

Read these notes before beginning installation.

The Engine and Starter wiring has some important facts that you must be aware of before installing this kit.

1. The electrical system was originally a 6 volt system through the 1966 model year. The 1967 model was the first year of the 12 volt system.

As this is a 12 volt conversion, all 6 volt equipment on vehicles prior to 1967 will have to be replaced with the 12 volt equivalent.

2. All Beetles used a dash mounted ignition switch through the 1967 model year. Connections are made directly to the switch.
From 1968 on, the ignition switch was mounted in the steering column. Connections were made to jumper wires that were hard wired to the switch.
3. A supplemental switch chart is available for download from our technical section on our website. This provides a cross reference of original switches to help determine applicability to your installation.
4. A stock 12 volt coil from 1967 and later or an aftermarket coil designed for use in a 12 volt application will be required.
5. The battery must be changed to a 12 volt battery.
6. Any indicator lights in the speedometer cluster must be changed to 12 volt equivalents.
7. The Automatic choke and the Electro-magnetic pilot jet must be checked and must be 12 volt compliant.
8. The generator and regulator must be 12 volt units. Generators and regulators from a 1967 and later 12 volt system can be used.
If you are converting to an internally regulated alternator, this becomes a moot point as you will not be needing the external regulator.
9. The starter must be a 12 volt unit. However, there are unique situations that must be addressed concerning the engine.
The flywheel size and starter ring gear tooth configuration was different on the 6 volt and the 12 volt cars. This means that a later 1967 and up starter cannot just be bolted to a 1966 and earlier car.
The options are:
 - a. Get your original 6 volt starter modified for 12 volt.
 - b. Run the 6 volt starter on 12 volts. General consensus is that it will spin faster but last quite a long time unless you crank the motor for long periods of time and overheat the starter
 - b. Change the flywheel on the motor to one that uses the 12 volt starter and use the stock 12 volt starter, Again, this may not be a simple bolt in. Check with your mechanic or the VW experts on all possible mechanical options and restrictions.

