System 718279900

Advantages over the old system:

Alternator/Electronic Ignition for Peugeot P55C

- Replaces the original SAFI SSY ignition alternator, upgrading to 12V/100W DC or 12V/70W AC and contactless electronic ignition.

- The ignition timing is fixed; modern fuels make adjustment unnecessary. The new rotor weighs 2 kg, like the original rotor, but has a smaller diameter (128 mm instead of 158 mm). No modifications to the engine block are required.

- All parts are new
- greater light output
- stable ignition with a strong spark
- better starting performance
- smoother engine operation
- No more trouble with the breaker

M718279900

Installation instructions for System 718279900	18.3.2026

- If you can install and adjust the original ignition system and have general mechanical skills, you can also install a VAPE system. If you have never worked with one before, it is better to have the system installed by someone who is familiar with it.

- VAPE cannot monitor compliance with these instructions, nor the conditions and methods used during the installation, operation, use, and maintenance of this system. Improper installation may result in property damage or even personal injury. We assume no responsibility or liability for any loss, damage, or costs arising from or in any way related to faulty installation, improper operation, or incorrect use and maintenance. We reserve the right to make changes to the product, technical specifications, or installation and operating instructions without prior notice.

IMPORTANT

Be sure to read the entire manual carefully before you begin installation

Keep in mind that unauthorized modifications, including repair attempts, to the parts may void your warranty. This also applies to cutting cables, which very often results in the loss of reverse-polarity-protected connectors and, consequently, to short circuits or reverse polarity that can damage the components.

Please note the **instructions on the system information page**. Make sure that the system configuration shown actually meets the requirements of your engine. Incorrect ignition settings, for example, can damage the engine and/or cause injury when starting (kickback from the kickstarter). Special caution is required during the first start-up after installation. If you notice any malfunction, check and adjust the ignition timing! During installation, check very carefully that the rotor is not rubbing against the stator coil or anywhere else, as this can occur for various reasons and lead to serious damage.

Intended Use

- This is a **replacement system and not a copy of the original equipment**. The parts of the system therefore look different from the original parts, and in particular, the ignition coil and regulator may have different mounting points that require adjustments on your part. This system is intended **exclusively** for replacing original lighting/ignition systems in classic and modern classic motorcycles **whose engine characteristics have not been subsequently altered by design changes**. It is not a tuning system; it does not alter the original engine characteristics, and it does not result in significantly higher engine power. However, it does improve the vehicle's roadworthiness and safety through better lighting, more visible turn signals, a consistently loud horn, and greater overall reliability compared to the aging original systems. Since our systems do not cause any significant change in engine characteristics, exhaust and noise emissions do not deteriorate. In most cases, exhaust emissions may even improve, as combustion becomes more complete.

- VAPE guarantees that its products are type-approved and marked with the letter "E" (specifically "E8" for the Czech Republic), ensuring that the product specifications consistently comply with the relevant ECE type-approval regulations (in particular ECE R10.05). Inspections are conducted regularly by the competent authority

- The charging system is **intended solely for use with rechargeable 12V (6V systems 6V) lead-acid batteries with liquid electrolyte or sealed lead-acid batteries, AGM, and gel.** It is not suitable for use with nickel-cadmium, nickel-metal hydride, lithium-ion, or other types of rechargeable or non-rechargeable batteries.

- The system is **not intended for use at sporting events.**

Improper use will void the warranty. Furthermore, the system may not perform as you expect, and we will be unable to assist you with our support services because we are unaware of the situation. In the worst- , improper use may even result in the revocation of the operating permit.

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- When installing the parts, **be sure to start with the engine-side components** (adapter, stator, rotor) to verify that they fit properly before installing the parts that go on the outside of the engine. Unfortunately, it is often the case that people start by installing the regulator, ignition coil, and, if applicable, the control unit, and these parts are very often modified (without proper calibration!), which makes it impossible for us to resell them later. Unfortunately, replacing the lighting and ignition systems on older motorcycles is not like picking something off the shelf at the supermarket; given the wide variety of models and the possible changes to the parts since they were manufactured many years ago, it is always a complex matter that can unfortunately also involve errors.

