3BUILT LLC
REMOTELY ACTIVATED SWITCH/RELAY
END USER AGREEMENT

NOTICE TO USER: PLEASE READ THIS AGREEMENT CAREFULLY. BY INSTALLING AND/OR USING ALL OR ANY PORTION OF THIS PRODUCT YOU ACCEPT ALL THE TERMS AND CONDITIONS OF THIS AGREEMENT, INCLUDING, IN PARTICULAR THE LIMITATIONS ON: FUNCTIONALITY AND RANGE IN SECTION 2; WARRANTY IN SECTION 3; LIABILITY IN SECTION 5. YOU AGREE THAT THIS AGREEMENT IS LIKE ANY WRITTEN NEGOTIATED AGREEMENT SIGNED BY YOU. THIS AGREEMENT IS ENFORCEABLE AGAINST YOU AND ANY LEGAL ENTITY THAT OBTAINED THE PRODUCT AND ON WHOSE BEHALF IT IS USED.

IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT OR ARE UNDER 18 YEARS OLD, DO NOT INSTALL OR USE THIS PRODUCT. RETURN UNUSED PRODUCT WITHIN TEN (10) DAYS OF PURCHASE FOR A FULL REFUND OF PURCHASE PRICE. VISIT *HTTP://WWW.3BUILT.COM* OR E-MAIL *SALES@3BUILT.COM* FOR REFUND INFORMATION.

1. DEFINITIONS
   a. "3Built" means 3Built LLC, a California Limited Liability Company, 23036 Windom St., West Hills, Ca. 91307.
   b. "Product" means any radio frequency remotely activated switch/relay sold by 3Built. Also known as, but not limited to, remote engine shut-off, remote kill switch, universal remote switch.
   c. "Documentation" means the Installation Instructions.

2. FUNCTIONALITY AND RANGE. This is a radio frequency controlled device. It is susceptible to radio frequency interference. The control signal is encoded to reduce the possibility of interference but it cannot be eliminated. The interference may cause the Product not to function as stated or desired. This may include non-operation, decreased range, and accidental triggering of the Product.

3. LIMITED WARRANTY. 3Built warrants to the individual or entity that first purchases the Product pursuant to the terms of this agreement that the Product will perform substantially in accordance with the Documentation for the sixty (60) day period following receipt of the Product when used as directed in the Documentation. Non-substantial variation of performance from the Documentation does not establish a warranty right. THIS LIMITED WARRANTY DOES NOT APPLY TO IMPROPERLY INSTALLED, ALTERED OR ABUSED PRODUCT. All warranty claims must be made, along with proof of purchase, within such sixty (60) day period. If the Product does not perform substantially in accordance with the Documentation, the entire liability of 3Built and its affiliates and your exclusive remedy will be limited to either, at 3Built's option, replacement of the Product or refund of the purchase price paid for the Product. THE LIMITED WARRANTY SET FORTH IN THIS SECTION GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE ADDITIONAL RIGHTS WHICH VARY FROM JURISDICTION TO JURISDICTION.

4. DISCLAIMER. THE FOREGOING LIMITED WARRANTY IS THE ONLY WARRANTY MADE BY 3BUILT AND ITS AFFILIATES AND STATES THE SOLE AND EXCLUSIVE REMEDIES FOR 3BUILT, ITS AFFILIATES OR SUPPLIERS' BREACH OF WARRANTY. EXCEPT FOR THE FOREGOING LIMITED WARRANTY AND ANY WARRANTY, CONDITION, REPRESENTATION OR TERM TO THE EXTENT THE SAME CANNOT OR MAY NOT BE EXCLUDED OR LIMITED BY LAW APPLICABLE TO YOU IN YOUR JURISDICTION, 3BUILT AND ITS AFFILIATES AND SUPPLIERS PROVIDE THE PRODUCT *AS-IS* AND *WITH ALL FAULTS* AND EXPRESSLY DISCLAIM ALL OTHER WARRANTIES, CONDITION, REPRESENTATIONS OR TERMS, EXPRESS OR IMPLIED, WHETHER BY STATUTE, COMMON LAW, CUSTOM, USAGE OR OTHERWISE AS TO ANY MATTER, INCLUDING BUT NOT LIMITED TO PERFORMANCE, SECURITY, NON-INFRINGEMENT OF THIRD PARTY RIGHTS, INTEGRATION, MERCHANTABILITY, QUIET ENJOYMENT, SATISFACTORY QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE. The provisions of Sections 4 and Section 5 will survive the termination of this

agreement, howsoever caused, but this will not imply or create any continued right to use the Product after termination of this Agreement.

