

Vittorazi Motors Service Bulletin

Dear Vittorazi dealer/retailer/manufacture

Vittorazi Motors is constantly working, testing and re-designing to bring further improvements to its products.

Our recent activities include a comprehensive factory and field testing programme, informed by customers feedback, to support customers investment in our products; their safety and reliability. Structural integrity, reliability and safe operation of our engines is not a new topic but one on which we focus, ever more closely, to guarantee the lifespan, performance and security.

Although most of our engines are well maintained by users, they are all susceptible to degradation from wear, vibration or other age and use related issues, depending on their specific history and environmental factors whilst in use. In this Service Bulletin, we have briefly described the issues under several topics and have provided a summary of the options available to the operator.

The information provided in that document is focused on all versions of the Moster 185 engine ([Classic](#), [Silent](#), [Plus](#) and [Factory](#)) and will also be included in the updated User manual, soon to be released.

That document, whose purpose is to provide all the solutions that we have adopted, is relevant to both the supplier and the end user. It will be distributed to every single dealer/retailer/manufacture, to whom we give the responsibility to re-distribute it to their customers.

It will be also available for download in the "Technical publications" area of our website.



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1. “Silent” Exhaust.

The exhaust used in the Moster 185 versions [Silent](#), [Plus](#) and [Factory](#), is designed with a joint fitted with a bushing (image no.1) made of bronze alloy, which guarantees an excellent movement of the joint and whose function is to damp the vibrations of the muffler.



Image 1

Because the bronze alloy has a limited life, to maintain perfect functioning of this joint, it is essential to replace the bushing every 25 flight hours. Wear on bushing can be checked, either visually (as shown in the photos no. 2 and 3), or by flexing the exhaust pipe manually to verify the smoothness of the oscillatory movement between the exhaust port flange and the exhaust pipe head.



Image 2



Image 3

The procedure for replacing the bronze bushing, is simple, without any need to disassemble the exhaust from the engine, or the engine from the frame.

To perform this operation, simply remove the three springs from the muffler joint, replace the bronze bushing and then re-install using new springs and safety cables.



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To better assist customers, we have prepared a kit (**MP143**) at the modest retail price of € 15.00.

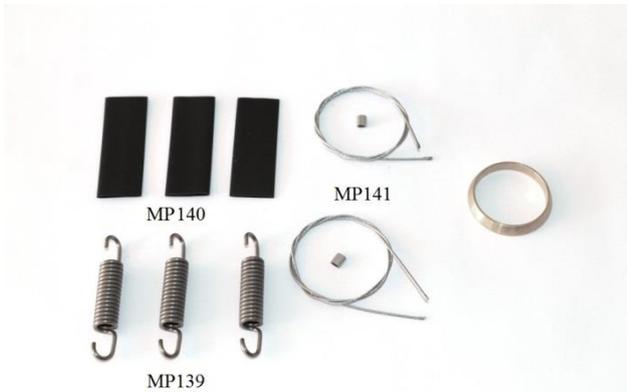


Image 4

MP143 Kit Contents: (image no. 4)

- ✓ 3 x M139 - spring exhaust
- ✓ 3 x MP140 - heat-shrink sheath
- ✓ 2 x MP151 - Security cable with clamp for exhaust springs
- ✓ 1 x bronze alloy bushing

The bushing and all content of the kit are considered consumables and not covered by warranty.

WE REMIND YOU THAT THE FAILURE OF THE BUSH REPLACEMENT EVERY 25 HOURS, COULD LEAD TO A BREAK OF THE MUFFLER AND THEREFORE VOID THE WARRANTY.

2. Moster185 Plus starter system.

In recent weeks we have improved small details, which do not alter the structure but which greatly improve the operation of the starter system "Soft Starter System - (3S)".

To update the starter, we have prepared an upgrade kit which is available for free. The upgrade kit may be obtained from your dealer, on provision of the engine serial number. The dealer is required to send to Vittorazi Motors a list of serial numbers of engines for which steps were taken to provide the upgrade kit. In this way we will be able to update our database.

