MOUNTED SPRAYER

MANUAL USE AND MAINTENANCE

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This manual contains all necessary information for the use and maintenance of your machine. We suggest to carefully read and follow the indicated information.

Keep this manual in an accessible place, so that you can have it ready in case of need.

GUARANTEE CONDITIONS

The guarantee period is of 12 (twelve) month.

M.M.'s responsibility is strictly limited to the replacement and/or repair of the parts, which after an inspection are recognised to be defective in manufacture or workmanship. The transport charges of parts recognised under guarantee, as well as the labour costs for their removal and replacement, are not included in the guarantee.

On delivery the customer should inspect the weeding unit for possible damages which might have occurred during transport.
He should also check that the machine fully complies with the ordered model and that the machine is equipped with the ordered accessories.
Eventual claims should be communicated in writing when he has complied with the guarantee conditions.

The guarantee is not valid in cases of normal wear, un proper maintenance, bad use, negligence or accident, or when the pump is operated over 540 RPM.

The guarantee right is forfeited when the customer carries out tempering or repairs without the consent of M.M. srl or their agent, and/or installs not original spare parts.

The guarantee right is lost also when the customer does not follow the indicated in the use and maintenance manual.

In no case M.M. srl is responsible for any kind of expenses, loosen damages which are caused by use, or un proper use, or by partial or total operation defects.

The guarantee not included the parts of standard wear like: NOZZLES, FLEXIBLE PIPE, PRESSURE GAUGE, PNEUMATIC WHEELS, etc….

REFERENCES NOTES

In order that the manual may be read quickly and rationally, symbols have been employed that highlight practical advice situation in which great care must be taken.

ATTENTION ! WARNING !

Pay maximum attention to the meaning of the symbol their aim is not to have to repeat safety warnings and as such should be considered as proper "reminders".

GENERAL SAFETY REGULATIONS

Before operating the weeding unit read the present use and maintenance manual carefully.

It's strictly prohibited to drive or entrust the driving of the tractor to minors.

Use suitable clothes.

Avoid direct contact with the liquid mixture or with its residual.

Keep hands and clothes far from any moving parts of the machine and of the tractor during operation.

Before operating the weeding unit and during its movements.

Never carry out repair or maintenance works when the weeding unit is in operation and/or when some machine's parts are moving.

Use the machine only for weeding treatments but not for other purposes.

All the operations for coupling and adjusting the machine must be carried out in a horizontal position with the tractor stopped.

During adjustment and maintenance don't enter in the tank with head and body because the weeding products used can emanate toxic fumes.

During the transport make sure the boom in closed and fixed at the safety- bolts.

SAFETY AND PRECAUTIONARY MEASURES FOR THE USE OF THE CARDAN SHAFT

Use the cardan shaft only for the tool it was made for.

Before putting the weeding units and the tractor into operation, check that the cardan shaft is properly secured to the tractor PTO and to the pump splined shaft.

Take into consideration the power which should be transmitted.
Make sure that 550 RPM. are not exceeded in order to avoid inconveniences and damages.

Keep the fastening chain connected and check that it's compatible with the maximum angle allowed by the cardan.

Do not remove the protection devices unless the machine is out.

Never approach the cardan shaft when it's moving and however.

Grease and check the conditions of the cardan shaft every 10 operating hours.

SELECTION AND APPLICATION OF CARDAN SHAFTS

When a cardan shaft operates with its two articulated joints at different angles, its movement is irregular. Such irregular movement is absent when the difference between the two angles is zero, that is to say 1 = 2.

1) the shaft is only to be used for towing the pump:
   - greater differences between the two joint angles, and hence a certain irregularity in movement, may be acceptable, as illustrated in the specialist catalogues.
2) During turns, the cardan shafts exert an axial thrust upon the shafts to which they are connected. Such degree of force may cause breakage of certain pump components. Therefore, to keep them within acceptable limits, both the joints and the telescoping shafts must always be well lubricated, in accordance with the manufacturer's instructions.
   In addition, at the maximum turning angle the shaft must never reach the fully closed condition, i.e. its minimum length, because this will result in breakage of its components.
   To minimize axial stresses, there are shafts available on the market with rilsan-coated telescoping tubes, and other new-generation products with special multiple-lobe sections, which can reduce the axial loads generated during telescoping by one half. For further information consult the manufacturers.

SAFETY REGULATION FOR SANDING AND WEEDING PRODUCTS

Handle weeding products with care.

Use suitable clothes.

No persons and animals should be present in the weeding area, both before and after the weeding treatment.

Do not weed when is windy.

Do not repair or disconnect pipes under pressure.