- Our systems have **NOT been tested for use with other electronic components (such as aftermarket ignition systems, navigation devices, cell phones, LED lights, etc.)** and may cause damage to such components under certain circumstances. Any existing tachometers are not supported by the system. However, we do offer a tachometer solution. Similarly, any circuit breakers or ignition-controlled exhaust control systems are not supported. It is also possible that your original ignition system had a speed-limiting device installed for legal reasons. The new system does not have such a device. Therefore, please check the legal requirements beforehand.

- If you do not have the necessary expertise to install the system, please have it installed by a qualified professional or a specialized workshop. Improper installation can damage both the new system and the motorcycle, or even result in injury to the rider.

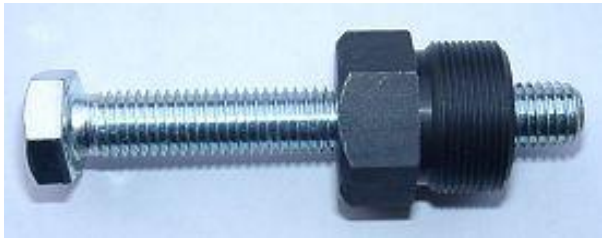
- Before ordering a system, please check whether the **rotor puller** we recommend is included in the package. If not, it's best to order it at the same time! If the rotor is damaged by using other tools or aids, the warranty will be void!

- The rotor is extremely sensitive to impact (e.g., even during transport). Be sure to inspect the rotor for any damage before installation. If the rotor has magnets that are not encapsulated, check that the magnets are securely in place by trying to push them sideways with your fingers. After being subjected to impact, some of the glued-in magnets may have become loose and are now held in place only by their magnetic force. This could cause serious damage to the system during operation. At the same time, please check the rotor's magnets for foreign objects (e.g., screws or other metallic objects).

- If you have internet access, we recommend viewing this documentation online. You can click on most of the images to enlarge them, and you'll find more—and possibly more up-to-date—information. System list available at: *http://www.powerdynamo.biz*

You should have received the following parts:

- Pre-assembled stator unit
- rotor
- Regulator/rectifier
- electronic ignition coil
- Ignition wires
- Small parts for installation



- To remove the new rotor again, you will need an M27x1.25 puller (Order No.: 99 99 799 00 **- Not included!-**).

- CAUTION: Using a claw puller will cause the magnets in the rotor to come loose!

- Make sure your motorcycle is securely on its stand, preferably on a raised work platform, and that you have easy access to the alternator side of the engine.

- Disconnect the battery and remove it from the motorcycle. At this point, please say goodbye to the old battery, because from now on you will need a 12-volt battery or you will be riding without a battery at all. The system allows for this. At this point, replace all 6-volt bulbs with 12-volt bulbs. The horn can remain on 6 volts.

- Loosen the rotor nut and pull the rotor off the crankshaft. Disconnect all cables from the old alternator and remove these parts.

- Remove the key from the crankshaft that fit into the groove of the old alternator rotor. Don’t worry—it didn’t serve a retaining function; it was only meant to aid in ignition timing. If you forget to remove the key, the rotor won’t fit onto the shaft later, and you’ll have to remove the stator again to access the key.

- Once the entire original alternator has been removed, you can see the felt ring on the crankshaft.

- Remove it from the shaft.

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- Now insert the felt ring into the new, pre-assembled stator plate. There is a special recess on the back for this purpose.

- Now loosen the three mounting screws on the new stator and lift it slightly off the base plate. This will give you access to the two screws securing the base plate.

- Make sure to note the position of the stator relative to the base plate; otherwise, the ignition mark won't line up later!

- Remove the two nuts from the mounting bolts. Place the new stator assembly, with the stator hanging loosely from it, onto the engine block. Replace the nuts on the bolts from the rear and secure the assembly to the engine housing.

- Place the nuts back on the bolts from the rear and secure the unit to the engine housing.

- Reattach the stator to the base plate. To do this, gently pull on the stator cable at the same time. The stator must snap firmly into place; if it sits loosely, a cable is definitely caught underneath. Make sure not to install the stator at an angle and that the inner opening of the stator sits flush against the locking flange of the base plate. Otherwise, the coil will be misaligned and damaged by the rotating rotor. Be careful not to pinch any cables under or between the support plate and the stator, and do not damage the insulation.

- Reattach the stator using the 3 M4 screws.

Ignition timing: To ensure maximum flexibility in ignition timing, the rotor is not secured to the crankshaft via a keyway and key. Nevertheless (provided the taper is correct), there is no risk of the rotor becoming unintentionally loosened or twisted, as it was always held in place by the taper and never by the key. The key served only as a guide for setting the correct ignition timing.