5. **LIMITATION OF LIABILITY**. EXCEPT FOR THE EXCLUSIVE REMEDY SET FORTH ABOVE AND AS OTHERWISE PROVIDED IN SECTION 3, IN NO EVENT WILL 3BUILT OR ITS AFFILIATES OR SUPPLIERS BE LIABLE TO YOU FOR ANY LOSS, DAMAGES, CLAIMS OR COSTS WHATSOEVER INCLUDING ANY CONSEQUENTIAL, INDIRECT OR INCIDENTAL DAMAGES, ANY LOST PROFITS OR LOST SAVINGS, ANY DAMAGES RESULTING FROM BUSINESS INTERRUPTION, PERSONAL INJURY OR FAILURE TO MEET ANY DUTY OF CARE, OR CLAIMS BY A THIRD PARTY, EVEN IF A 3BUILT REPRESENTATIVE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS, DAMAGES, CLAIMS OR COSTS. THE FOREGOING LIMITATIONS AND EXCLUSIONS APPLY TO THE EXTENT PERMITTED BY APPLICABLE LAW IN YOUR JURISDICTION. 3BUILT'S AGGREGATE LIABILITY AND THAT OF ITS AFFILIATES AND SUPPLIERS UNDER OR IN CONNECTION WITH THIS AGREEMENT WILL BE LIMITED TO THE AMOUNT PAID FOR THE PRODUCT, IF ANY. THIS LIMITATION WILL APPLY EVEN IN THE EVENT OF A FUNDAMENTAL OR MATERIAL BREACH OR A BREACH OF THE FUNDAMENTAL OR MATERIAL TERMS OF THIS AGREEMENT.

6. INDEMNITY. You agree to hold 3Built harmless from any and all liabilities, losses, actions, damages, or claims (including all reasonable expenses, costs, and attorneys fees) arising out of or relating to any use of, or reliance on, the Product, including, without limitation reliance on a)batteries, b) range, c) installation, d) performance, and e) failure to exercise reasonable judgment. Nothing contained in this agreement limits 3Built's liability to you in the event of death or personal injury resulting from 3Built's negligence or for the tort of deceit (fraud). 3Built is acting on behalf of its affiliates and suppliers for the purpose of disclaiming, excluding and limiting obligations, warranties and liability, but in no other respects and for no other purpose.

7. GOVERNING LAW. This agreement will be governed by and construed in accordance with the substantive laws in force in the State of California, if the Product is purchased when you are in the United States, Canada, or Mexico.

8. GENERAL PROVISIONS. If any part of this agreement is found void and unenforceable, it will not affect the validity of the balance of this agreement, which will remain valid and enforceable according to its terms. This agreement will not prejudice the statutory rights of any party dealing as a consumer. This agreement may only be modified by a writing signed by an authorized member of 3Built. This is the entire agreement between 3Built and you relating to the Product and it supercedes any prior representations, discussions, undertakings, communications or advertising relating to the Product.

Remote Engine Shut-Off

RES12VL

INSTALLATION INSTRUCTIONS

WARNING

BY INSTALLING OR USING THIS PRODUCT YOU AGREE TO OUR "END USER AGREEMENT". IT IS INCLUDED WITH THESE INSTRUCTIONS AND AVAILABLE ON-LINE AT *http://www.3built.com/documents.asp*

Use of this product could result in injuries and/or property damage due to the sudden loss of engine power. Vehicles may lose stability when engine power is disabled. Control of the vehicle will also be limited after engine is disabled. This product will not stop a vehicle. It will not apply the brakes or any other mechanism to reduce speed. It is designed to disable the engine by shutting off the ignition system. It functions similarly to the vehicle's stock ignition ON/OFF switch. Use extreme caution as to when and where the vehicle is before disabling the engine. Proper judgment must be used when disabling engine power. **Performance and range is not guaranteed.** Radio frequency interference may be common in some areas and can affect this product's range and performance. Use of motor vehicles is an inherently dangerous activity. Wear proper protective gear when operating the vehicle. If any doubt of potential injury, do not use. Once installed, to understand how this product functions, test the device by disabling the vehicle's engine, first at idle and then at low speed. This product's installation and use is at your own risk. This product is intended to be installed and used by adults only.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

INCLUDED PARTS

(1) Receiver (1) Transmitter (1) USB Cable (1) USB Charger

GETTING STARTED

1) Installation of this device requires electrical and electronics knowledge.
2) You should have a wiring diagram for your vehicle before installation. This is available from your dealer in the Repair Manual for your vehicle. Some vehicle specific wiring instructions are available on our website at: *http://www.3built.com/pages/support*
3) Do not connect any RES wire to the high voltage spark plug wire.
4) This device is a remotely activated switch. The switch can be connected as a normally-open or normally-closed switch while the vehicle is in the RUN mode. **The internal relay is limited to switching 8 amperes, maximum.**
5) It is important to determine your OEM (original equipment manufacturer) RUN/STOP switch type before installation. Improper installation of this unit can damage your vehicle's electrical system and CDI. If unsure, please consult a professional.

DEFINITIONS

OEM - Original Equipment Manufacturer. This is any component that the vehicle originally came equipped with from the factory.

