# PRO SUPERCHARGED

# VOLTAGE REGULATOR

# BGM VOLTAGE REGULATOR – 4-plug 12V AC/DC

Thank you for purchasing our bgm Pro regulator. For full customer support, please f nd included these f tting instructions. To show the basic principle we have chosen some common electrical setups and included the wiring diagrams.

## APPLICATIONS

The bgm Pro regulator is the most versatile and powerful on the market. Thanks to AC and DC output it can be used for all Lambretta and Vespa scooters equipped with 12 V electronic ignitions. Additionally it can be used as a high quality replacement for most common Twist & Go scooters. To ease up your life in the workshop the connections of the regulator are shown at the back.

#### FEATURES

**AC-AC (alternating current):** IN for the current delivery of the stator plate and OUT for the regulated AC current for the wiring loom.

**Sense:** To use the regulator the AC IN and OUT has to be bridged. The special wiring loom is included in the delivery of every bgm Pro regulator. This so-called SENSE function checks the power OUT against a reference value and keeps it stable. So the power output is constant even with alternating load.

**DC (direct current):** OUT with DC for charging the battery. With ignition systems capable of high power output, consumers can be fed directly without a battery used (e.g. Satnav systems, water pumps, rev counters, speedos and all sort of other toys).

**Earth:** Can be taken easily from the old existing regulator. If there wasn't an Earth connection, you should install one. Use the Earth out of the regulator and connect it to the frame of the scooter. Make sure this is f tted to a bare metal part of the frame. Ideally you should additionally wire the earth to the body of the regulator as well.

On the next pages you'll find wiring diagrams for the most common setups. These examples show the basic principle and can be helpful to see how to connect it to any other scooter.

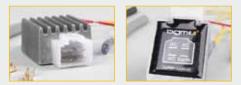
#### Lambretta

- MB Developments loom
- Casa Lambretta loom
- Original type AC loom with 12 V electronic ignition
- Original type DC loom with 12 V electronic ignition
- Varitronic/Casa Lambretta

#### Vespa

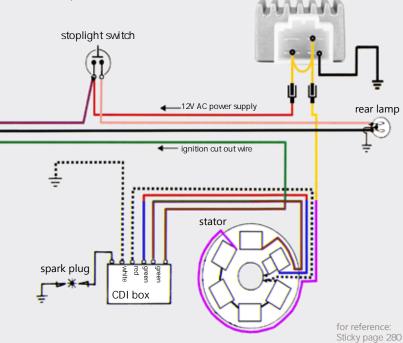
- Vespatronic/Parmakit
- Vespa 3-Pin regulator
- Vespa 5-Pin regulator



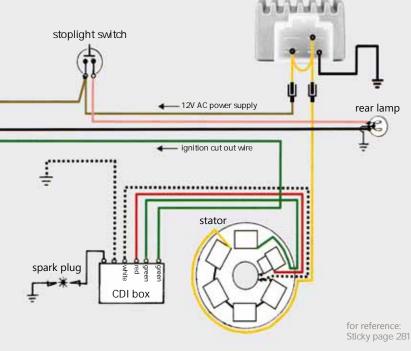


For questions or general technical support contact support@bgm-tuning.com

• MB Developments loom



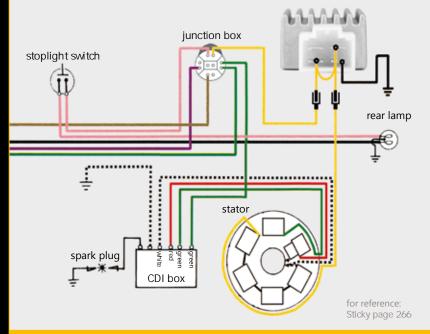
Casa Lambretta loom



 Original type AC loom, 12 V electronic ignition



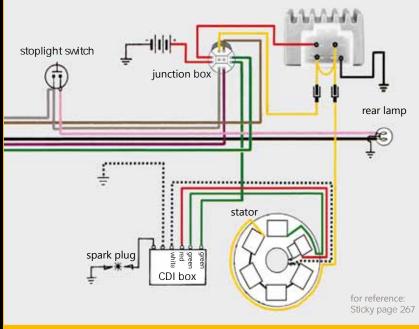
Back view of junction box. All connections are bridged for AC power supply. Only green (ignition circuit) stays separate.



