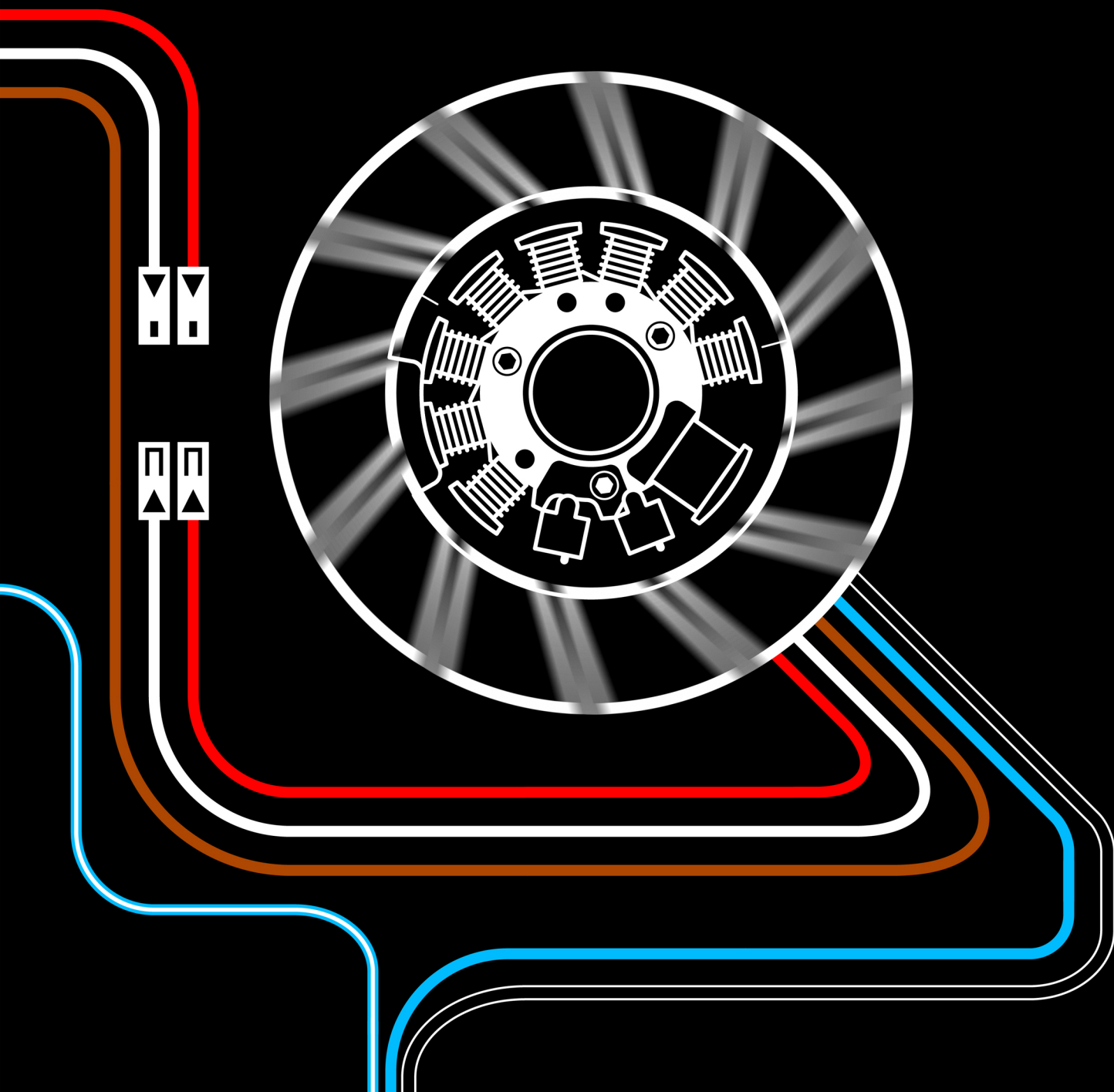





IGNITION PERFORMANCE INSTRUCTION MANUAL



notes

Vorfrende




ASSEMBLY INSTRUCTION

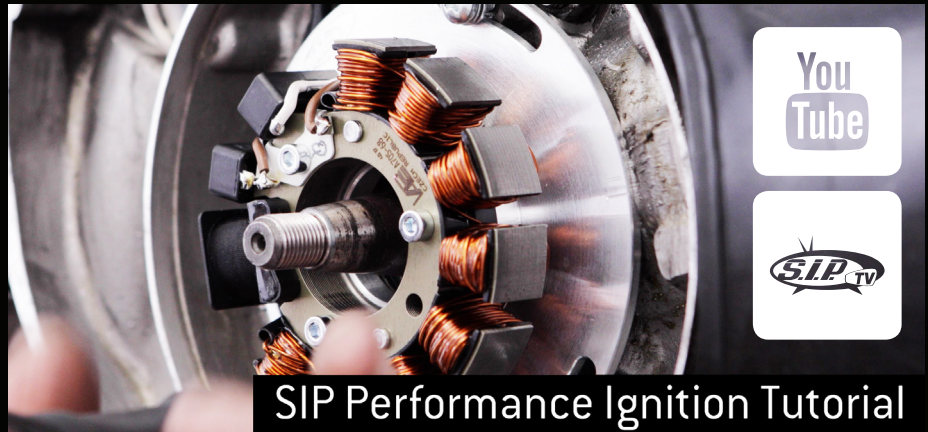
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Please check additionally the video instruction online: bit.ly/ignitiontutorial

Take your time, work precisely, double check and test run your scooter carefully. Re-adjust setting if necessary!

In case of any doubt, please assign an authorized workshop for installation and adjustment!