RES - 3Built's Remote Engine Shut-off kit

Normally-open - means that the switch is open (no connection) when the RES is in the unlocked mode. This connection type is typically used for ground type OEM RUN/STOP switches.

Normally-closed - means that the switch is closed (connected) when the RES is in the unlocked mode. This connection type is typically used on positive voltage type OEM Run/Stop switches.

INSTALLATION

1) Charge the transmitter by plugging it in to a USB charger (5 volts). The cable is a USB to mini-USB. With the power switch off, you will see a small red or blue light towards the bottom of the transmitter (small window) while charging. The included lithium battery is designed for hundreds of charge cycles. It can be replaced, if necessary, with another lithium-ion 18500 size battery.
    a. Blue LED = fully charged ; Red LED = charging
2) Find a suitable place to mount the *Receiver*. Position it so that it will stay dry and will not be damaged in case of an accident.
3) Attach the Red Wire on the *Receiver* to 12 volts DC power supply. We recommend that you use a fuse if connecting directly to a battery or un-fused power wire. Improperly mounted wires can become damaged and short to the frame causing damage to the vehicle and/or rider. Damage may include high heat and/or fire.
4) Attach the Black Wire to ground.
5) Choose either Normally Open or Normally Closed connection type. (**See images on next page.)**
    a. **Normally Open Connection for Relay (8-amp max.) [diagram #1] (Yellow LED is <u>OFF</u>)**
    This is typically used when an ignition system must be grounded to shut off the vehicle.

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Blue Wire – The wire will be attached to the vehicle's electrical system. The OEM RUN/STOP switch has two wires. One comes from the CDI and the other goes to the vehicle's ground. Splice the Blue Wire between the CDI and the OEM Run/Stop switch. Attaching the Blue Wire to an incorrect wire may damage the CDI or other electrical component. Use caution and consult a professional if unsure.

Green Wire - Attach Green Wire to vehicle ground or negative side of battery.

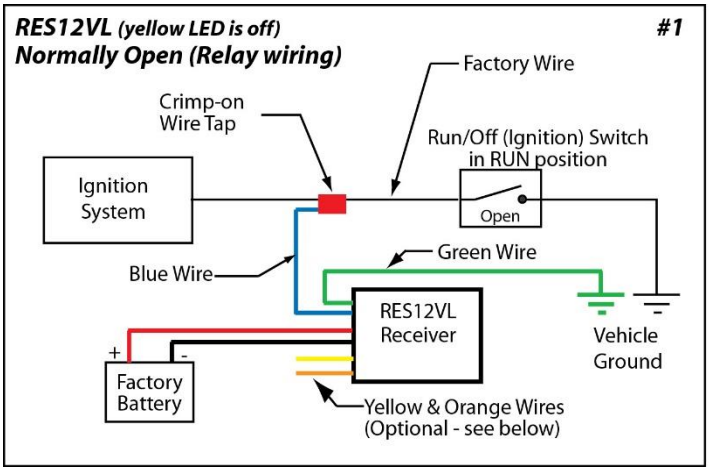
b. **Normally Closed Connection for Relay (8-amp max.) [diagram #2] (Yellow LED is <u>ON</u>)**

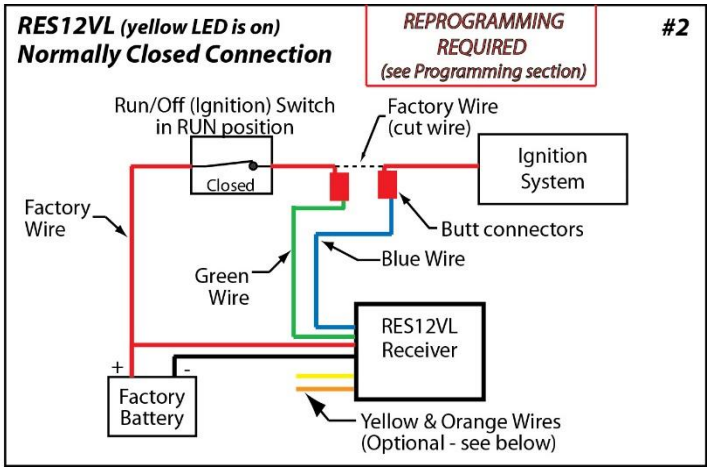
*****Must perform "*NORMALLY-CLOSED MODE*" steps in REPROGRAMMING section.**
The system will not work otherwise.***

This is used typically when an ignition system needs to be powered from the battery. It is very important to cut the correct wire for proper operation. Incorrect wiring can damage the CDI or other electrical component. Use caution and consult a professional if unsure.

Blue Wire – Identify the power wire from the OEM Run/Stop switch to the CDI. Cut the wire and attach the *Blue Wire* to one end of the cut wire

Green Wire – Attach the *Green Wire* to the other end of the previously cut wire. It does not matter which wire is attached to which side of the cut wire.





