

70 80 499 017 => <u>€/\$</u> 80 499 020 => <u>€/\$</u>

for RS0, RS1/3, RS1S, R60, R67, R67/2, R67/3, R69 with 17mm crankpin (measured at wide end). for RS0/2 (not for 12V "Behörde"), RS0S, RS0US, R60US, R69S, R89US with 20mm crankpin (measured at wide end).

Dynamo replacing original 6 Volts BMW dynamo L45/60L engines with 17mm or 20mm shaft (measured at wide end). Upgrades your system to 12V/150W. No need to modify engine casing. You may use the dynamo without battery.

Version 15.1.201.

If you can install your stock dynamo/alternator and possess basic mechanical skills, you can install a VAPE system!

If you never have worked on your electrical system, better have it done by someone who knows.

VAPE can not monitor the compliance to those instructions, nor the conditions and methods of installation, operation, usage and maintenance of the system, improper installation may result in damage to property and possibly even bodily injury. Therefore we assume no responsibility for loss, damage or cost which result from, or are in any way related to, incorrect installation, improper operation, or incorrect use and maintenance. We reserve the right to make changes to the product, technical data or assembly and operating instructions without prior notice.

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Please read these instructions fully and carefully before starting work on your motorcycle

Please bear in mind that any modification of the material as well
as own repair attempts which have not been agreed with VAPE
may result in a loss of warranty. Do not cut off wires. This leads to
also sof reverse pointry protection and often results in damage
to electronics. Also, please take note of the information provided
on the information page for this system. Check that you
have bought really corresponds to the motorcycle you have.
During assembly check carefully that the totor (flowheel) does not
touch the stator coils or anything else, which may happen due to
various circumstances and lead to severe damage.

 $\triangle$ IMPORTANT:

If you have no expertise for the installation have it done by an expert or at a specialist's workshop. Improper installation may damage the new system and your motorcycle, possibly even le to bodily harm.

Internet online. You get larger and better pictures by

and possibly updated information. System list at http://www.powerdynamo.biz stator unit
 rotor (flywheel)
 rectifier/regulator
 screws, battery cables

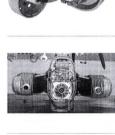


To disengage your new rotor again, you will need a puller M27x1.25 (part-no.: 99 99 799 00 -Not provided!-).

<u>Note:</u> Never use a claw puller, a hammer or any other device, that will shake the magnets off.

the blue wire at generator terminal 61 (which runs to the charge light), gets connected to the red/green of the new regulator (unless you want to drive without battery, in that case do not connect, leave insulated dile) one heavy red fright also be black wire at generator terminal 30 (which runs to the battery plus) is connected (bridge) to the heavy red running formerly to terminal 51 of thock dynamo (see nost tiem), one heavy red (might also be black) wire at generator terminal 51 (which runs to the headigithst man switch) is connected (bridge) to the heavy red running formerly to terminal 30 (see item above) one heavy forom wire (ground) which is attached to the ground terminal next to the negative (-) brush secure to some other ground point





Now put the stator coil back into its position on the plate, taking care not the damage the wires Make sure that the inner opening of the stator unit slots evenly over the elevated fixing rim of the base plate - otherwise the coil will sit loopsided and will touch the rotor, damaging it.



Regler/ Regulator



Remark:

Until November 2007 this wire has been a single wire outside the compact plugsingle wire outside the compact plugwire outside the compact plugto the charge light control function is based on a transistor switch and is an additional function twen if that should fail, the regulator might still be in ok working condition. Simple check: have the engine running, turn lights on, disconnect the battery, If you have bright lights the until is ok. There is no charge light control function in our 6 volts systems. Hence no green/red wire

Give the newly installed dynamo a chance to work, before you start to <u>check and test</u>. Our parts have been checked before delivery to you. You will not be able to check much anyway. At any rate do refrain from measuring the electronic regulator other than the output votage. You risk several damages to the inner electronic there, You will not get any tangible results from the operation anyway. Check ground connections carefully and, to be on the safe side and for testing, put an additional ground wire from the regulator directly to the engine block.

SW SW þ (charge control nur (only) 12V (existing electric system) (wiring diagram w/o ignition 12V) 16 Ampere Sicherung (fuse) SΝ SW Kabellarben

wing colousi:
bl = blau (blue)
br = braun (brown)
ge = gelb (vellow)
gn = grun (green)
gr = grau (green)
r = rol (red) = schwarz (black) s = welß (white)

Schaltplan ohne Zündung 12V



all parts are new
 more light output
 no wear anymore on carbons and collector

assembly instructions
 wiring diagram
 parts in the pack (photo)

engine with the new exploded view the new stator unit regulator/rectifier

r System 70 80 499 0XX

Designated use
This system is designated to replace stock dynamo/alternator in vintage and classic motorcycles. As it is a voltage generating unit only, it will in not change your engine characteristics. In most cases it will supply more electric power and hence enhance roadworthiness and comfort by offering better lighting, better function of side indicators and horn and, compared with the agin stock systems, increased reliability.

