Molon Hay Rake Attachment
Manufactured by Molon Giovanni s.n.c.
to fit
BCS Power Units

Operating Instructions
Before commissioning the machine, read operating instructions and observe warning and safety instructions.

PLEASE ALSO READ ORIGINAL MOLON INSTRUCTION MANUAL
IMPORTANT

PLEASE READ THE OWNER’S MANUAL FOR THE POWER UNIT FIRST.

FOR ANY FURTHER INFORMATION OR ASSISTANCE PLEASE CONTACT TRACMASTER ON 01444 247689 OR VISIT WWW.TRACMASTER.CO.UK

IMPORTANT
READ CAREFULLY

No liability will be accepted for any damage caused to persons or property through failure to observe the operating and safety instructions.
INTRODUCTION

Guide to the consultation
Congratulations on your purchase of a MOLON machine. This machine has been developed by engineers with years of experience on the field and it is built to the highest MOLON quality standards. This manual will help you to know better and to appreciate the features of your machine and it is considered integral part of the machine itself. This machine can be relied on to last a long time without inconveniences and accidents if used in the correct way; for this reason, it is necessary to read carefully these pages before setting up and using the machine. The manual, or a copy of it, must always be on the machine to be consulted by the user.

Pay attention to this symbol; it indicates the most dangerous operations and situations.

This symbol points out a note or a very important warning.

Machine identification
The machine is identified by the data which are indicated in the label.

The label is stuck on the frame and it is well visible (fig. 1); it carries the following data:

Model
Serial No
Year
Weight
R.p.m. max./1'
Using the Hay Rake

MACHINE EMPLOYMENT
The machine is a hay-rake tedder. Use it only and exclusively for raking and tedding hay and cut grass.
The manufacturer declines any responsibility for a different use from the described one.
Familiarize yourself with the operating controls and the correct use of the machine.

Never permit children or inexpert to operate your machine.

Avoid working whilst people, especially children and pets, are nearby. Keep in mind that the operator is responsible for accidents to people and to their property.
The user must know the characteristics and the safety procedures of the machine.
The accident prevention rules and any other requirement of safety and of occupational medicine must always be observed.

The manufacturer declines any responsibility for possible damages deriving from any arbitrary change on the machine.

Do not get on the machine whilst working, nor have yourself carried by it.

ACCIDENT PREVENTION MEASURES
Follow the instructions described on the labels stuck on the machine.

Scour the area where the machine is to be used and remove all foreign matters (stones, wire, sticks, etc...).
Using the Hay Rake

Carry out the checks, the operations of maintenance, adjustment and repair when the machine is not working and is unhooked from the tractor.
In case of road haulage, the highway code rules have to be observed.

Danger through rotating parts! It is absolutely forbidden to take away or to damage the guards and to use the machine without them.

Danger through thrown objects! The machine can throw objects or stones that may lie on the ground.

It is forbidden to stay within the working radius of 10 m.

Do not carry out operations of cleaning or maintenance with engine on, nor with connected power take-off.

While working in presence of dust, wear a mask and glasses to protect your throat and eyes if your tractor is lacking a cabin.
The acoustic pressure level is inferior to 70 dB.
The safety signals are (fig. 2):
A= Before the use of the machine, read the manual.
B= Danger through thrown objects; keep the safety distance.
C= Danger through drive belts; do not take away the guards with machine on.
D= Turn off the engine and take away the key before any operation of repair and maintenance.
The corresponding labels are stuck on the machine in the indicated places. (fig. 3)
These signals must always be visible and, when lost or illegible, they have to be replaced with original ones.
Remember that a prudent operator is the best security against any accident.

**USE OF THE MACHINE**

_Checks and advice before starting to work_

The machine hooks directly to the connection of the motor mower in place of the cutter bar.

- Tighten strongly the fastening screws or make sure of the perfect connection in case of quick connection.
- Fasten the supporting foot, which is near the connection, in high position, far from the ground.
- The power take-off of the tractor must not exceed the speed indicated on the machine (R.P.M. max./ 1').
- Do not operate the machine barefoot or in open-toe sandals. Always wear substantial footwear and long trousers.
- Work only in daylight or in good artificial light.
- Walk, never run.

⚠️ Always be sure of you footing on slopes. Work across the face of slopes, never up and down. Be careful when you are changing direction on slopes. Do not work on excessively steep slopes.

_The controls_

Steering lever for the control of the wheel direction from the driving seat.

Each one of the two supporting wheels has got a screw clamp for the adjustment of the height above ground level on the right or left side of the machine (fig. 4).
Using the Hay Rake

*Guide for the user*

-Hay-rake-
Position the machine parallel to the ground and lower the combs till they skim the ground. Adjust the lateral rake to the width you want (fig. 5). Avoid stopping near the row when the combs are moving; if you need to, disconnect the power take-off.