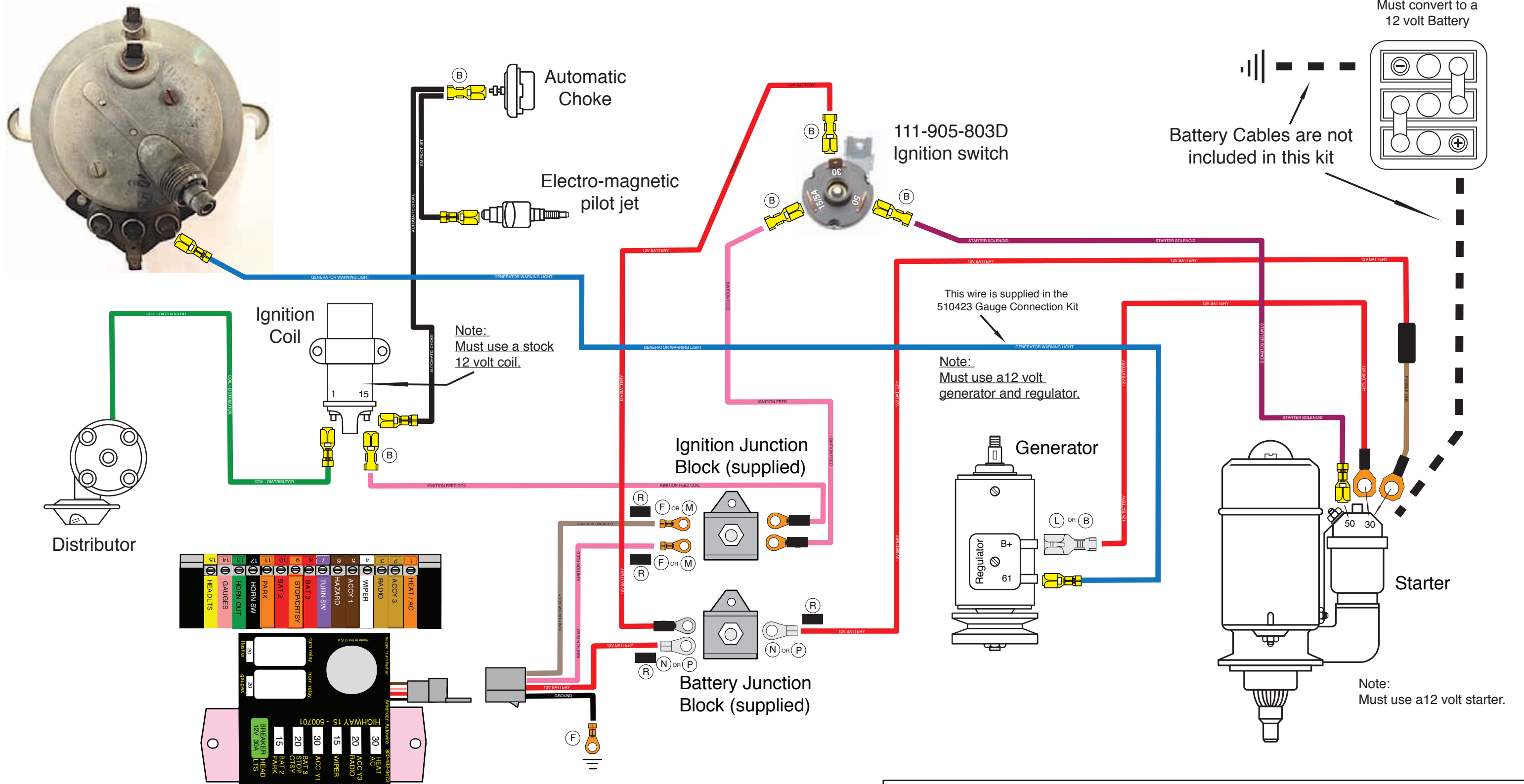


www.americanautowire.com 856-933-0801

510421

Volkswagen Starter, Ignition,
Engine kit

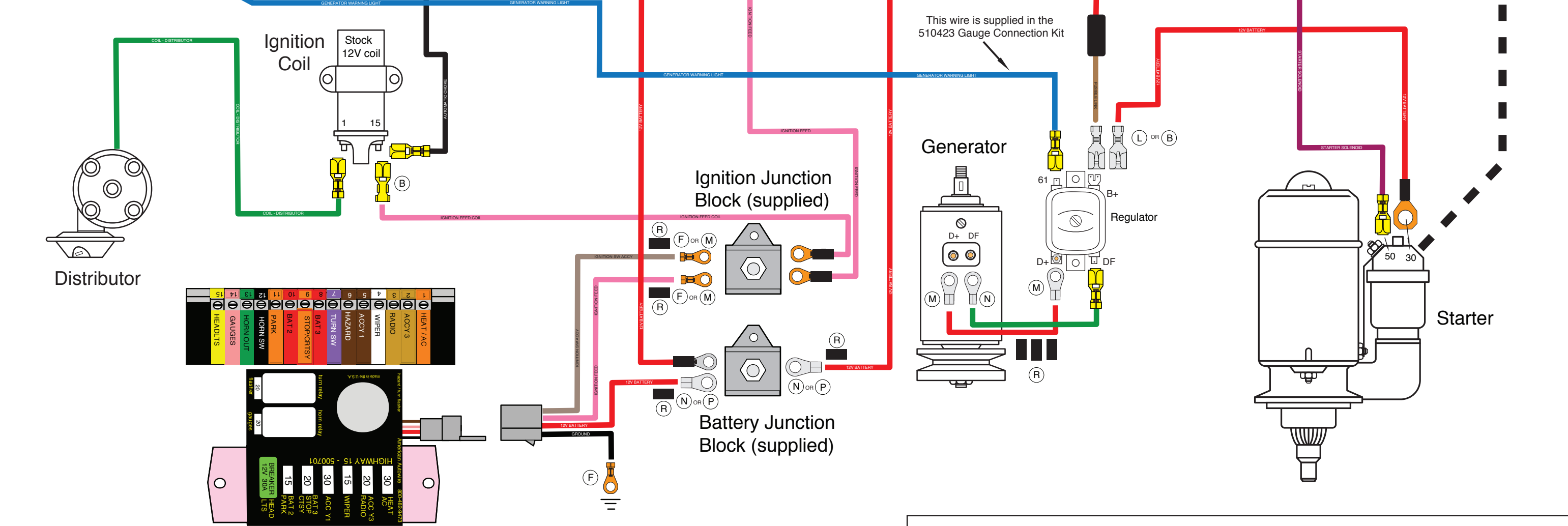