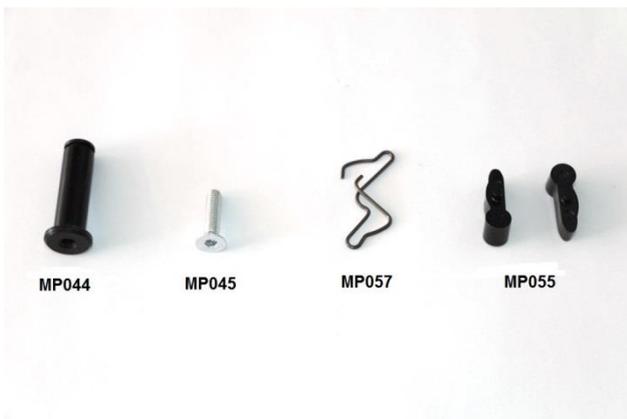


Image 5

"Soft Starter System - (3S)" Kit Contents (image no. 5)

- ✓ 1 x MP044 - Starter central pin
- ✓ 1 x MP045 - Screw 6 x 25 mm
- ✓ 2 x MP055 - Plastic hook
- ✓ 1 x MP057 - Elastic ring for hooks

The instructions for the installation of the upgrade kit are shown in the video down-loadable via this [link](https://youtu.be/7RSMz_j0CYo): https://youtu.be/7RSMz_j0CYo



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3. New reduction wrench – Moster185 Plus.

Since March 2015, all the Moster185 [Plus](#) engines, are delivered with the new reduction wrench inclusive of an hexagonal pin (see image no. 6). This tool facilitates the proper tightening of the belt, both in the engines with the eccentric rotated to the right, and in the engines with the eccentric rotated to the left. The new reduction wrench will be provided free of charge to all customers who have purchased the engine Moster185 [Plus](#) before 01.03.2015. Please ask your dealer for availability of this tool.

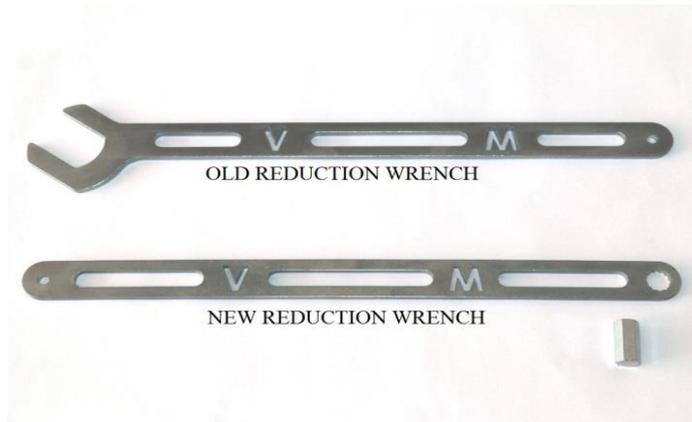


Image 6

The correct weight that has to be applied, is:

- 3.5 Kgs for Moster185 [Classic](#) and Moster185 [Silent](#) with a Gates 15 grooves belt;
- 4.5 Kgs for Moster185 [Plus](#) and Moster185 [Factory](#) with an Optibelt 13 grooves belt; (5.0 Kgs for the first installation of the Optibelt 13 grooves belt).

The weight must be applied on the final hole of the tool, as shown in image no. 7. Please refer to the user manual for further details.



Image 7



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4. New crank-case, engine support and cylinder.

In order to improve the reliability and resilience and the heat dissipation capacity of the Moster185 (all versions), we have redesigned the crank-case, the engine support and the cylinder block. With these improvements we also significantly reduced the weight of the short block, giving it a new look.

While ensuring full compatibility between the old and the new version of the crank-case and the engine support, a few of the fixing elements have changed. These changes are highlighted in the price lists updated in March 2015, which are available on request.

Here below are some details of the new components.



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5. Coil and flywheel.

While in the Moster185 [Classic](#) and Moster185 [Silent](#) engines we are continuing to fit the coil ([M031i](#)) and flywheel ([M034i](#)) "IDM", in the versions [Plus](#) and [Factory](#), we have, for several months now, been fitting the new coil ([M031s](#)) and flywheel ([M034s](#)) from "Selettra".

The main advantages of these new "Selettra" components, are their better efficiency of engine ignition and in the greater durability and security of the whole electrical part. In addition the starter bell has been integrated into the new flywheel.

In the future, this improvement will be adopted in all Moster185 versions.