- Take a look at the new rotor now. You will see a line mark on its circumference that was applied with a laser. This is an ignition mark.

- Before installing the rotor, check to make sure its magnets haven't picked up any screws or other small parts that could cause damage.

- On the stator plate, near the two small black coils, there is a red line. This is also an ignition mark.

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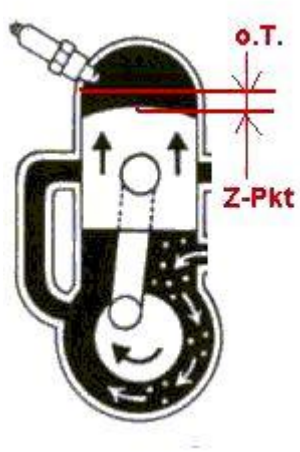


- Remove the spark plug and set the piston to the top dead center (TDC) position.

- To measure the piston position, you will need a tool (a dial gauge or a measuring rod, which you can make from an old spark plug, for example. In a pinch, however, a pencil and a bit of visual estimation will do).

- First, move the piston to top dead center (here, TDC). This is the highest position the piston can reach in the cylinder.

- Since the flywheel rotates to the left in this system, you must now turn it slightly to the right (i.e., clockwise) until the piston has dropped to the required advance angle. Please refer to your manual for the correct value (if the manual is not available, try 4–5 mm before TDC). Incorrect settings can lead to overheating and, in extreme cases, even to the piston crown burning through.

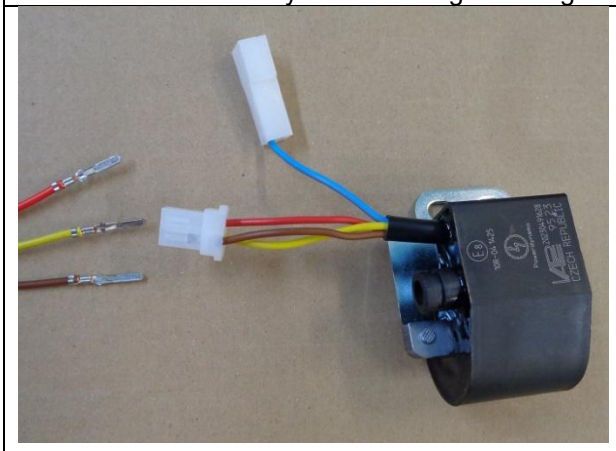
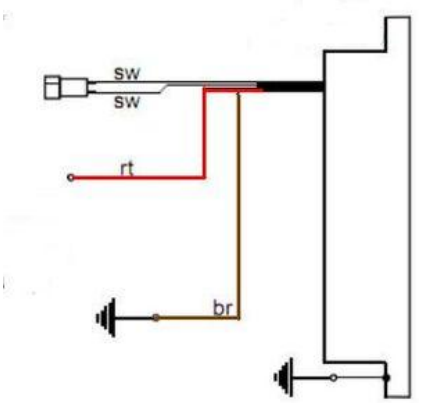
- Remove the rotor from the crankshaft again and reinstall it so that the mark on its circumference aligns exactly with the ignition mark on the adapter plate (which has been transferred to the engine block). Press the rotor firmly onto the shaft.

- It is very important not to change the position of the crankshaft (which is at the ignition timing). If this changes, you must repeat the entire process.

- In this position, secure the rotor with the supplied M14 rotor nut.

- Remove the new rotor using only an M27x1.25 puller (Order No.: 99 99 799 00 **- Not included!-**).

- Now attach the new ignition coil and the new regulator in a suitable location. It is best to use the ignition coil's mounting bracket. Leave one of the ignition coil's mounting screws loose; a ground cable will be attached here. Route the new alternator cable along the frame using the included cable ties so that it ends at the same level as the regulator and ignition coil, along with all other cables. Make sure nothing can rub against it.