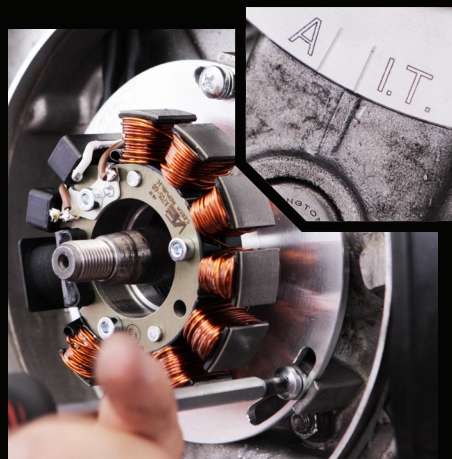
See attached chapter for additional components, spare / wear parts and required tooling equipment.



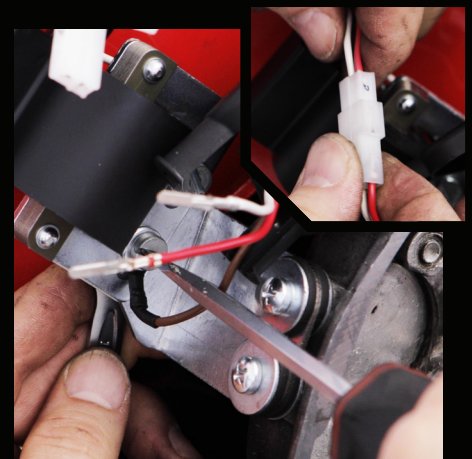
Video tutorial: bit.ly/ignitiontutorial



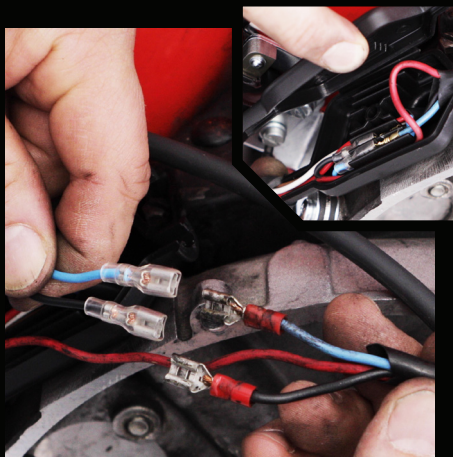
STEP 01: Mount ignition base plate. Apply thread lock. Do not crush wiring harness!



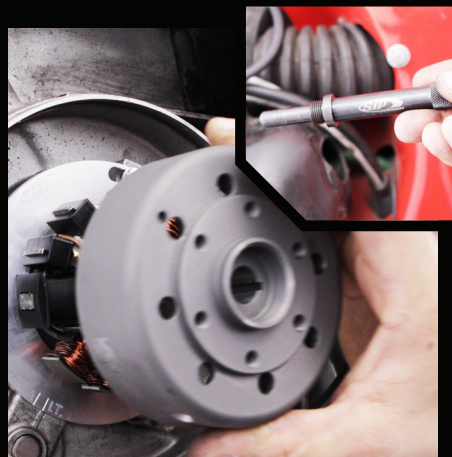
STEP 02: Guide wiring harness through crankcase. Tighten base plate. Preset around 20° before top dead center (TDC).