6) Flip the toggle switch on the side of the <u>receiver</u>. The green LED will illuminate.
   a. **Green LED = receiver in RUN position**
   b. **Red LED = receiver in OFF position**
7) Turn on the <u>transmitter</u> by flipping the toggle switch. It will communicate with the receiver and display a status:
   a. **Green LED = receiver in RUN position**
   b. **Red LED = receiver in OFF position**
   c. **Yellow LED = transmitter CANNOT CONNECT to the receiver.**
      i. **Either the <u>receiver is turned off</u>** (Check on/off switch on receiver or check the connection and ensure black and red wire are connected to the 12 volt battery)
      ii. **or the receiver is <u>out of range</u>** (Move closer and press either the run button or off button until you receive a solid Green or Red light. Once the light turns from yellow to either solid red or green you are now at the maximum range. Make a note of this distance.).
      iii. **Blinking -** transmitter is sending command to receiver
   d. **Green & Yellow LED = Not all receivers responded (only when more than one receiver expected)**
   e. **Red & Yellow LED = Not all receivers responded (only when more than one receiver expected)**
8) Press the Red button. The Red LED on the receiver and transmitter will illuminate. The engine should now be disabled.
   a. It will be impossible to restart the engine until the receiver shows a Green LED or it is turned off.
9) Press the Green button to allow the engine to run. The GREEN LED on the receiver and transmitter will illuminate.
10) Test the system again at low speed to understand how the system operates. Engine power will be disabled when the Red button is pressed within range of the vehicle. **The RES will not slow down or stop the vehicle. The RES only disables the engine.**
11) **The RES receiver consumes a small amount of power from the battery.** (This is normal for all radio frequency receivers.) We recommend shutting the receiver off with the toggle switch when not in use.
12) **OPTIONAL Solid State Switch –** The RES12VL has two secondary solid state switches that are not prone to typical relay vibration issues. They can be used to activate lights or other devices.
   a. Normally Open **[diagram #3] -** When the receiver's Green LED is on, the yellow wire is shorted to ground.
   b. Normally Closed **[diagram #4] -** When the receiver's Red LED is on, the orange wire is shorted to ground.

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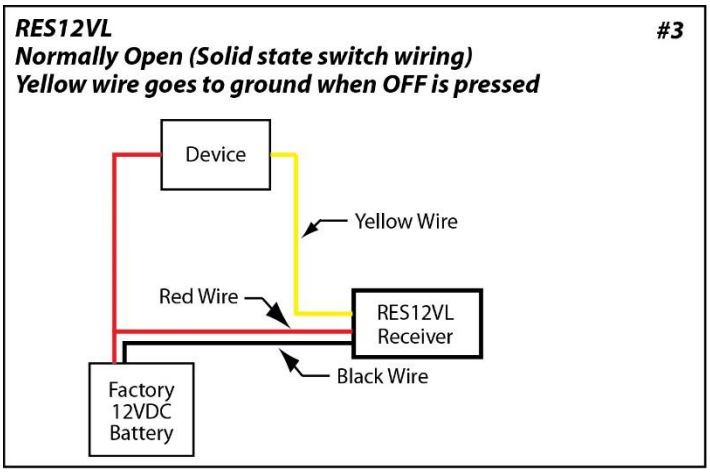

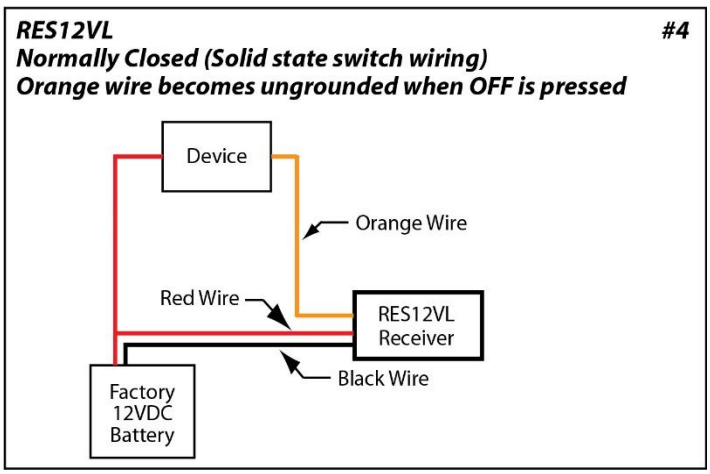

REPROGRAMMING

- ***NORMALLY-CLOSED MODE. (Image #2)***

This step must be performed if connecting as normally closed (step 5b).

When the receiver is powered on, the relay is in an open state (normally-open). Some ignition systems like the MSD6 need a normally-closed relay. This method allows you to change the operation of the receiver so that when the receiver is powered on, the relay is in a closed state and allows electricity to flow.