Connect the cables as shown in wiring diagram 73ik_102, that is:	
- To make it easier to feed the cable through tight openings—or to make it possible in the first place—the connector on the cable leading to the new ignition coil from the new alternator has not yet been attached to the terminals at the end of the cable. You should not attach the connector until the cable has been fully routed through the engine opening. To do this...	
	... take the female connector of the ignition coil with the yellow, red, and brown wires. - Insert the loose 4-pin connector sleeve provided into this connector and insert the loose alternator wires (white, red, and brown) into the connector, aligning the terminals at the back. Make sure the terminals snap into place inside the connector housing. Be sure to pay close attention to the correct positioning of these wires in the connector: • yellow to yellow • red goes to red • brown to brown
- If you want (or need) to remove the cables from the connector housing, it's best to use a bent paperclip to push the barbs on the contact tabs to the side so that the connectors can be disconnected.	
	The new regulator/rectifier has 4 cables: ▪ the two black cables with the plastic plug are the AC input ▪ the red cable with the plastic plug which provides the positive terminal ▪ the brown cable with the plastic plug is the ground connection
The two black cables from the controller ...	... are connected to the two black cables from the alternator. To do this, insert the two black alternator cables into the included 2-pin connector. It doesn't matter which cable goes to which of the two terminals, since alternating current is supplied here.
The brown cable from the regulator ...	... is connected to **the negative terminal** of the battery, or to **ground** if driving without a battery.
The red cable from the regulator ... **Caution:** Incorrect polarity will damage the electronics!	... is either connected to **the positive terminal of the 12-volt battery** or, when driving without the battery, to the cable leading to the electrical loads (usually the input terminal on the main switch).
- If you are driving with the battery, make sure a **15A fuse** is used between the battery and the vehicle electrical system.	
- There is no way to connect a charging indicator light; it would not work anyway when driving without a battery. The regulator has a built-in capacitor that smooths out the pulsating DC voltage. This ensures that any turn signals and horn will function properly even without a battery.	

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- That leaves the blue (sometimes blue/white) wire from the ignition coil—the cut-off wire. **Note:** If you experience ignition problems, disconnect this cable first (pull the plug). In most cases, you'll be able to continue driving	**- If it is connected to ground, the ignition will shut off!** - We use this circuit configuration in vehicles that originally had a magneto ignition system (magneto rotor) and therefore shut down when short-circuited to ground. - These vehicles have a terminal on the ignition switch (on German vehicles: terminal 2) that is connected to ground when in the "OFF" position. The blue (/white) cable is connected to this terminal. This ensures that the ignition shuts off as before.
- The high-voltage cable (ignition cable) ... Please **do not use** "Nology Super Cables" ("hot wire"). These cause interference in VAPE systems and can damage the electronics	... screw it into the ignition coil and place the rubber cap over it. This is, of course, easier to do before installing the coil on the vehicle. Please also use the ignition cable provided and do not use an old, unidentified cable.
- You'll be doing yourself a favor if you replace your motorcycle's spark plugs and spark plug boots (preferably with 1–2 kiloohms, but no more than 5) at this point. More than enough interference can be traced back to "seemingly good" cables, plugs, and boots (including brand-new ones)! - **Do not use** spark plugs with built-in interference suppression resistors **together** with interference-suppressed spark plug wires (this results in double the resistance). Always use only one interference suppression method.	
- Finally—**before installing the battery and before the first start**—please take your time to check all fasteners and wiring. Remember to replace all bulbs from 6 to 12 volts. Also remember that you will now need a 12V battery. The horn can remain at 6 volts. - If the system does not work right away, please consult our troubleshooting page. As a first step, disconnect the blue cable between the relay and the ignition coil (disconnect the connector); most faults are hidden in the shutdown circuit.	
- IMPORTANT: Please note that if **the crankshaft** has been **reconditioned** (even previously), its alternator journal has been over-machined and is therefore shorter. As a result, the rotor sits lower, which can cause contact between the rotor (the rivets are the lowest point) and the stator coil. This will result in a damaged stator and subsequent loss of ignition.	

Important Safety and Operating Instructions - MUST be read and followed in their entirety!
- Follow the safety instructions and requirements specified by the vehicle manufacturer and the automotive trade. Installation requires technical expertise. The ignition marks on the material are intended solely for guidance during installation. After installation, please verify the correctness of your settings using appropriate methods (such as a stroboscope) to prevent damage to the engine or risks to your health. You are solely responsible for the installation and correct adjustment.
- Caution Ignition systems generate high voltage—danger to life! Our ignition coils can reach up to 40,000 volts! If handled carelessly, this can not only cause severe pain but, more importantly, be harmful to the heart! People with pacemakers should not perform any work on ignition systems. Always maintain a safe distance from the electrode and exposed high-voltage cables, and during testing, firmly press the spark plug connector to ground with an insulating object to safely discharge the voltage. Never disconnect a spark plug wire to synchronize the carburetor! Never disconnect or touch the ignition wires while the engine is running or at starting speed. Wash the vehicle only when the engine is off.