STEP 03: Mount coil (optional brackets SIP available). Connect plugs.



STEP 04: Check connectors. Replace if necessary (enclosed). Pay attention to matching colors!



STEP 05: Mount rotor. Replace woodruff key. Screw in piston stopper.



STEP 06: Place degree disc and indicator (e.g. paper clip). Rotate rotor clockwise against piston stopper.

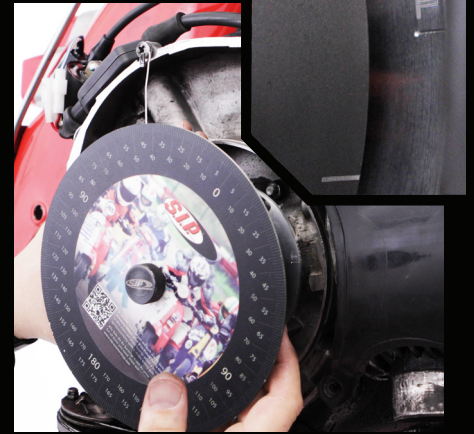


STEP 07: Keep the rotor slightly pushed against piston stopper! Align degree disc in this position with indicator to zero position. Lock degree disc!



STEP 08: Rotate rotor counterclockwise together with locked degree disc against piston stopper. Example here: 86°

Note your measurement here:



STEP 09: Calculated top death center (TDC) is half your measured value. Example here: 86° divided by 2 equals 43°

Note your calculation here:



STEP 10: Remove piston stopper. Rotate rotor together with locked degree disc counterclockwise and align disc / indicator with your calculated value.

In order to figure out your current ignition point keep rotating counterclockwise until T-mark on ignition base plate aligns with laser mark on rotor. Read angle degree. Example here: 23°

Example calculation: 43° TDC minus 23° T-mark position equals 20° ignition advance

Note your calculation here:



20° ignition advance is an example value. This goes along with the dotted blue timing line shown in the comparison diagram on page 05.

The desired value of ignition advance is to adjust by rotating the ignition base plate: clockwise = less ignition advance / counterclockwise = more ignition advance



STEP 11: Mount fan wheel (screws enclosed). Apply thread lock! Torque 12-14 Nm.



STEP 12: Mount holding tool. Tighten fly wheel to 45-60 Nm.



STEP 13: Screw in new spark plug. New plug cap recommended.

