Exhaust joint improvement, model My18-My19



MANDATORY

1. Applicability

Engine model	Production period / Serial number
Moster185 Plus	My18, dual starter
Moster185 Silent	My18, dual starter
Moster185 Plus	*My19, manual and dual starter
Moster185 Silent	*My19, manual and dual starter
Moster185 Factory	*My19

^{*}The engines Moster185 - My19 delivered after September 15th 2019, already have this standard improvement.

2. Reason

In some mufflers, after a few hours of operation in severe conditions, there is a step formation on the surface of the bronze ring. When this happens, the exhaust system loses the ability to rotate in this joint, causing severe stress to the sheets of the entire exhaust.



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A kit has been created, compatible with the system and which brings some developments:

- 1. the different profile that avoids the seizure of the joint;
- 2. the change of the bronze alloy which improves the sliding and duration;
- 3. the lower load of the springs which decreases the mechanical stress on the parts involved.

These modifications have led to avoiding blockages and a better sliding of the ball joint, and therefore as a consequence, to ensure the freedom of movement and stabilize the system over time. From extreme endurance tests performed, it was proved that:

- with the new bush kit even in hard use conditions, the blockage due to steps have been removed. Periodic replacement of the brass ring remains the same: within 30 hours. Below a picture of the new bush that worked correctly for 30 hours.



- In the next picture the previous series bushing, which worked for 30 hours in the same procedure test. The damage to the material and the steps that prevent the correct functioning of the joint system are clearly visible.



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3. Compliance

- Immediately, on undelivered engines.
- Before next flight, on the engine affected to avoid unusual engine operating behavior.

4. Subject

Improvements to the ball joint system of the Moster185 engine to ensure maximum exhaust life and reliability. The kit is compatible with the engine model above described.

5. Labor time

Estimated labor: 10 to 15 minutes.

6. Mass data

Change of weight: none.

7. References

In addition to this technical information refer to current issue of:

- Engine user Manual
- Illustrated Parts Catalog

8. Material

Price and availability will be provided on request by VITTORAZI authorized dealer or Service Centers. Material requirement per engine:

Code / Art.	Quant.	Description	Cost of the material FOB
ME143	1	Bronze bushing with springs and security cables	18,00€

9. Rework of parts

None.

10. Special tooling

The same tools used for bronze ring replacement.

11. Alert conditions

- Replace the new bush within 30 hours. Replacing after the indicated intervals leads to a series of harmful consequences:
 - a) Seizure of the exhaust joint and strong possibility of breaking the exhaust system due to rigidity.
 - b) Consequential damage to the bushing housing that is welded on the exhaust.
- Use of non-original spare parts can compromise the functioning of the system and lead to immediate breakdowns.

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12. Accomplishment and Test Run

The work must be implemented and confirmed by at least one of the following persons:

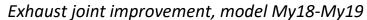
- VITTORAZI MOTORS representatives;
- VITTORAZI MOTORS authorized Distributors, Service Centre, Aircraft manufacture.

At the end of the work to ensure the correct operation of the service a ground test is required and then a further approval in flight.

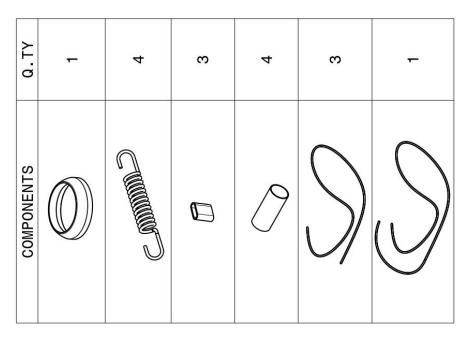
Suggestion: add an anti-seize spray (like WD40) to the bronze ring at the end of each flight when the engine is cold.

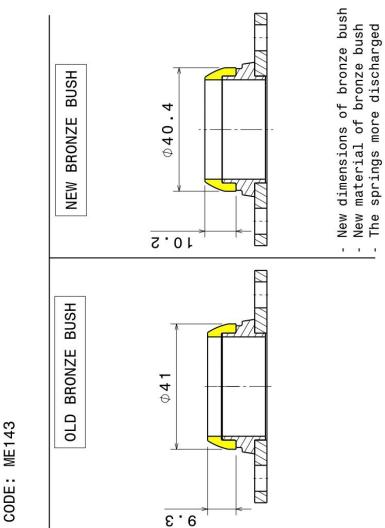
13. Inquires

Inquiries regarding this Service Bulletin should be sent to the VITTORAZI authorized Distributors, Service Centre, Aircraft manufacture of your area. A list of all VITTORAZI representatives is provided on the Vittorazi website (vittorazi.com).









1P04-0022 00 - Replacement bronze bush exhaust VITTORAZI

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