- If your VAPE ignition cable came with rubber spark plug connectors *(which do not have a built-in interference suppression resistor)*, please use the spark plugs with a built-in resistor *(to comply with local laws regarding electromagnetic compatibility requirements)*. Alternatively, replace the cable(s) with standard ones and use shielded spark plug connectors *(under no circumstances should you use suppressed spark plugs AND suppressed spark plug connectors at the same time. This would cause interference, particularly making it difficult to start the engine).* The total resistance of the spark plug-spark plug connector combination should not exceed 5 kOhm.

- Keep in mind that spark plug wires age and their resistance increases over time. If an engine only starts when cold, the cause is almost certainly a faulty spark plug wire or spark plug. Do not use so-called spark-enhancing cables (e.g., Nology).

- After installation, be sure to check that all retaining screws are tight. If the parts loosen, they will be damaged. We only tighten the screws loosely during pre-assembly!

- First, give the system you just installed a chance to fire up before you start measuring and testing everything. Please also follow our instructions on how to check for a spark. All our parts are tested before shipment. You can hardly measure anything on them anyway. Under no circumstances should you measure the electronic components (including the ignition coil, except for its high-voltage output). You risk destroying them and will still not get usable results!
Keep in mind that if the engine doesn't run right away, the problem is often due to the carburetor, the intake hose, and especially the spark plug wires and spark plugs (unfortunately, even brand-new ones). (As a rule, after installing a Lima alternator, its settings must also be adjusted.) If the system doesn't run right away, check the ground connections first and foremost, particularly between the chassis ground and the engine block.
Before you immediately remove the parts and send them to us for inspection, check our knowledge base to see if there is already an answer to your problem there. If not, use our service ticket system to request specific assistance.

- If you have a system with a dual ignition coil, be aware of some specific features of this coil. The ignition will only function properly if both spark plugs are connected to the coil. This means you cannot simply remove one spark plug to test it, because each output is grounded through the other spark plug. If you really want to test only one side, the other coil output must be grounded.

- The spark from conventional breaker systems has a low energy level of approximately 10,000 volts and therefore appears yellow and thick. The spark from our systems is a high-energy spark of up to 40,000 volts and is therefore very sharply focused and blue, which makes it harder to see. In addition, the spark is only generated at engine speeds reached by kicking the starter. Simply pushing the kickstarter lever by hand does not produce a spark.

- Most of our systems combine the ignition and the alternator into a single unit. You can tell this by the presence of a regulator. You can measure almost nothing on the regulator except for the voltage it outputs. If you are not getting any power, check the ground connections and the wiring from the regulator to the ignition switch first. This important connection is often cut and overlooked during installation! Most PD systems have DC regulators/rectifiers. However, there are also AC regulators, which have specific considerations that must be taken into account.

- Never perform electrical welding on the vehicle without first completely disconnecting all electronic components containing semiconductors (regulator, ignition coil, and control unit). The stator and rotor do not need to be removed. Solder only with soldering equipment powered by series transformers, or unplug the soldering iron before soldering to prevent overvoltage damage to the components. Never use copper paste on connectors or spark plugs.

- Electronics are sensitive to reverse polarity. After making any changes to the system, always check that the battery is connected correctly and that the wiring is correct. Reverse polarity and short circuits will immediately destroy the regulator and the ignition coil! As a general rule, wires should always be connected color-to-color. Any exceptions are explicitly mentioned in the manual. Damage caused by reverse polarity is not covered by the warranty.

- When assembling the rotor, please take care not to damage the magnets. Avoid applying direct mechanical force to the rotor. **Never place the stator inside the rotor when transporting the generator;** follow our shipping instructions (packaging).

- Lightly oil the outside of the rotor; otherwise, it will rust quickly in the harsh environment (which is not harmful, but looks unsightly).