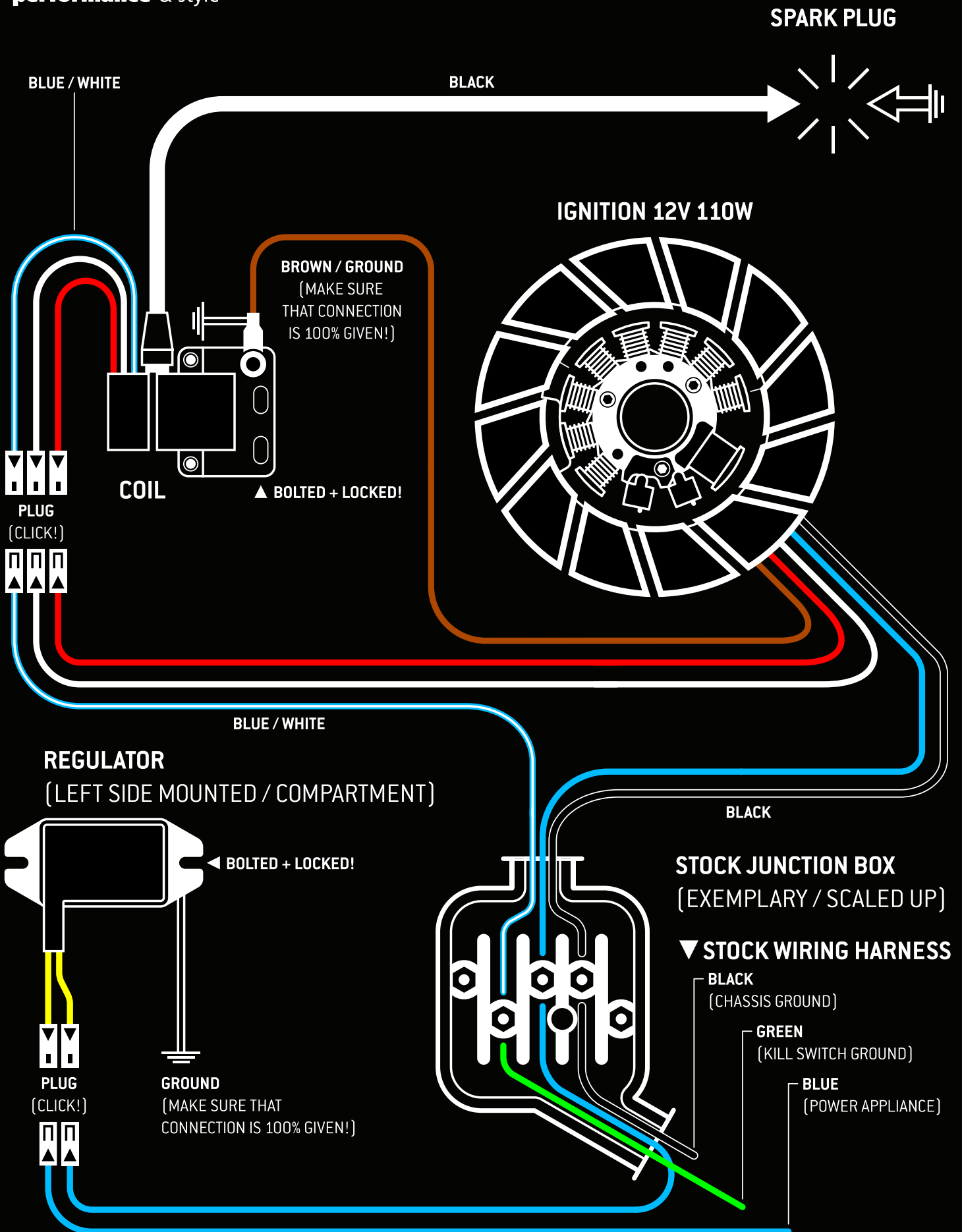


STEP 14: Mount regulator. Connect with enclosed plugs. Replace all lamps to 12V. Engine ready to start. Countercheck timing