92971336 Rev 1.0 3/21/2016



**American
Autowire**

510421

Volkswagen Starter, Ignition,
Engine kit



12 volt Battery

Battery Cables are not included in this kit

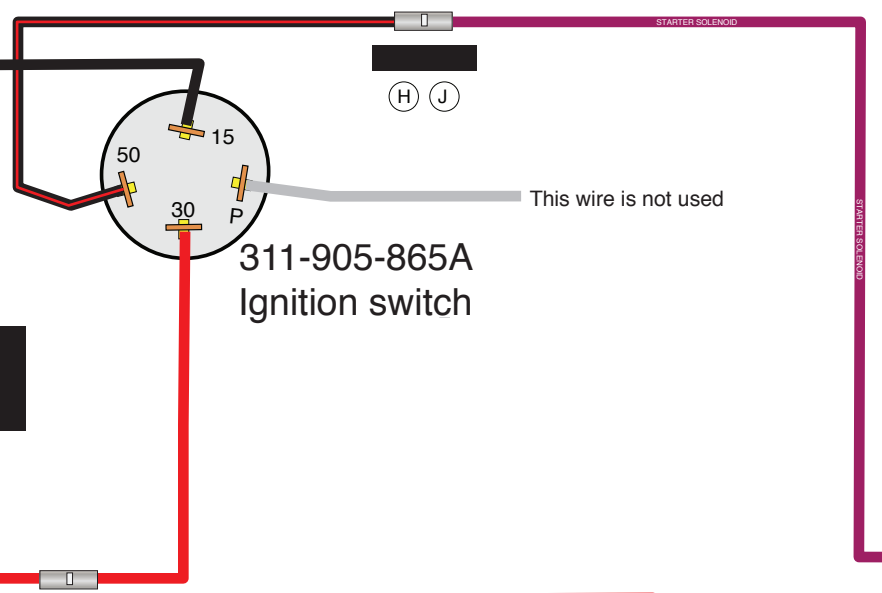