1) Turn receiver and transmitter off.
2) Turn receiver ON and make sure the green or red LED is on to show Run or Off state. Proceed to steps #3 & #4 within 30 seconds.
    a. Yellow LED is off indicates, normally closed operation
    b. Yellow LED is on indicates, normally open operation.
3) Press and hold the RED button on the transmitter.
4) Turn the transmitter ON via the toggle switch.
5) Continue to hold the RED transmitter button for at least 17 seconds.
6) The receiver's LEDs will blink to indicate mode change.
7) Release the red button on the transmitter
8) Confirm the status of the Yellow LED on the receiver. ON for normally open, OFF for normally closed.

- STATUS CHECK MODIFICATION

Transmitter asks the receiver if it is in off or run mode every 30 seconds. This can be disabled, if desired.

1) Turn receiver and transmitter off.
2) Press and hold the green button on the receiver.
3) Turn the transmitter on via the toggle switch.
4) Continue to hold the green button for at least 10 seconds.
5) The transmitter's LEDs will blink:
    a. If the green LED blinks, the receiver is in Status Check Every 30 Seconds mode.
    b. If the red LED blinks, the receiver will not check status every 30 seconds.

ADDITIONAL FEATURES

- The transmitter queries the receiver (receivers) on power-up, during every button press and every 30 seconds. 30-second check is optional; see reprogramming section.
- The transmitter will automatically power off after 6 hours of inactivity to conserve the battery. Turn off and on again to reset.

TIPS

- For connection to **MSD ignition** systems please see our additional guides at: https://3built.com/pages/support
- Press the Green button to check range status without shutting off the vehicle.
- **All radio transmissions are susceptible to interference from many sources. Interference can cause reduced range or complete loss of communication between the transmitter and receiver. Resistor spark plugs and suppression type spark plug wires may reduce radio interference.**

These instructions are subject to change without notice.

3Built LLC

West Hills, CA

www.3Built.com
Technical Support: techsupport@3built.com
Sales: sales@3built.com or 818-574-5334

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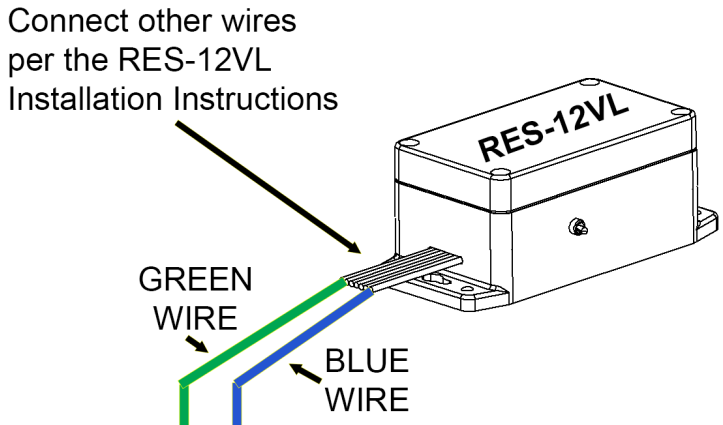
Connection to:
MSD Digital 6A & 6AL

NOTE:
Reprogramming required!
see page 3 of Installation Instructions

After reprogramming, the yellow LED will always be illuminated to show that the relay is working in nomally closed mode.