with a stroboscopic light!



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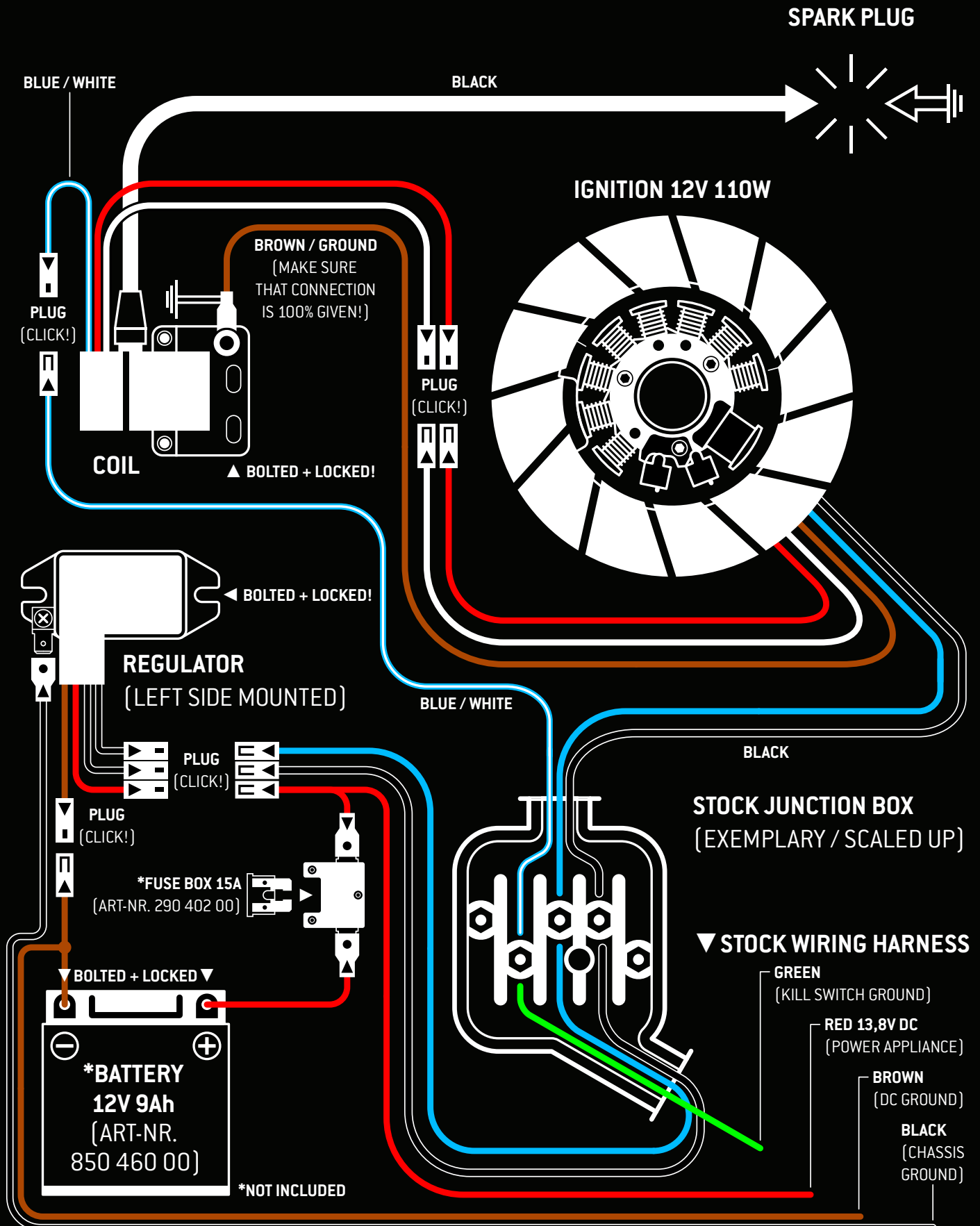
WIRING DIAGRAM AC (WITHOUT BATTERY)