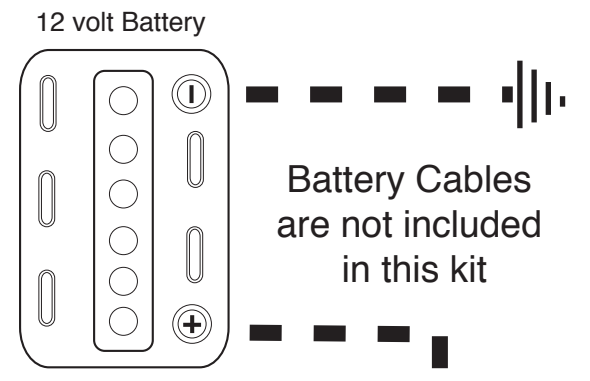
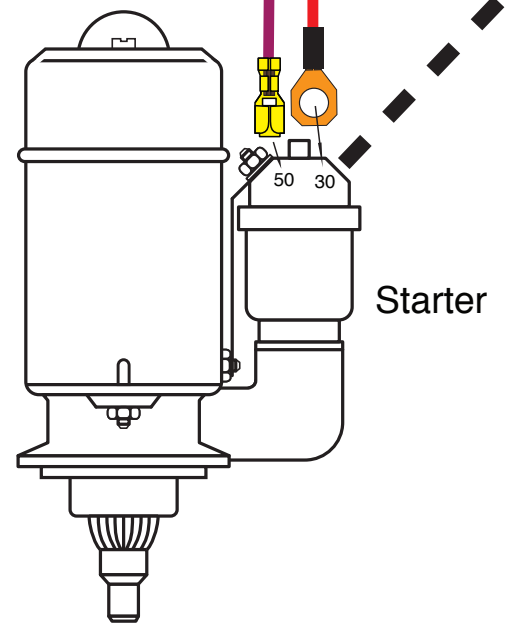
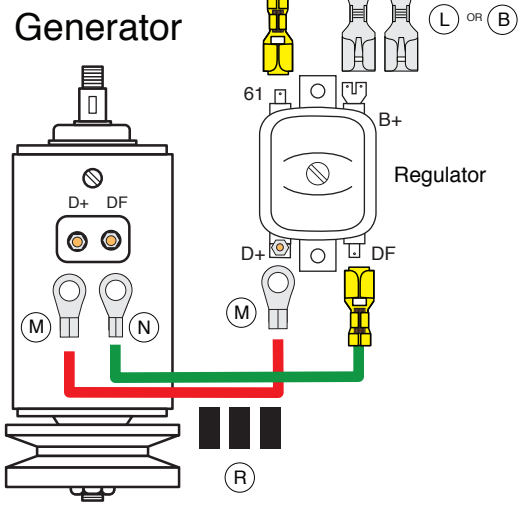
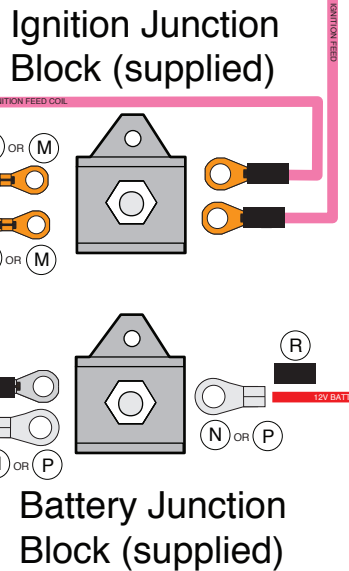