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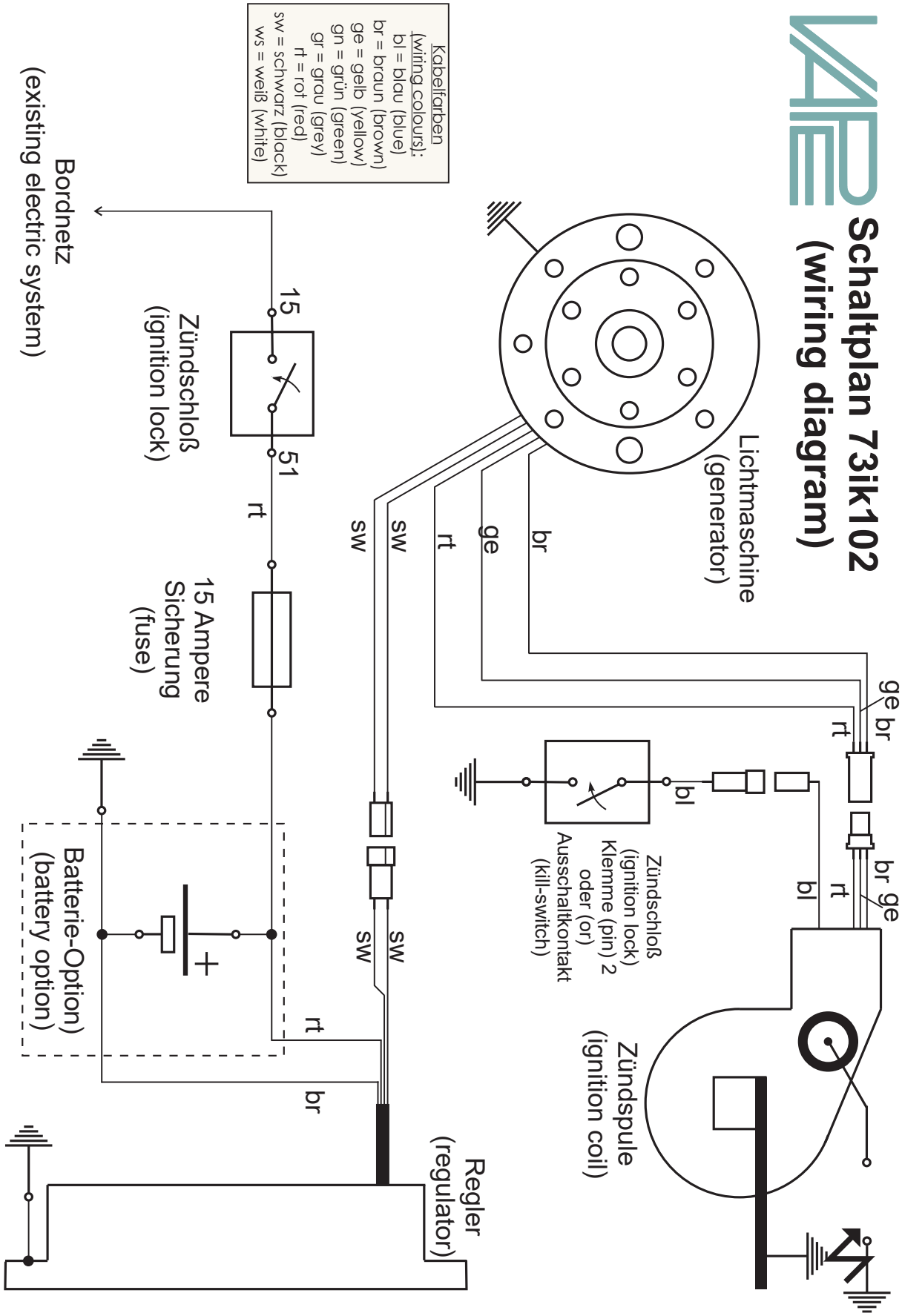
- Never use a claw puller or a hammer to remove the rotor. This can cause the magnets to come loose. Always use only a screw-in puller M27x1.25 (see installation instructions).
- If your vehicle will not be used for an extended period, you should disconnect the battery (if equipped) to prevent any slow discharge through the rectifier diodes. However, even with the battery disconnected, you may notice that it has discharged after a long period of time; this is normal.
- Please follow these instructions, but don't let them unsettle you. Thousands of customers have already successfully installed our systems before you. ***Good luck, and enjoy your drive!***

Schaltplan 73ik102 (wiring diagram)



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