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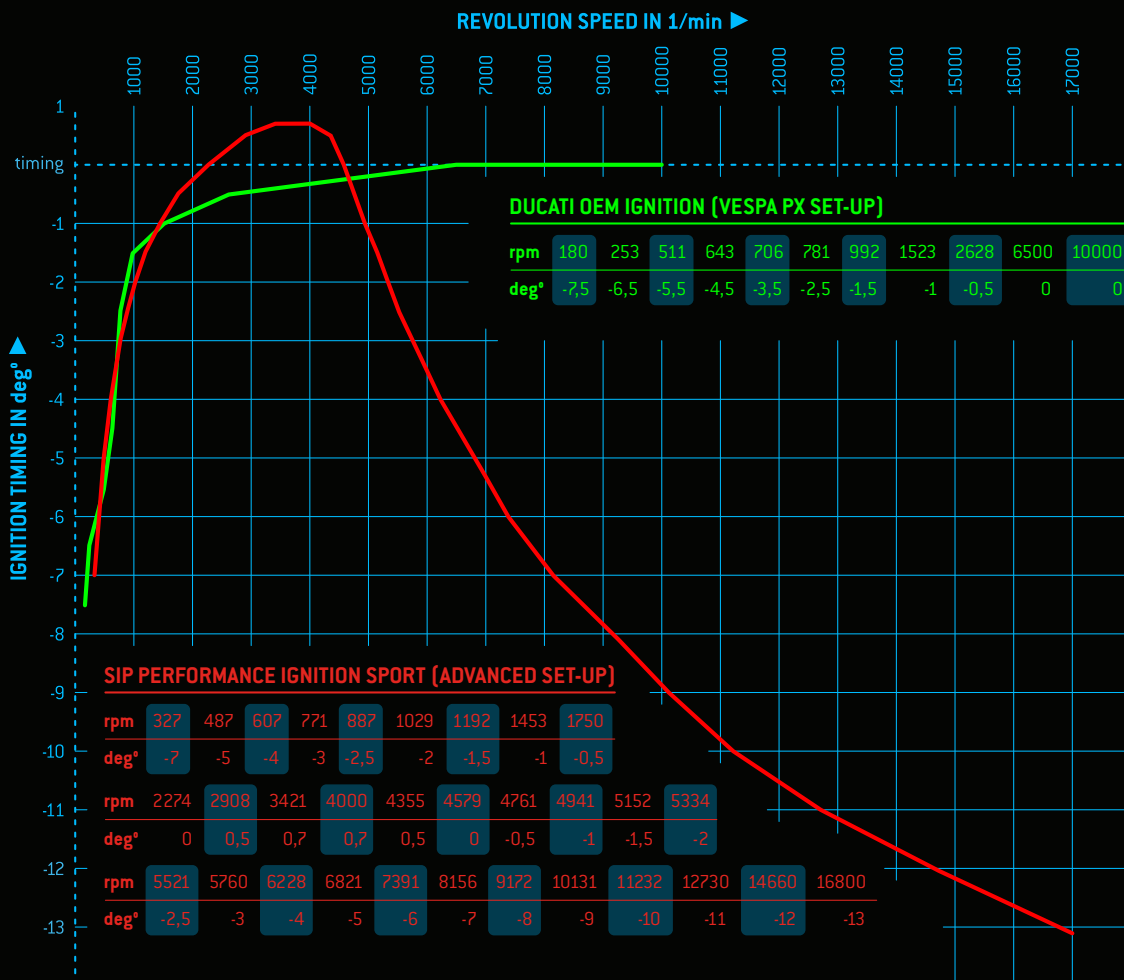
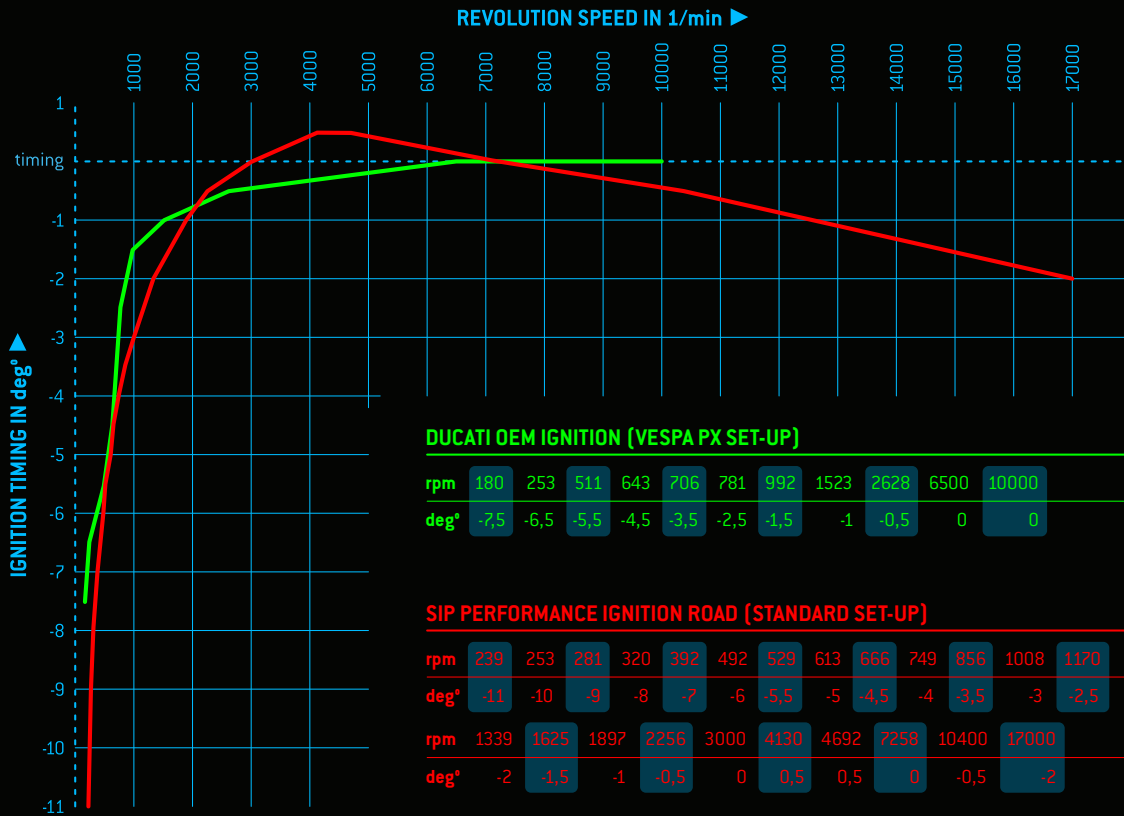
WIRING DIAGRAM DC (WITH BATTERY)