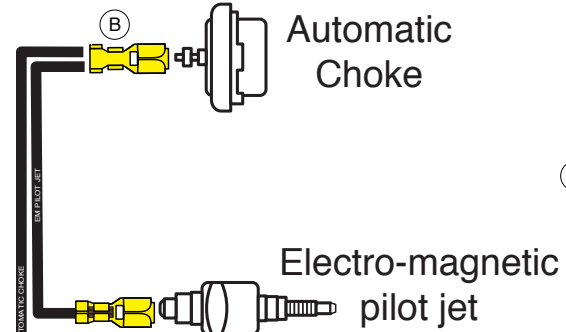
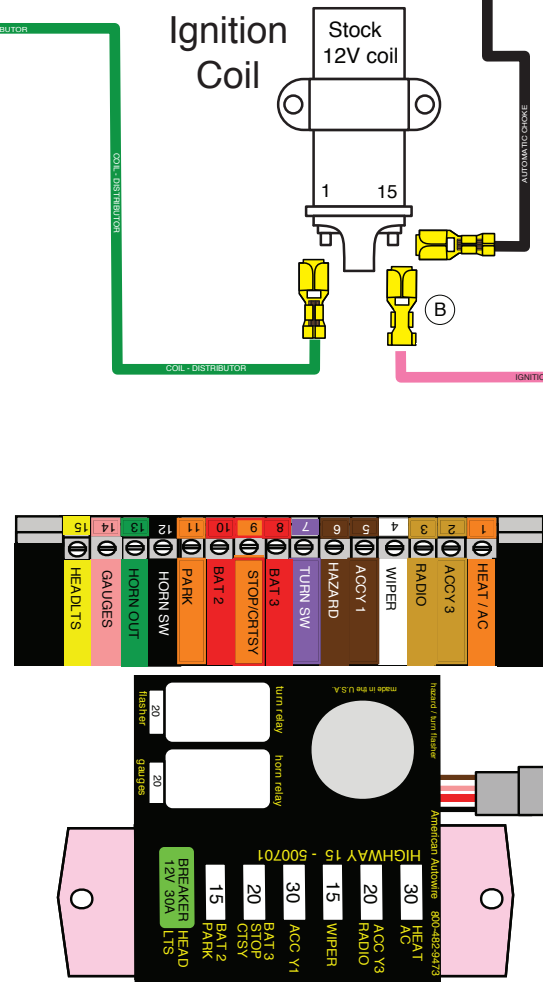
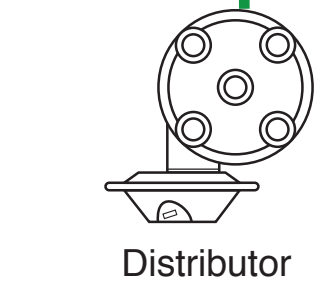
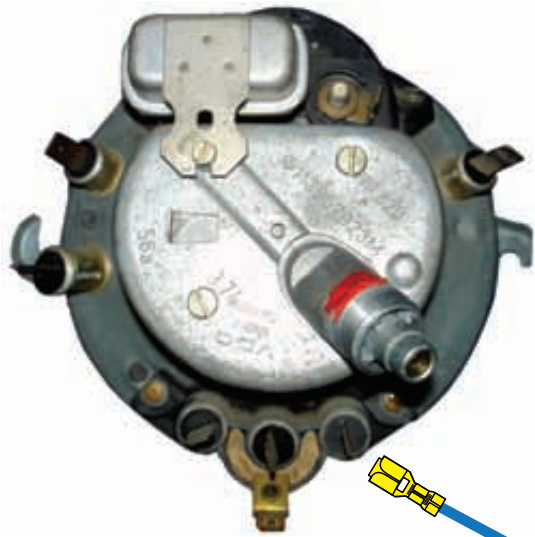
American Autowire