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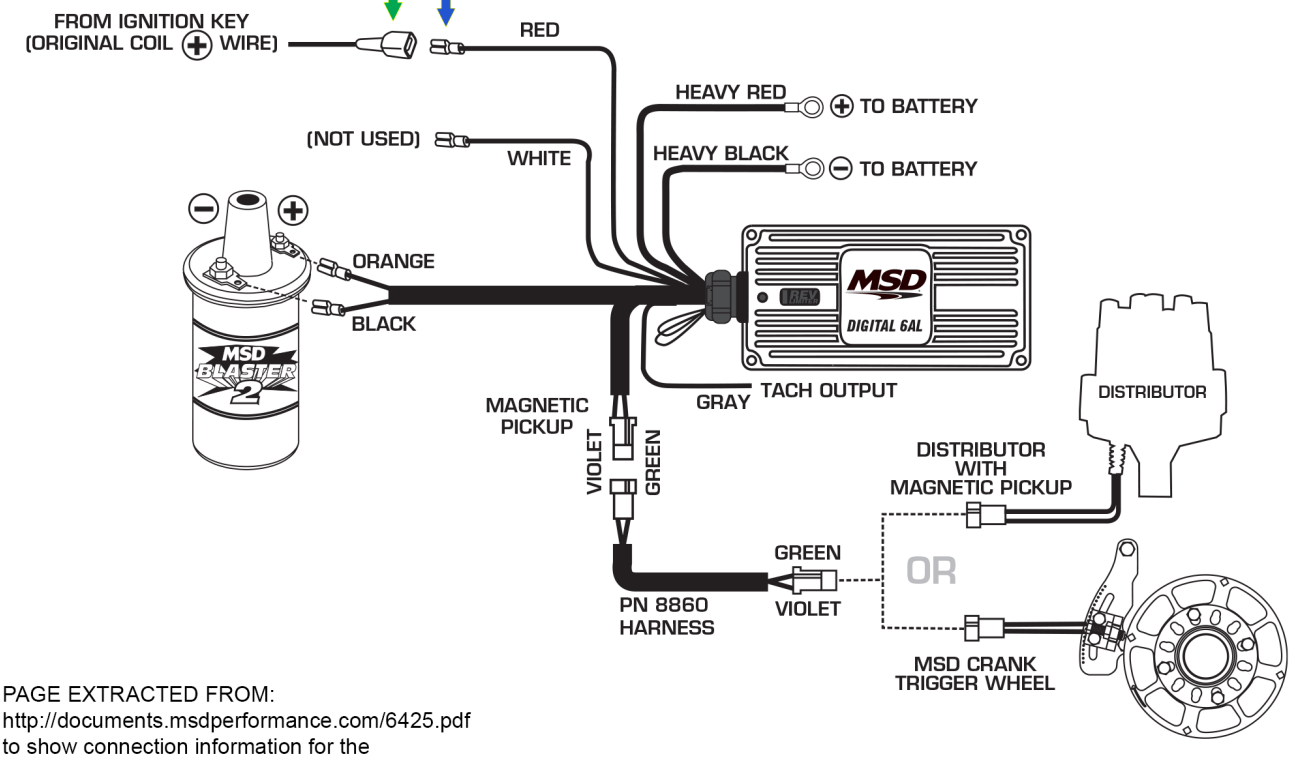
MSD SYSTEMS Installing to an MSD Distributor/Crank Trigger.



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to show connection information for the
MSD Digital 6A and 6AL Ignition Control

Connection to:
MSD Digital 7AL

NOTE:
Reprogramming required!
see page 3 of Installation Instructions

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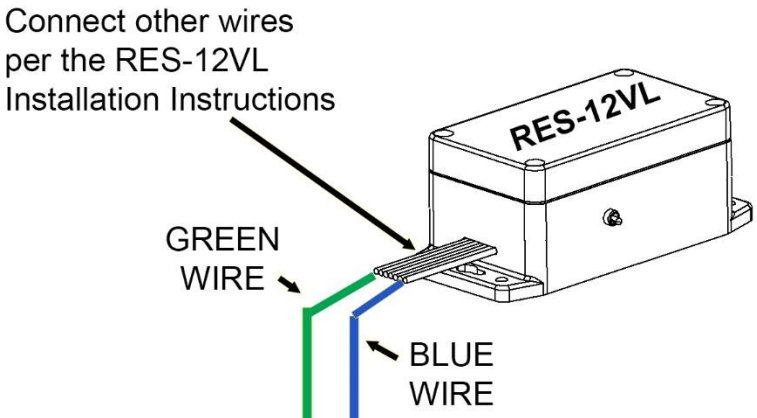

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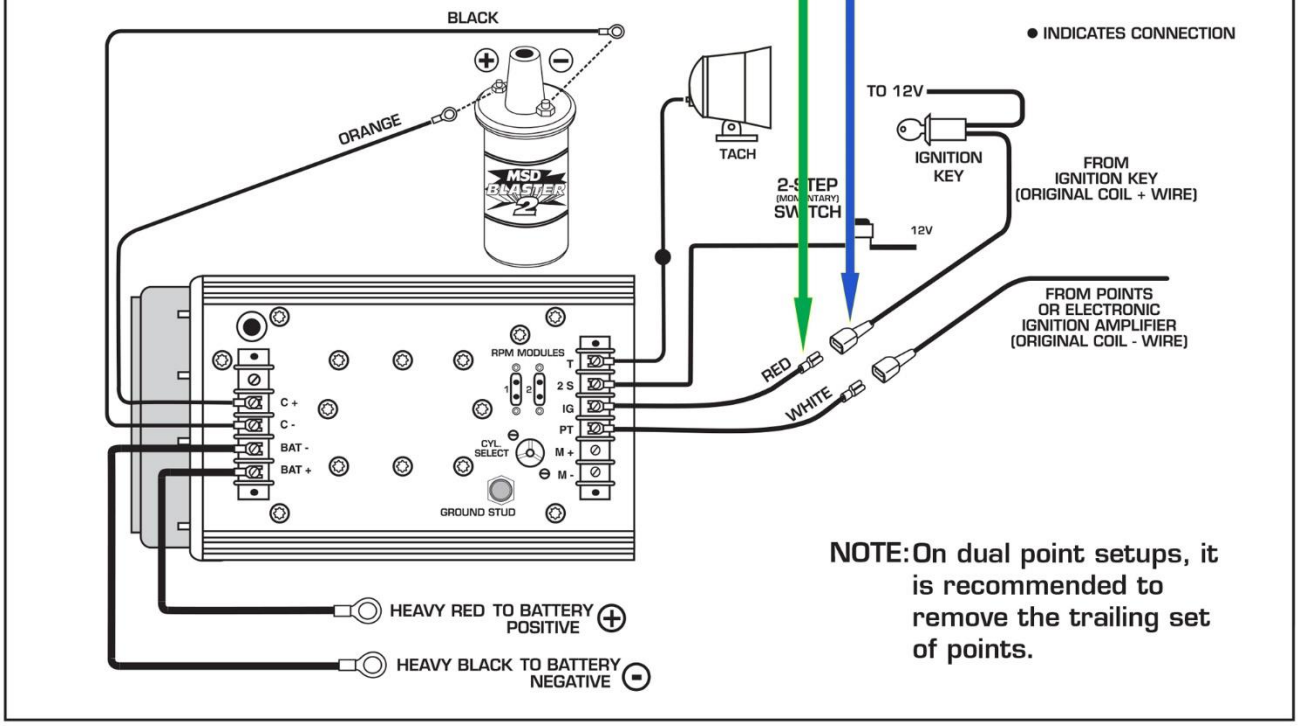
MSD SYSTEMS Installing to Points/Amplifier Style Ignition.