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COMPARISON DIAGRAM (OEM / SIP)





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FREQUENTLY ASKED QUESTIONS

01: Do I need the AC or the DC version?

- In case of using a standard wiring harness without battery rather decide in favour of AC as this version doesn't imply a modification of the wiring harness. In case of using a standard model with breaker ignition a conversion wiring harness has to be installed.

02: Do I need the road or the sport version?

- The road version resembles the standard Ducati ignition with a nearly static ignition point. The sport version adjusts the ignition point from 4700 U min. onwards.

03: How do I install the electronic unit?

- As an optional equipment see our offer "Bracket SIP electronic unit" (SIP product codes 17910400 / 17950500 / 16484500).

04: Can I keep my SIP speedometer in case of using the DC version?

- The DC version is the more powerful version. Please note: the use of the rev counter is not possible anymore!

05: DC version: Is the regulator ground identical to the chassis ground?

- Yes, they are identical and have to be connected.

06: I don't have to double check the ignition timing with a stroboscopic light, do I?

- Like all modern ignitions the SIP performance ignition has a mark on its base plate and rotor in order to verify the exact ignition point. Thanks to the degree disc and the indicator mounted on the engine casing the desired pre-ignition can be easily set.
If in doubt, just double check with a stroboscopic light.

07: Does the SIP performance ignition also fit in with a PX old having a battery?

- Not without modifying the wiring harness! The SIP performance ignition has namely two wires instead of four.

08: How do I uninstall the flywheel?

- Use the standard PX / PK M28 x 1.0mm (SIP product code 93332000).

09: Can I convert my AC ignition to DC ignition afterwards?

- Yes. Exchange the voltage regulator for the rectifier.

10: Can I convert my road ignition to sport ignition afterwards?

- Yes. Exchange the electronic unit.



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OPTIONAL PARTS / TOOLS / SPARE PARTS



Bracket SIP electronic unit
for Vespa 50-125/PV/ET3/PK50-125/S/XL/
XL2 - steel, zinc plated
Art.No. 17910400



Bracket SIP electronic unit
for Vespa 125 GTR 2°/TS 2°/150/Sprint V 2°/
Super 2°/200/Rally 2°/PX80-200/PE/Lusso
Cosa - steel, zinc plated, w/o E-start
Art.No. 16484500



Bracket SIP electronic unit
for Vespa 125 GTR 2°/TS 2°/150/Sprint V 2°/
Super 2°/200/Rally 2°/PX80-200/PE/Lusso
/Cosa with PX Lusso/MY/11 E-start motor
/-casing - steel, zinc plated
Art.No. 17950500



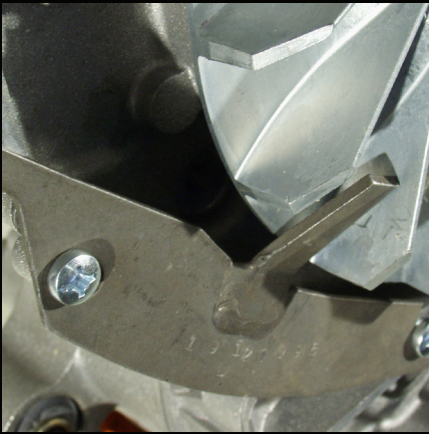
Bracket SIP for SIP/PINASCO degree disc
for Vespa 50-125/PV/ET3/PK50-125 1°/S 1°/
SS - M10x1,5 mm, h collar 15,0 mm
Ø 19,5 mm, incl. screw grip
Art.No. 83008130



Bracket SIP for SIP/PINASCO degree disc
for Vespa PK50-125 2°/S 2°/XL/XL2/125 GTR
2°/150 TS 2°/Sprint V 2°/Super 2°/200 Rally
2°/PX80-200/PE/Lusso/Cosa/T5 - ZZZ -
M12x1,25 mm, h collar 15,0 mm
Ø 19,5 mm, incl. screw grip
Art.No. 83008150



Ignition Timing Degree Disc SIP
for ignition adjustment, for Vespa/Lambret-
ta/Scooter/Maxiscooter
Art.No. 83002000



Holding Tool fan wheel

for Vespa all models for flywheels with metal fan

Art.No. 20095100



Woodruff Key flywheel side

for Vespa 98/125 V1-TS/150 VL -Super/160 GS 1°/Rally/PX80-200/PE/Lusso/Cosa/T5 flywheel / primary for Vespa 50-125/PV/ET3/PK50-125/S/XL/XL2 - 12,6x5x3 mm, clutch for Vespa 160 GS/180 SS