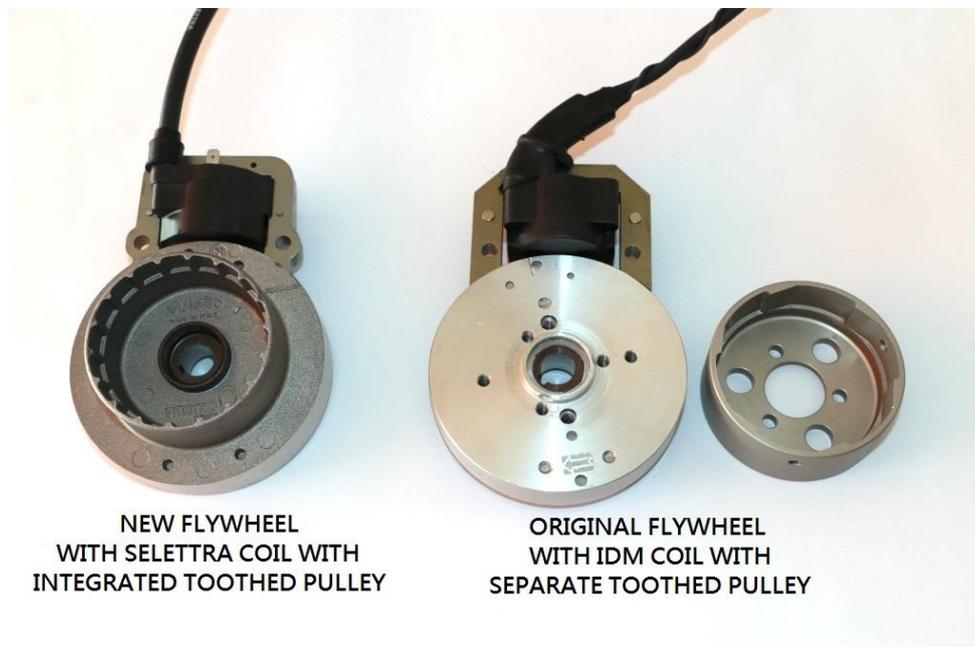


Image 8



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Important Information:

- The “IDM” coil/flywheel system and the one from “SELETTA” **are not compatible**. It is therefore, important to check the version installed on your engine before buying any spare parts. The version in use is easily recognizable from the logo printed on the cable of the coil, as illustrated in image no. 9.



Image 9

- In the spare parts price lists, updated in March 2015, which are already available, we have added the new product codes for the two versions.
- To facilitate the removal of the new "Selettra" flywheel we have prepared a special puller that is available as a service tool (see image 10).



Image 10



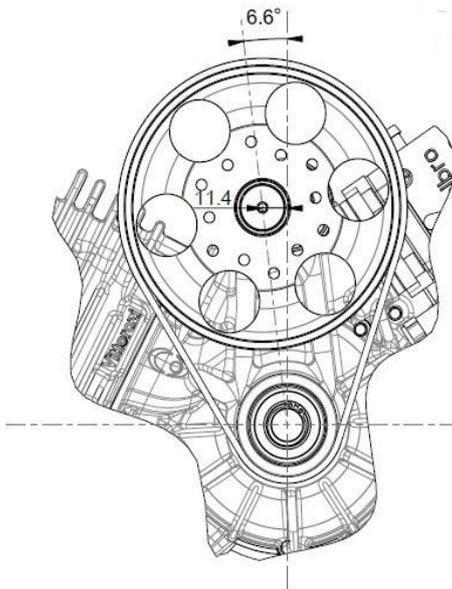
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From September 2015 will apply the following two changes (paragraph 6 and 7):

6. Rotation of the Moster185 eccentric.

In Moster 185 engine versions [Classic](#) and [Silent](#), the eccentric will be rotated to the left as is currently in production on versions [Plus](#) and [Factory](#). This change will be implemented to improve the cooling of the cylinder and of the pulley. We encourage manufacturers to take this change into consideration for modifications needed to their frames.

A - Current reduction setting for Moster185 Classic and Moster185 Silent



B - Current reduction setting for Moster185 Plus and Moster185 Factory.
- Future reduction setting for Moster185 Classic and Moster185 Silent

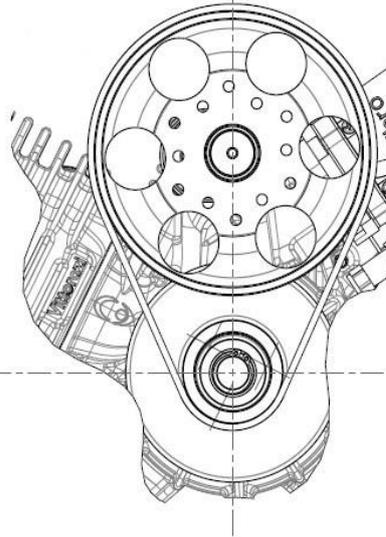


Image 11



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7. Drilling of the pulley of the Moster185.

On the pulley of all versions of Moster 185 ([Classic](#), [Silent](#), [Plus](#) and [Factory](#)) we will remove the drilling with spacing of $\varnothing 50$ mm. (highlighted in red in image no. 12) since both the propellers that are currently selected by Vittorazi and those in course of approval, will all have the drilling with spacing of $\varnothing 60$ mm.

In future, the pulley will only have the drilling with spacing of $\varnothing 60$ mm. as highlighted in green in image no. 12.



Image 12