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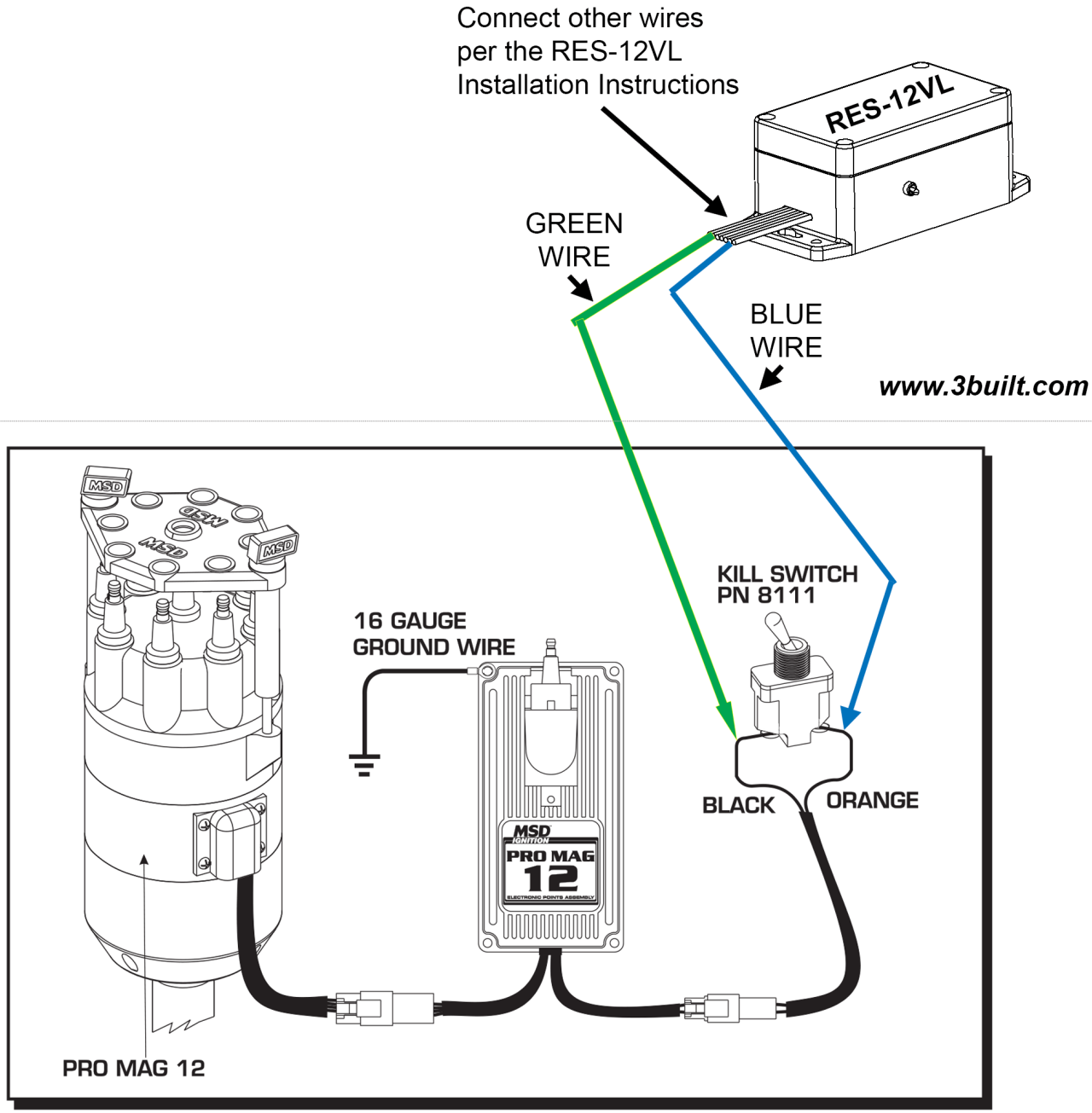
Connection to:
MSD Pro Mag 12