www.americanautowire.com 856-933-0801

510421
Volkswagen Starter, Ignition, Engine kit

92971336 Rev 1.0 3/21/2016

1968-1970 Beetle - Ignition and Starter





**American
Autowire**

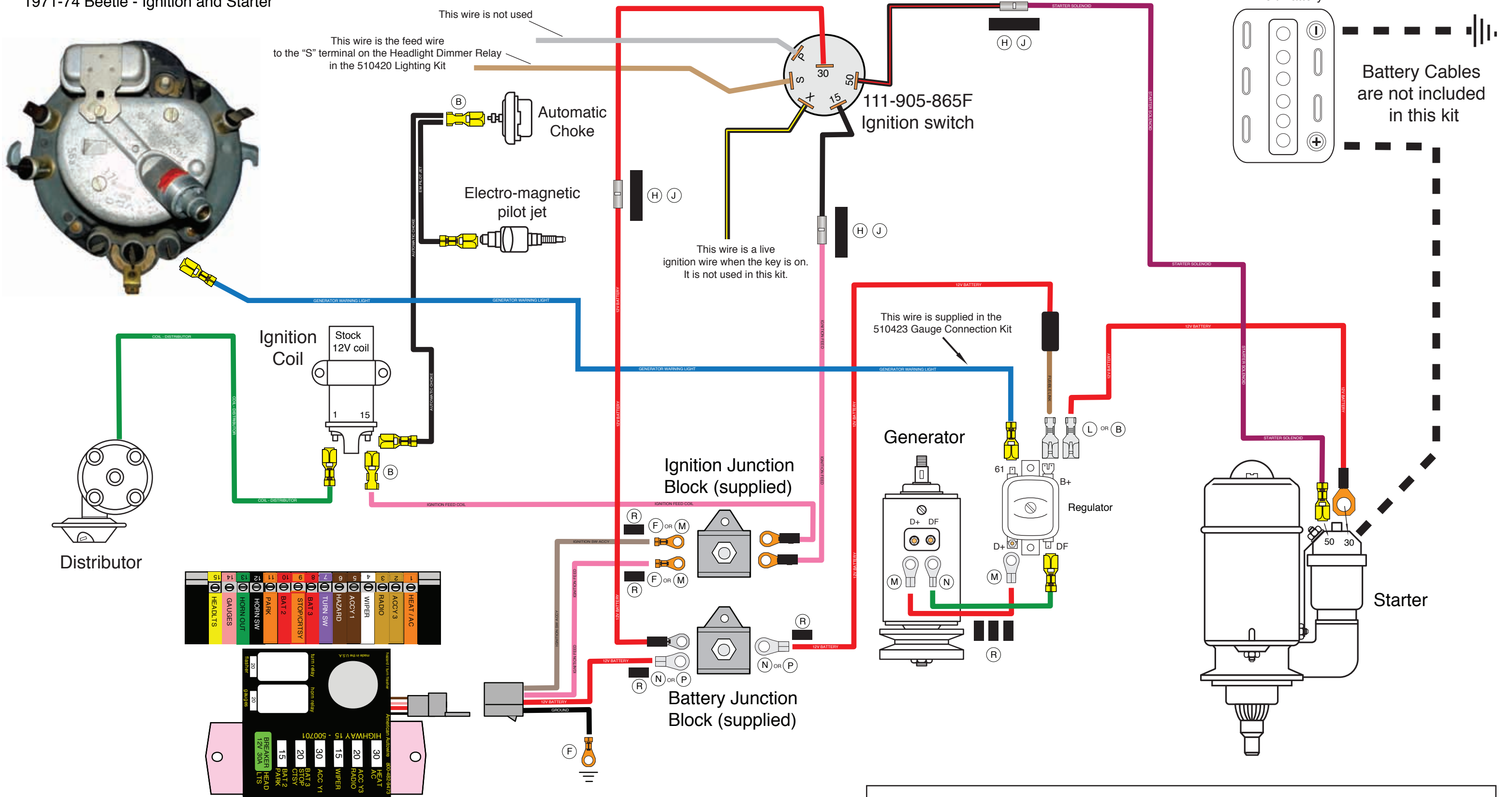
www.americanautowire.com 856-933-0801

510421

Volkswagen Starter, Ignition,
Engine kit

92971336 Rev 1.0 3/21/2016

1971-74 Beetle - Ignition and Starter



American Autowire

www.americanautowire.com 856-933-0801

510421

Volkswagen Starter, Ignition, Engine kit

92971336 Rev 1.0 3/21/2016

WIRE FUNCTION CHART

<u>VW CIRCUIT</u>	<u>AAW CIRCUIT</u>	<u>WIRE GAUGE</u>	<u>WIRE COLOR</u>	<u>WIRE PRINTING</u>	<u>CIRCUIT FUNCTION</u>
30	2A	10	Red	12V BATTERY	Panel connector to battery junction block
15	3A	12	Pink	IGNITION FEED	Panel connector to Ignition junction block
	4	12	Brown	IGNITION SW ACCY	Panel connector to Ignition junction block
	150	14	Black	GROUND	Panel connector to chassis ground
15	3B	12	Pink	IGNITION FEED	Ignition junction block to ignition switch (1962-67) Ignition junction block to ignition switch in line splice (1968 up)
15	3C	12	Pink	IGNITION FEED - COIL	Ignition junction block to coil
	122	14	Dark Green	COIL - DISTRIBUTOR	Lead wire from coil to distributor
30	2B	12	Red	12V BATTERY	Battery junction block to fusible link in line splice connection
30	2D	12	Red	12V BATTERY	Battery junction block to ignition switch (1962-67) Battery junction block to ignition switch in line splice (1968 up)
30	2C	14	Brown	fusible link	Fusible link in line splice connection to starter battery terminal
30	2E	12	Red	12V BATTERY	Lead wire from regulator to starter battery terminal
30	2F	10	Red	12V BATTERY	Lead wire from generator "D+" terminal to regulator "D+" terminal
	152	16	Dark Green	GENERATOR - REGULATOR	Lead wire from generator "DF" terminal to regulator "DF" terminal
31	151	14	Black	GROUND	Ground wire from regulator to generator "31" terminal
50	6	12	Purple	STARTER SOLENOID - S	Ignition switch to starter solenoid (1962-67) Ignition switch in line splice to starter solenoid (1968 up)
	51	16	Black	AUTOMATIC CHOKE	Lead wire from coil to automatic choke
	52	16	Black	EM PILOT JET	Lead wire from automatic choke to electro-magnetic pilot jet



**American
Autowire**

www.americanautowire.com 856-933-0801

510421

Volkswagen Starter, Ignition,
Engine kit

92971336 Rev 1.0 3/21/2016