The system does not replace your ignition. Ignition must be either a compleately selfsupplying magneto or there has to be a battery in the system. The system has not been tested to work with a third party electronic ignition, it may work with it, but also may not and even may damage it. At any rate the system will charge your battery well. The charging system is only suitable for use with rechargable 12V (6V systems 6V) lead-acid batteries with liquide electrolyte or sealed lead-acid batteries, AGM, Gel. It is not suitable for use with nickel-cadmium, nickel-match with fluide electrolyte or sealed lead-acid batteries, AGM, Gel. It is not suitable for use with nickel-cadmium, nickel-match with fluide electrolyte or sealed lead-acid batteries, AGM, Gel. It is not suitable for use with nickel-cadmium, nickel-match with a light match with the system of the syste

This is a <u>replacement system and not a copy of the stock material</u>. The parts in this system therefore look different and might fit differently (notably ignition col and regulator) coquining some adaptation by you.

During assembly imperatively start with assy of engine based parts to see that those really fit before you start fitting the external parts. In many cases customers assemble those first and thereby often modify them in breach of warranty which renders them unfit for renewed sale. Reglacing old electrical systems is there have been very many types, versions and possibly unknown aftermarket modifications which harbour plenty of room for error.

Our systems are NOT tested for use with third party electronic devices (such as GPS, mobile phones, LED lighting or electronic gritting land may assue damage to such parts. Possibly existing electronic tachometers will not work with the new system. Read our information for suitable solutions. Possibly existing selects with the said electronic valve controls are not supported.

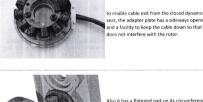
Before you order a system, please check whether a <u>puller tool</u> for the new rotor is included in the kit. If not, better order it at the same time. You might want to order light <u>pulls</u>, <u>hore</u>, horn, <u>flather unit</u> etc.

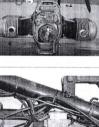
Never use anything other than the recommended puller tool to <u>pull the new rotor gain</u>. Damage to the rotor as a result of use of other tools or methods is not covered by warranty. owner tools or methods is not covered by warranty.

The rotor is sensible to blows (including during transport), Before assembly, please always, check for damage (or notor without magnet plastification try to push the magnets axide with your fingers). After impact the glued in magnets might have broken floose, sticking to the rotor solely by magnetic force, so that one does not notice right away. During engine run the damage would be considerable, shere placing the rotor onto the engine, pleas make sure that its magnets have not collected any metal objects such as small screws, nuts and washers. That equally would lead to severe damage.

Drain your petrol tank into a safe canister. Make sure you do not spill petrol. Refrain from smoking. Disconnect the connecting tube under the petrol (gas) tank and take the tank off. Put it into a safe place for the duration of the works.

Now put the base plate consisting of the stee ring and the base plate (aluminium) onto the engine block and screw it down with the 2 screws M6 provided.





he new regulator/rectifier could be fitted unde he rear holder for the petrol tank. (On this roposal the customer has used a selfmade unit date;) For this, unscrew the nut (panner 13) scuring your BMW's tank holder and put your we regulator plate (with the regulator on it) nderneath. The regulators cooling fins will face powards. Put the nut back, do not forget to put ne washer back.

... connect to pins 1/4 of the new regulator (from there equally black wires lead inside the unit). It does not matter which wire connects to which of the both terminals (1/4) as they carry alternating current.

Put the rotor onto the crank and screw it down with the provided screw M8x40. Do not forget t place the washer there. To disengage the rotor again, use a <u>puller M27x1.25</u>, never a claw pulle or hammer blows!

current.
... connects pin 3 of the regulator unit
(from there equally a brown wire goes
inside the unit) with the negative pole of
the battery of (in case you drive without
battery) to ground (chassis).
... connects to pin 5 of the new regulator
(from there equally a red wire goes inside
the unit). Here your regulated positive voltage comes out to connect to battery plus, or (in case you drive without battery) to the voltage input terminal of the main switch (fignition lock, German bikes: pin 51/30). attery and vehicle circuitry. ... is for the charge control light. You connect there the wire that formerly did run from the control light to the original regulator.

Finally - and before installing the battery and before the first kickstart - please re-check carefully all connections and fitments against the wiring diagram. Do check battery and light bulbs for correct voltage (12V).

Should something not work, please consult our trouble-shooting guide on our homepage. As a first step disconnect the blue wire from the coil and re-test MEMORIANT); Guing crash shaft reapir the dynamo shaft is often machined get shorter. The result is a rotor stiting lower, possibly touching now with its rivets the coll. The result is a destroyed stator and ignition failure. For more detail and how to check see (online) here.

d the motorcycle not be in use for some longer period, please disconnect the be listing) to prevent current bleeding through the diodes of the regulator. Though nnected battery will empty itself after a while.

was to the circumference of the rotor, take care not to damage its magnets. Refrain from dire was to the circumference of the rotor. When transporting never put the rotor over the tor. Observe our information relative to transport of the material.