX PRE INSTALL PROCEDURE

Important:

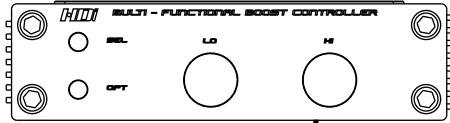
Although the pin out seems very much the same with the similar manufacture year and engine of a different model , we still recommend to check and confirm the signal piror doing any installation incase they are changes from the manufacturer.

The below is the signal specification example.

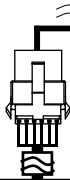


WRX 06-07 2.5L MODLE: GDGFK8D ENGINE:EJ255LE8JB
TRANS: 5 SP MEN ECU#: S3 22611AL310 DENSOL

HDi SBC - D- RX WIRING PROCEDURE



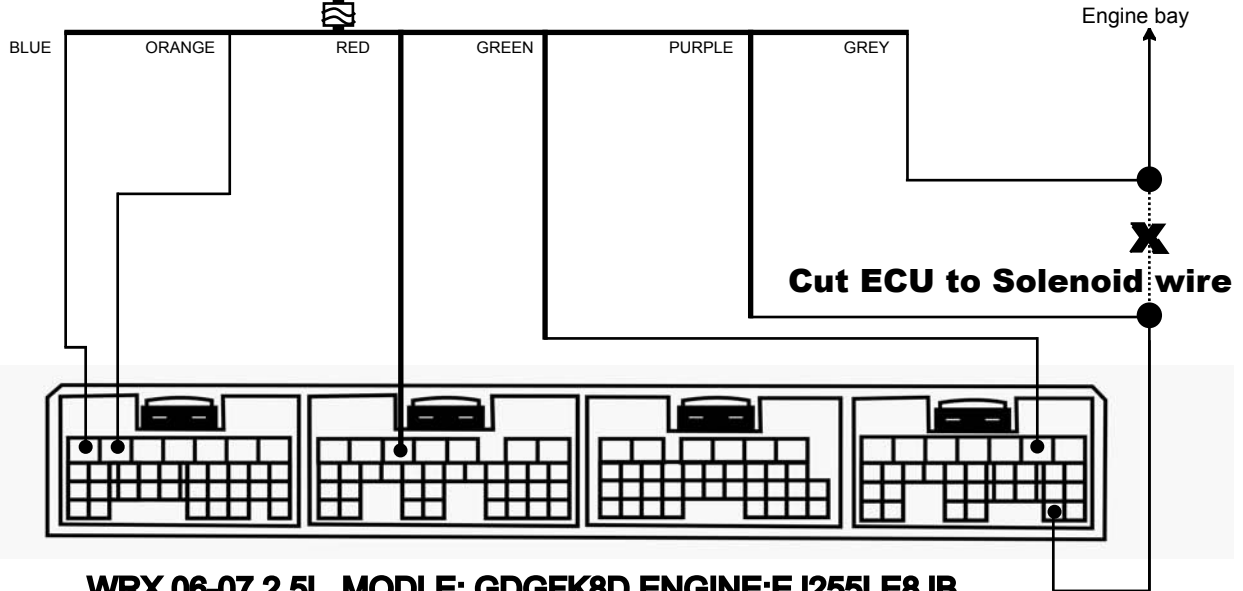
PLUG 1



Description:

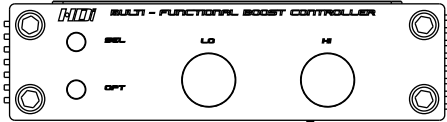
PLUG 1

- Red ---- Battery + (12V non switched)
- Orange ---- Pressure/Map signal in (~0.9-1.2v)
- Blue ---- Ignition + (12v switched)
- Green ---- Earth (0v)
- Purple ---- Solenoid wire ECU side (pulsed)
- Grey ---- Solenoid wire engine side (pulsed)



**WRX 06-07 2.5L MODLE: GDGFK8D ENGINE:EJ255LE8JB
TRANS: 5 SP MEN ECU#: S3 22611AL310 DENSOL**

HDi SBC - D- RX WIRING PROCEDURE



Description:

PLUG 1

Red ----- Battery +

Orange ----- Pressure/Map signal in

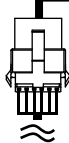
Blue ----- Ignition +

Green ----- Earth

Purple ----- Solenoid wire ECU side

Grey ----- Solenoid wire engine side

PLUG 1



Engine bay

GREY

BLUE

RED

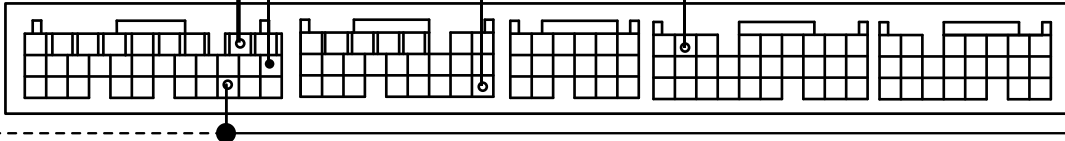
GREEN

ORANGE

PURPLE

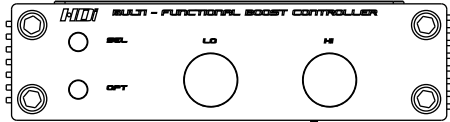
Cut ECU to Solenoid wire

Cut the ECU to solenoid wire! , join the computer side end to the purple wire , and join the engine side wire to the gray wire.



WRX 01-04 2.0L. MODLE: GDA/GDB (AUSTRALIAN). ENGINE:EJ20
TRANS: 5 SP MEN VERSION 7-8

HDi SBC - D- RX WIRING PROCEDURE



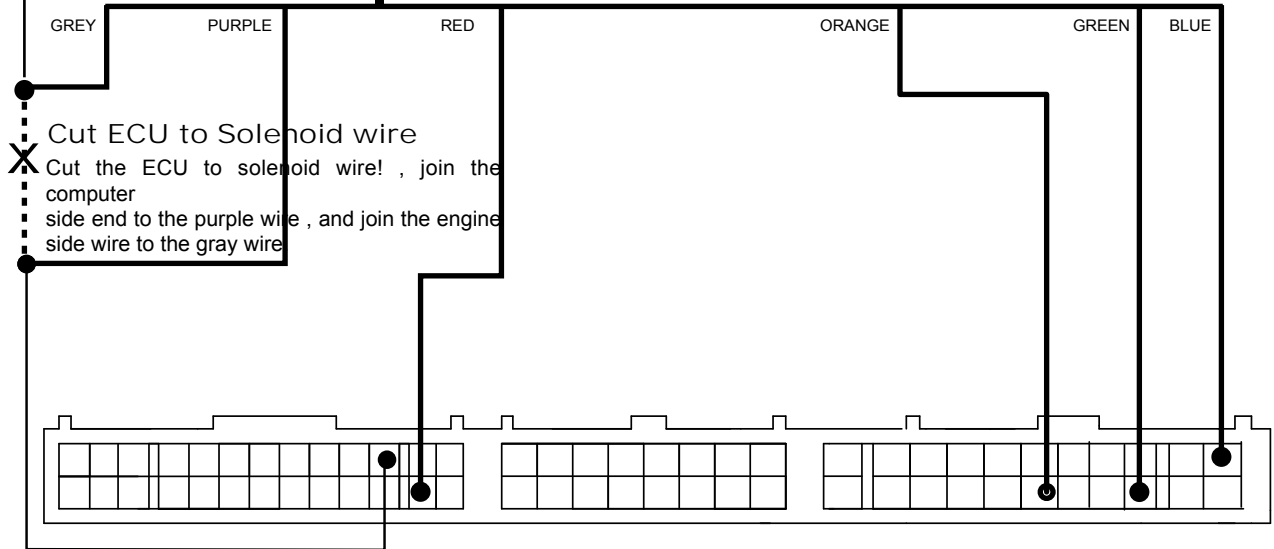
Description:

PLUG 1

- Red ----- Battery +
- Orange ----- Pressure/Map signal in
- Blue ----- Ignition +
- Green ----- Earth
- Purple ----- Solenoid wire ECU side
- Grey ----- Solenoid wire engine side