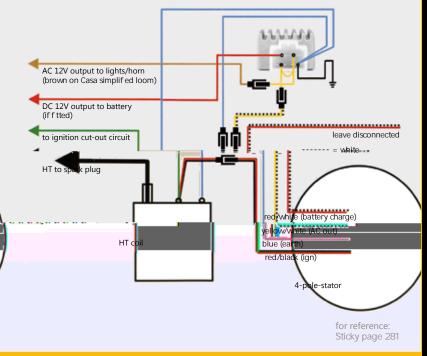
 Original type DC loom, 12 V electronic ignition



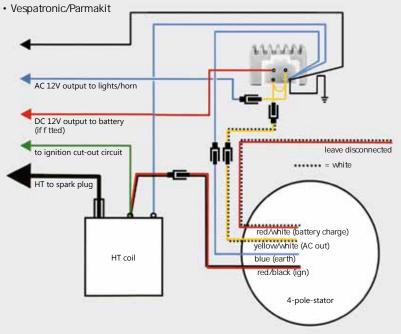
Back view of junction box. All connections are bridged for AC power supply. Only green (ignition circuit) and red (DC) stay separate.



Varitronic/Casa Lambretta

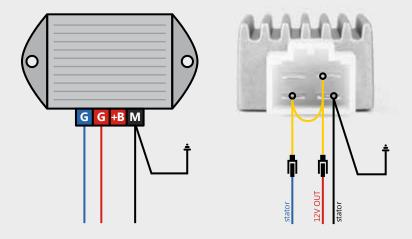


# Vespa



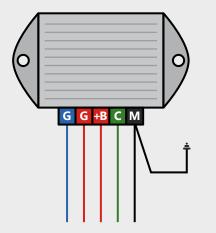
# Vespa

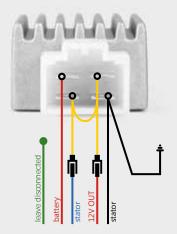
• Vespa 3-Pin regulator



# Vespa

• Vespa 5-Pin regulator







# IGNITIONS



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6. bgm Pro stators, ultra reliable ignition systems for Lambretta and Vespa

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# FUEL/AIR MIXTURE SCREWS

 Extended air screws for easy adjustment, available for most common carbs

# **VOLTAGE REGULATORS**

8. Multi pupose High Power Output AC and DC regulator. For all electronic Lambretta and Vespa ignitions.

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# CARBURATORS

 bgm Pro PWK 30mm. Small and neat, perfect for road applications. Check for more carbs online. Range goes from 17.5mm PHVA up to 30mm PWK versions.

# **MORE BGM STUFF!**

#### CYLINDER HEADS

10. bgm Pro V2 head for Runner, Dragster 172-180cc 2stroke, also available for long stroke crankshaft. Check online!

#### STAYS

11. Stay bgm Pro, 2-stroke, Piaggio 125-180cc



#### CRANKSHAFTS

 bgm Evolution 2 crank, 55mm stroke, 110 mm con rod. Check for complete scooter crankshaft range online.





#### WATER PUMPS

12. Water pump bgm Pro, universal, 12V, f ow rate 8I/h

#### **BEARING & OIL SEAL SETS**

 European or Japanese quality bearings are used for these kits. Available for nearly all Vespa and Automatic scooters.

# WATCH OUT FOR MORE: www.bgm-tuning.com

# SHOCK ABSORBERS

- 15. bgm Pro, front, anodized silver/grey, Rally, Sprint, VNA-VBB type
- 16. bgm Pro, front, chrome, Rally, Sprint, VNA-VBB type

# CYLINDER HEADS

 Cylinder head bgm Pro, Vespa 207-210cc, available for 57mm and 60mm stroke.

# MAIN JET SETS

- Handy main, idle and needle sets for Mikuni, Dellorto and PWK
  - > Check online for full listing!







# WATCH OUT FOR MORE: www.bgm-tuning.com

bgm main distributors:



# Northern America



United Kingdom



Italy



www.scooter-center.com

Mainland Europe