Art.No. 87060000



Piston Stopper SIP long

M14x1,25 mm, l top 72mm

l bottom 40,5mm, Ø collar 19 mm, steel

Art.No. 49316000



Spark Plug Resistor Cap NGK

LB05EMH 47x36 mm, rubber cover, black, 90°, for M14 spark plug, 5k0hm

Art.No. 85174000



Thread Locker LOCTITE "243"

medium strength, blue, 5ml

Art.No. 14100000



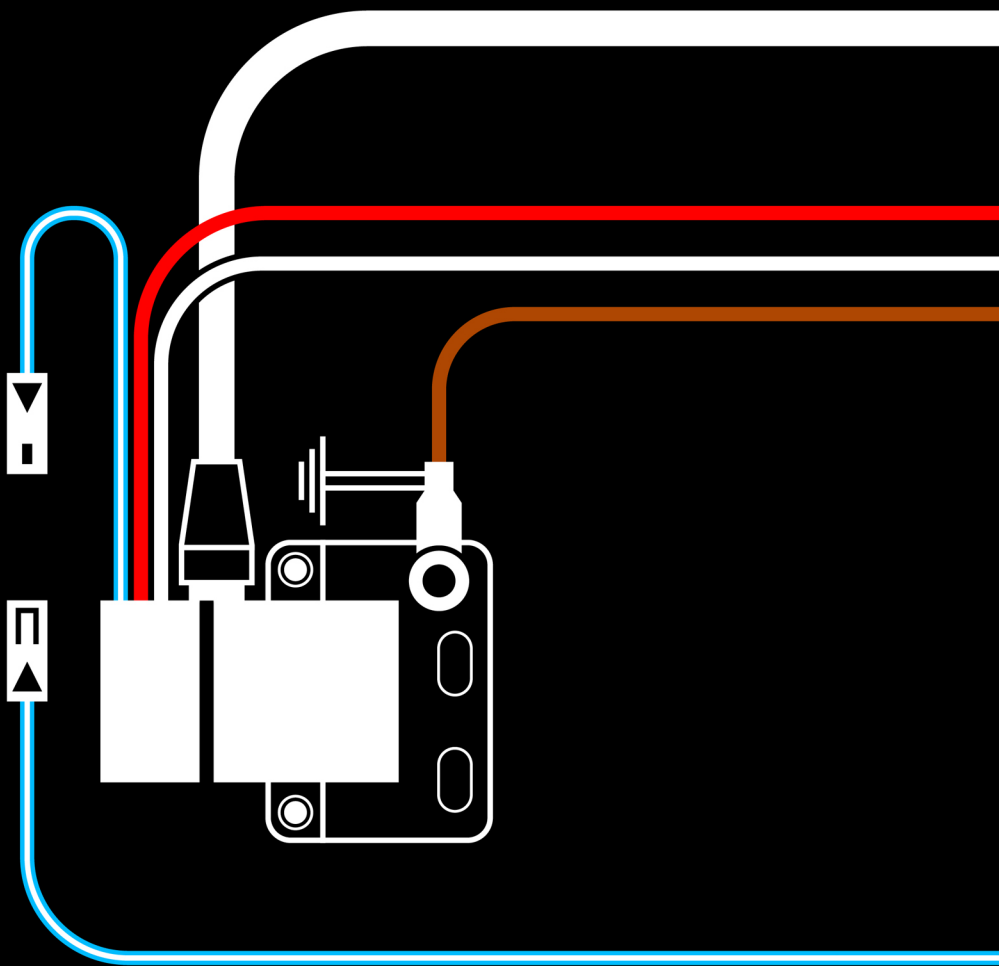
Stroboscopic Ignition Timing

Lamp HELLA ignition timing adjustment

Art.No. FS118600

notes

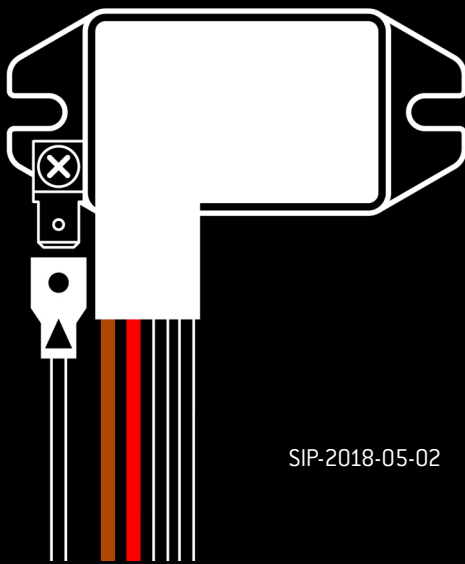
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SIP Scootershop GmbH
 Marie-Curie-Straße 4
 86899 Landsberg
 Germany

www.sip-scootershop.com



for more information scan QR code with your
 smartphone (e.g. with the app "scanlife")



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