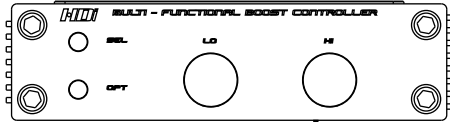
Engine bay

PLUG 1

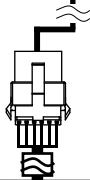


WRX 97-98 2.0L. MODLE: GC8 . ENGINE:EJ20
TRANS: 5 SP MEN VERSION 3/4

HDi SBC - D- RX WIRING PROCEDURE



PLUG 1

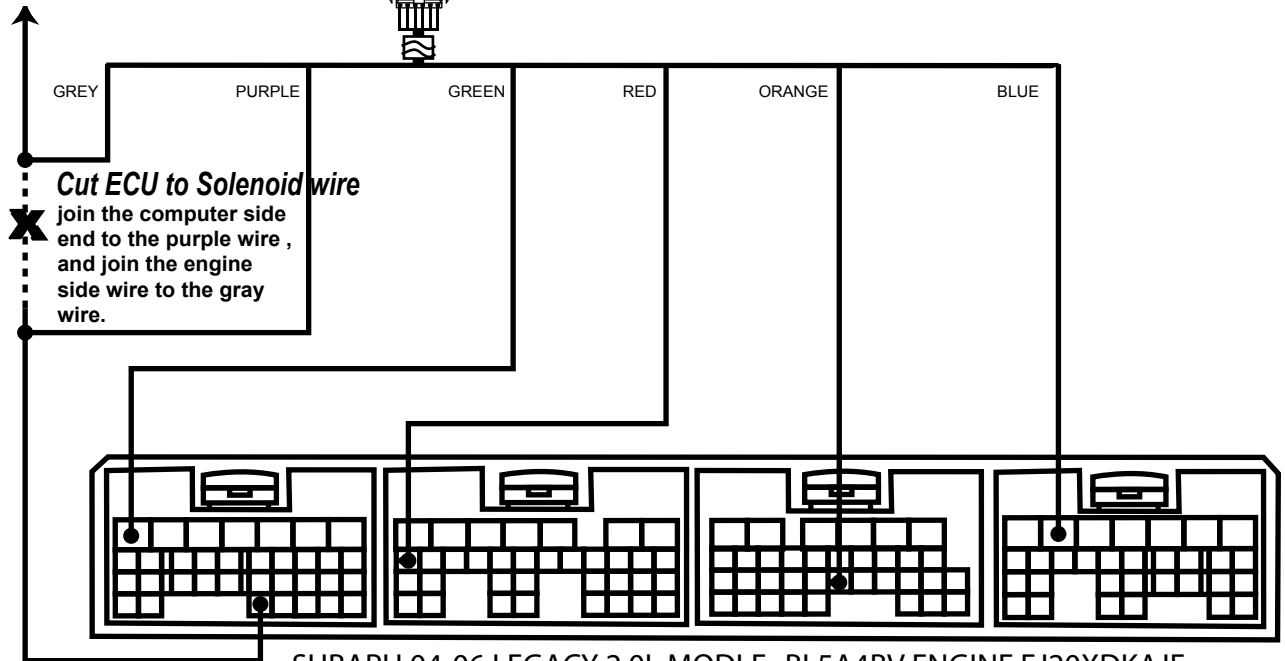


Engine bay

Description:

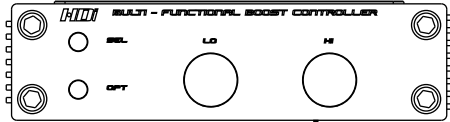
PLUG 1

Red ---- Battery +
Orange ---- Pressure/Map signal in
Blue ---- Ignition +
Green ---- Earth
Purple ---- Solenoid wire ECU side
Grey ---- Solenoid wire engine side