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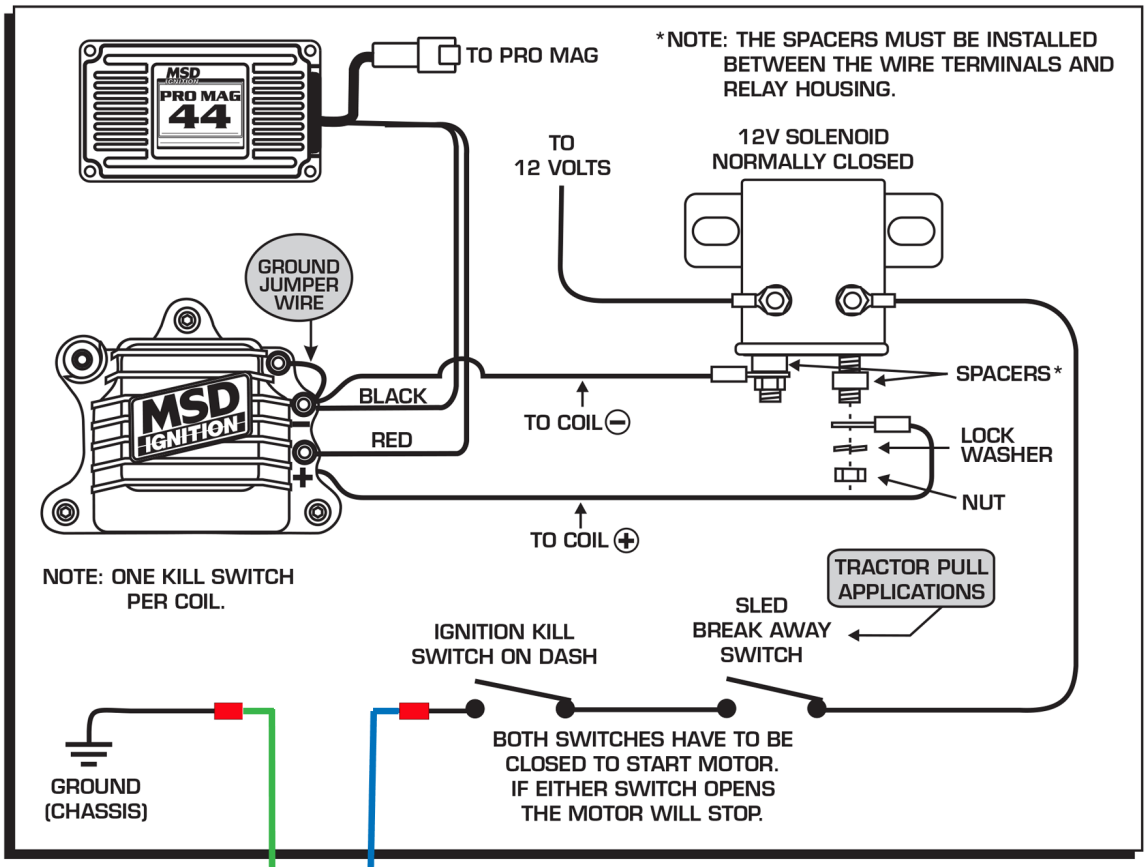

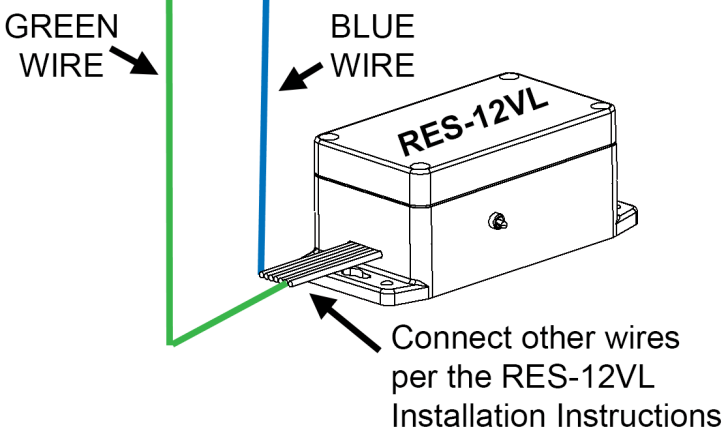

NOTE:
Reprogramming required!
see page 3 of Installation Instructions

After reprogramming, the yellow LED will always be illuminated to show that the relay is working in nomally closed mode.

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