-Tedder-
Position the wheels so that the machine results higher (3 or 4 cm) on the side of the unloading of hay (fig. 6). Remove the lateral rake.

The maximum speed of advance is 5 Km/h.

*Adjustments for the use*

Before starting to work, control that the teeth are in good condition and well fixed. In case of breaking of some teeth, you must buy the original spare parts (code 818).

Often control the plastic bearings and the bushings which drag the combs: these parts, which are subjected to wear and tear, must be replaced when their minimum thickness is 4 mm. Their replacement, like any operation on the V-belts, must be entrusted to skilled workers.

Make sure that the protective sheets are correctly fixed after each operation.
Troubleshooting & Maintenance

*Bad working and failure research*

<table>
<thead>
<tr>
<th>Inconvenience</th>
<th>Cause</th>
<th>Remedy</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>The combs drag the hay on the upper part</td>
<td>slow speed of the tractor</td>
<td>increase the speed</td>
<td>possible accumulation of hay on belts and pulleys</td>
</tr>
<tr>
<td>accumulation of hay on belts and pulleys</td>
<td>incorrect use</td>
<td>unhook the machine from the tractor and remove the hay</td>
<td>never operate if the machine is connected to the tractor</td>
</tr>
<tr>
<td>the combs do not rotate</td>
<td>the drive belt is broken</td>
<td>replacement of the belt by skilled workers</td>
<td>never operate if the machine is connected to the tractor</td>
</tr>
<tr>
<td>the combs do not rotate</td>
<td>loosen belts</td>
<td>the belts have to be tightened by skilled workers</td>
<td>never operate if the machine is connected to the tractor</td>
</tr>
</tbody>
</table>

**MAINTENANCE**

*Periodical maintenance*

Any maintenance operation must be carried out by qualified workers according to what is written in this manual.

![Fig. 7](image)

- When you have to carry out an operation of maintenance, you must turn off the tractor engine and disconnect the power take-off.
- Only suitable tools must be used and they have to be in good condition.
- Often grease (at least every 8 hours of work) the part near the connection, which is provided with a grease cup (fig. 7).
- Never grease the belts and the plastic parts!
- Control that the thickness of the plastic parts is superior to 4 mm.
- Control the tyre pressure (2,5 bar).

*Teeth replacement*

To replace a couple of teeth (code 818), you must loosen the nut (code 133)
which locks the connecting tang (fig. 8). Replace the new couple of teeth and take care of the perfect joint between the tang and the seat on the comb which carries the teeth; then fasten the nut strongly.

Extraordinary maintenance
Any operation of extraordinary maintenance must be carried out by skilled workers and it consists on the control of the V-belt conditions and also, if necessary, on the tightness or replacement of the belts, on the check of wear and tear of plastic parts with possible replacement of these last if their thickness is inferior to 4 mm.

INACTIVITY
Setting for a stop
Clean the machine when it is unhooked from the tractor and remove possible hay, remnants and dust, then do the operations of ordinary maintenance. Cover the points of the teeth which are turned up with the proper accident preventive protections the machine is provided with (fig. 9). Block the machine to avoid displacements caused by accidental collisions. The user will benefit from finding the machine in perfect conditions when he starts working again.

Restarting
Control the tyre pressure (2,5 bar) and remove the protections from the teeth.

MACHINE TRANSPORT
The machine can easily be lifted by a crane through two belts, type- tested for its weight, which must be placed, the first on the connection and the other on the connection longitudinal frame members of the wheels (fig. 10).
Transporting the Hay Rake

The points of belt placement are indicated on the machine by proper labels (fig. 11). For the operations of loading and unloading, the machine must be placed on a level ground, with sufficient surrounding space.

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**Technical data**

<table>
<thead>
<tr>
<th>Model</th>
<th>Combs nr.</th>
<th>Belts nr.</th>
<th>Working width cm</th>
<th>Maximum width cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>MINI 100</td>
<td>7</td>
<td>1</td>
<td>100</td>
<td>140</td>
</tr>
<tr>
<td>MINI 120</td>
<td>8</td>
<td>1</td>
<td>120</td>
<td>150</td>
</tr>
</tbody>
</table>

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**DEMOLITION AND GETTING RID OF THE MACHINE**

Proceed to demolition and getting rid of the machine according to the regulations in force so as to avoid ecological damages.
Manufacturer Information

This machine is manufactured in Italy by Molon Giovannie s.n.c.
Tracmaster Ltd is the UK distributor for these models, the TR65 and TR85 Flails.
Please ensure you read the original manufacturer’s manual before operating this machine.

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