SUBARU 04-06 LEGACY 2.0L MODLE : BL5A4BV ENGINE EJ20XDKAJE
TRANS: AUTO ECU : 22611AL310 DENSOL

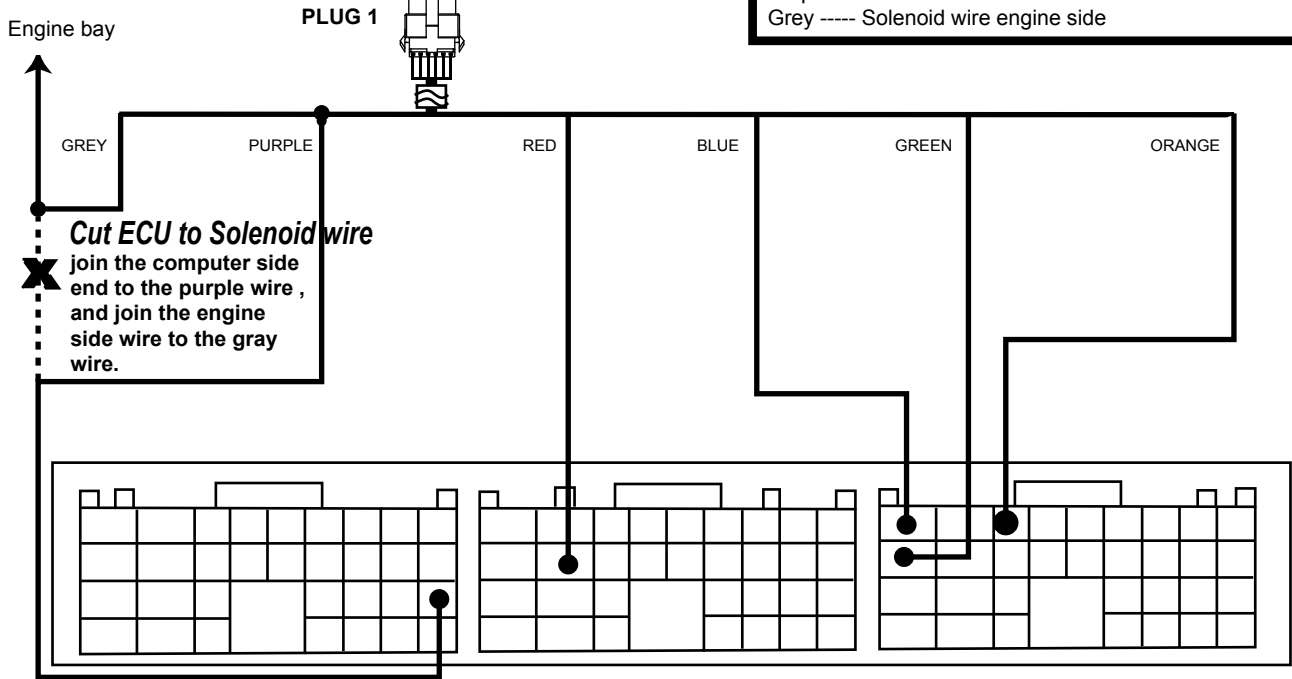
HDi SBC - D- RX WIRING PROCEDURE



Description:

PLUG 1

- Red ----- Battery +
- Orange ----- Pressure/Map signal in
- Blue ----- Ignition +
- Green ----- Earth
- Purple ----- Solenoid wire ECU side
- Grey ----- Solenoid wire engine side



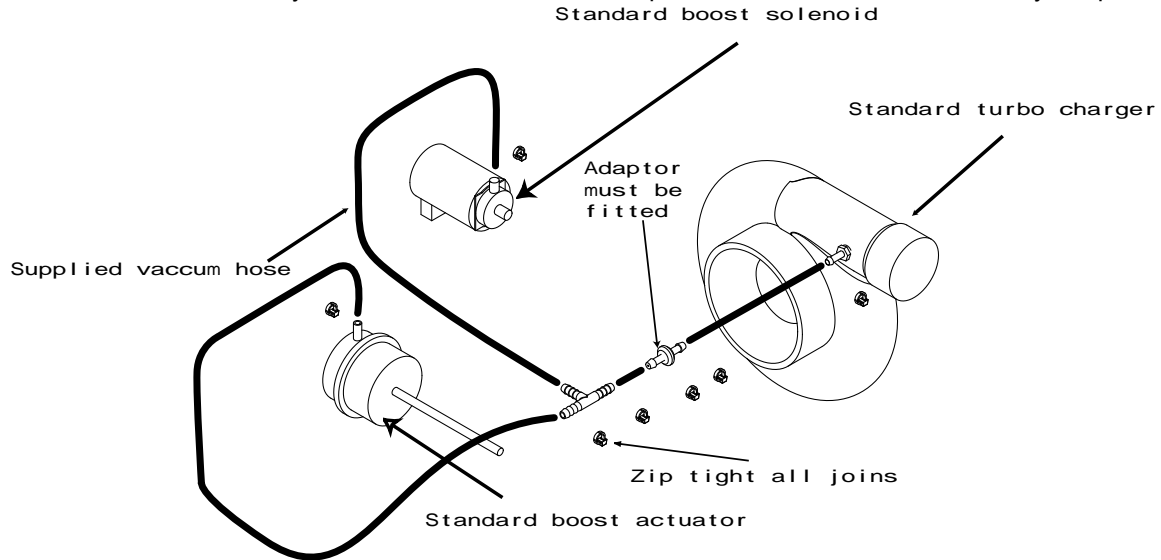
SUBARU 98-00 LEGACY / Liberty 2.0L MODLE : BH5/ BE5 ENGINE EJ206DXBKE
TRANS: 5SP MENU ECU : 22611 AF 330L

