

# FORCE MASTER 3

## Electronic control module (injection)

**NEW!**

**5518992**

€ 365.70

### VESPA euro 5 2021-> (MD31M)

GTS HPE 300 ie 4T LC  
 GTS Super HPE 300 ie 4T LC  
 GTS Super RACING SIXTIES HPE 300 ie 4T LC  
 GTS Super Sport HPE 300 ie 4T LC  
 GTS Super Tech HPE 300 ie 4T LC  
 GTS Touring HPE 300 ie 4T LC  
 SEI GIORNI HPE 300 ie 4T LC  
 SEI GIORNI II EDITION HPE 300 ie 4T LC



### LIMITLESS

Have you heard of the theory that argues we use only twenty per cent of our brain? **With Force Master 3 you'll use a hundred per cent... of your engine!** To improve our most advance control module, we designed with vision, starting with the milestones achieved so far. Thus was conceived Force Master 3, a futuristic control module both in hardware and in software.

### LAMBDA MODULATOR

The original control module of the scooter, for analysis of the air/fuel ratio and to adjust the carburetion accordingly, normally interfaces with the lambda sensor installed on the silencer. Force Master 3 intercepts the signal of the original sensor, sending to the primary control module the values produced **by a "virtual" lambda** and allowing dynamic and customised management of the air/fuel ratio in all the moments for which the original system would be programmed to analyse the results of the lambda sensor.

**It has finally becomes possible to manage the air/fuel ratio of the carburetion between the idle and transmission zones**, essentially for all those rpm and for those conditions in which control of the operations of the lambda might prevent intervention. Thanks to a highly evolved circuit, the electrical disturbances normally present on the throttle position signal are removed in such a way as to allow more precise identification of its real degree of opening and significantly improving response times, all to the advantage of the performance and efficiency of the engine.

### HARDWARE ET INTERFACE

Accompanying a hardware, there therefore needs to be a microprocessor with very high computing power that would enable the Malossi technicians to introduce new software strategies and to take advantage of all the Force Master 3 potentials.



### TECHNICAL FEATURES:

- Fuel adjustment
- $\pm 14\%$  at LOW / HIGH / MID
- RPM limiter :  
+ 1000 RPM
- 8 different maps
- Lambda emulator
- Temperature range : -20°C +80°C
- Minimum working voltage : +7V
- Maximum working voltage : +16V
- Average current consumption <- 200mA
- Environmental protection : IP65

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Particular attention was paid to improvement of the user interface by introducing a graphical display that shows the main functional parameters of the device :

- Firmware version
- System status

### • POSITION OF CARBURETION CORRECTION SWITCHES :



### • Map used



### • Status of diagnostics



### • TPS calibration



### • Engine revolutions



### • TPS status



## THE FORCE FORCE MASTER

The incredible innovations of Force Master 3 alongside the peculiarities that have placed all the models of the Malossi control modules at the forefront :

- Fuel calibration +250%
- Fuel correction levels 8 \* 20 break
- Fuel management during engine heating
- Programmable acceleration pump
- Extension operation beyond rev limiter
- Where possible, engine parameters reading via the K-Line KWP2000
- User carburetion compensation, by means of three external trimmers,  $\pm 14\%$  min/average/max
- Immunity from electromagnetic disturbances present on the vehicle
- Cabling with cables and sheathing compatible with oils and hydrocarbons with temperature range -20 +150°C

# FORCE MASTER 3



**5518992** € 365.17 **VESPA** **NEW!**

MAPS	Cylinder	Exhaust system	Filter	Camshaft	Head
• Curve 0	Original	Original	Original	Original	Original
• Curve 1	Original	Malossi	Original	Original	Original
• Curve 2	Malossi	Original	Original	Original	Original
• Curve 3	Malossi	Malossi with db-killer	Original	Original	Original
• Curve 4	Malossi	Malossi without db-killer	Original	Original	Original
• Curve 5	-	-	-	-	-
• Curve 6	-	-	-	-	-
• Curve 7	-	-	-	-	-

## EIGHT MAPPINGS

The **4 maps** available on the Force Master 2 have become **8** in **Force Master 3!** Double the choice ensures the certainty of always finding the right mapping in relation to the various combinations of Malossi products installed on your scooter! The Malossi technicians have studied every single mapping to offer the end user the optimal solution for each style of processing, developing them with sufficient accuracy to ensure consistency of performance in the most diverse conditions: a genuine electronic prodigy!

**5518480** € 345.00 **VESPA**

MAPS	Cylinder	Exhaust system	Filter	Camshaft	Head
• Courbe 0	Original	Original	Original	Original	Original
• Courbe 1	Original	Malossi	Original	Original	Original
• Courbe 2	Malossi	Original	Original	Original	Original
• Courbe 3	Malossi	Malossi with db-killer	Original	Original	Original
• Courbe 4	Malossi	Malossi without db-killer	Original	Original	Original
• Courbe 5	-	-	-	-	-
• Courbe 6	-	-	-	-	-
• Courbe 7	-	-	-	-	-



**(Exclusion of speed limiter)**

**VESPA (MA36M) 2019->2020**

GTS HPE 300 ie 4T LC euro 4  
 GTS Super HPE 300 ie 4T LC euro 4  
 GTS Super Sport HPE 300 ie 4T LC euro 4  
 GTS Super Tech HPE 300 ie 4T LC euro 4  
 GTS Touring HPE 300 ie 4T LC euro 4  
 SEI GIORNI HPE 300 ie 4T LC euro 4

**5515730** € 332.00 **YAMAHA**

MAPS	Cylinder	Exhaust system	Filter	Camshaft	Head	Throttle	Air Intake system
• Curve 0	Original	Malossi with db-killer	Original	Original	Original	Original	Original
• Curve 1	Original	Malossi with db-killer	Original	Malossi	Original	Original	Original
• Curve 2	Malossi 560	Original	Original	Original	Original	Original	Original
• Curve 3	Malossi 560	Malossi with db-killer	Malossi	Original	Original	Original	Original
• Curve 4	Malossi 560	Malossi with db-killer	Malossi	Malossi	Original	Original	Original
• Curve 5	Malossi 560	Malossi without db-killer	Malossi	Malossi	Original	Original	Original
• Curve 6	Malossi 560	Malossi without db-killer	Malossi	Malossi	With enhanced pipes	Enhanced	Original
• Curve 7	Malossi 560	Malossi with db-killer	Malossi	Malossi	Original	Original	Malossi

**YAMAHA**  
**2012->2016 (J409E)**

T MAX 530 ie 4T LC

**5515732** € 340.00 **BMW**

MAPS	Cylinder	Exhaust manifolds	Silencer
• Curve 0	Original	Original	Original
• Curve 1	Original	Original	Malossi with db-killer
• Curve 2	Original	Malossi	Malossi with db-killer
• Curve 3	Original	Malossi	Malossi without db-killer

## BMW

C Sport 600 ie 4T LC euro 3 <-2015  
 C GT 650 ie 4T LC euro 3 <-2015  
 C GT 650 ie 4T LC euro 4 2016->  
 C Sport 650 ie 4T LC euro 4 2016-> (652EA)