Installing Optional Hardware

The supplied optional hardware are only needed if the original boost control system is altered i.e (not standard)
Disconnect Battery Negative terminal

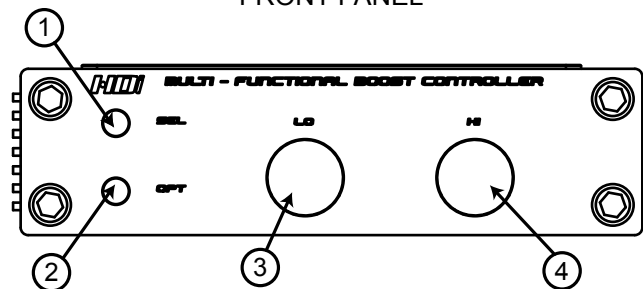
1. Locate the standard Boost Solenoid Valve. This can be found on the front LEFT suspension tower.
2. Remove the factory vacuum hoses that connect between the standard boost solenoid valve, turbocharger and standard boost actuator. □
3. Replace with the HDi silicon vacuum hose, connecting the T-Peice and adaptor as per the diagram.
Once the HDi silicon vacuum hoses are fitted, cable tie all fittings with the supplied cable ties.
Re Check all fittings are secure.

NOTICE: Hybrid Development International recommends installation by a HDi trained technician or HDi approved installation centre. To locate your nearest Installation centre please refer to our website www.hybrid-power.com



DESCRIPTION

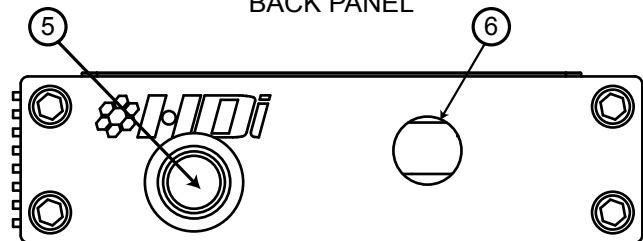
FRONT PANEL



FRONT PANEL FUNCTIONS:

1. SEL ----- SELECT FROM HIGH BOOST/LOW BOOST
2. OPT ----- OPTIONAL FUNCTION ON/OFF (NOT available for THIS RX version!)
3. LO ----- LOW BOOST ADJUSTMENT
4. HI ----- HIGH BOOST ADJUSTMENT

BACK PANEL



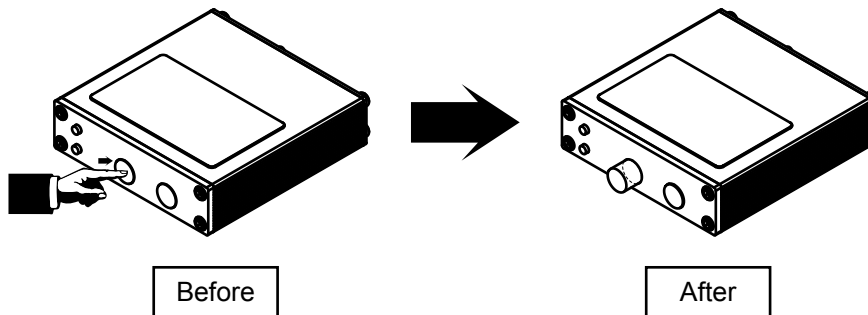
BACK PANEL FUNCTIONS:

5. BOOST CONTROLLER HARNESS
6. VENTILATION

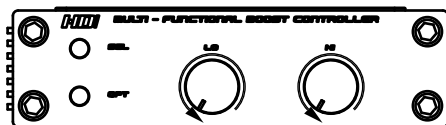
SETTING UP THE BOOST CONTROLLER

The best way to set up the **HDI SBC-D-RX** is on the Dynapack dynamometer machine.

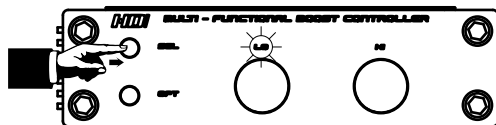
1. Push the adjustment knob so it is extended for adjustment.



2. Turn all adjustment knobs counter clockwise fully.



3. Press the select (SEL) button to select the mode that need to be set up The HI, LO indicator will tell you which adjustment knob that correspondent to the mode that you are operating.



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