It is forbidden to person, other than the user, approach the operating weeding units.

INTRODUCTION

This weeding unit operate from the tractor's power take-off and it is pre-set for operation a maximum of 550 rpm.
The transmission of the tractor's power take-off to the pump, take place by means of a cardan shaft, which must be always of type protected with a casing.
The pump takes the product from the tank and sends it under pressure to the nozzles the boom.

PRELIMINARY CHECKS

Before starting and periodically, make sure that the oil is not at tool low a level.

USE OF THE UNIT

The unit must be used exclusively to spray plant protection and pest control products on vineyards, orchards, and tree crops in general. It is also possible to use the unit for disinfections and disinfestations, but in these cases you must contact our technical service office to verify that the product to be used is suitable.

Do not use the unit with inflammable liquids or liquids with properties that are not compatible with the correct functioning of the unit.

Any other use is considered improper.
Products used with this unit must be used in the amounts and according to current laws in your country.

CHECKS AND OPERATION TO DO BEFORE USE

1) check that tow hook higher and length be correct.
2) check that axle shaft width be in conformity to the own requirements.
3) check the oil level in the pump (see the enclosed manual).
4) To avoid air infiltration, the suction hose must be firmly attached to the pump, make sure the hose has no kinks which cause improper flow of liquid.
5) Check that the fixing bolt on the pump support are correct fixed.
6) Connect the machine to the tractor through the tow – hook using the pin on the towing eye.
7) Gear the protect cardan shaft with the PTO tractor to the pump shaft.
8) Check that all fixing – pin on the cardan shaft are in the correct position and not wear.

SPECIFICATION OF THE UNIT

This product is in conformity to the essential safety law and the health protection as per directive 89/392 CEE and subsequent amendments.
This machine is a weed killed sprayer trailed units with pulverizing liquid through the nozzle. The frame is complete painted. Supplied with adjustable axle on the width and tow-hook.
The frame support a polyethylene tank. In the front of the unit is fixed the pump and on the same level there is the connection to the PTO tractor through the cardan shaft.

STARTING THE UNIT

1) Fill the tank.
   ATTENTION! during the loading and after it, check the suction filter be clean.

2) start up the PTO tractor to give movement to the pump.
   Using the clutch pedal with gentleness. To be avoid no damage the cardan transmission and the other mechanical parts of the machine.

3) Adjust the pressure of the pump to the level adequate for the type of application. (using the handle on the control unit).

the pressure not exceeding maximum value as indicated on the pressure gauge.

check the RPM of the PTO: not exceeding 540 RPM on the max. speed. The perfect functioning of the pump depends on the speed it's run at.

4) check that the pressure gauge not fluctuates badly. (in case of fluctuates badly, the pump is drowning in air).

COMPONENTS DESCRIPTION

PUMP
(see enclosed pump manual)

TANK
FILLING THE TANK
Filling the tank can take by simple gravity feed.
Gravity Feed-The water is put in by simple gravity feed from a special tank positioned at higher level than the loading mouth of the machine tank.

CONTROL UNIT
(see enclosed pump manual)

PUMP INLET FILTER
This filter prevents impurities or residues entering the pump. Periodically check that all pipe-holders clamps on the tank-pump inlet connections are in good working order and that the filter coupling are well tightened so that there is no intake of air.
Periodically make sure the cartridge inside the filter in clean and in good working order.
If the pump intakes air, the finger on the pressure gauge will oscillate continuously.
For correct operation, the pressure gauge finger must be steady at the required pressure valve.

HYDRAULIC AGITATOR
The hydraulic agitator is driven by the pump, which allows part of the inlet liquid into tank at high pressure. In this way a continuous movement of the liquid in the tank is generated and prevents the formation of deposits.

WEEDING BOOM
The booms can be mechanical.
The opening and closing of mechanical booms is manual.

MAINTENANCE OF THE MACHINE

CLEANING AFTER EACH TREATMENT
- at the end of treatment, to open the exhaust-valve and pick up the residual liquid.
- to clean the tank in and out.
- during the cleaning tank don't enter into the tank..
- cleaning the pump with clean water at zero pressure.
- to clean the pump inlet filter.

PERIODICAL MAINTENANCE
- to grease all the parts where are pre-dispose for the greasing.
- check the inlet apparatus, the filter must be clean, the pipes must not be choked and make sure there are no air intakes.
- to clean the small filters periodically and replace the small plates whenever these are widened excessively through wear.
- check the oil level and if necessary, top up.
- check the air pressure in the pressure accumulator.
- empty the pump of all water during cold spells.

WARRANTY CERTIFICATE

Starting from date of delivery the machine is guaranteed for 12 (twelve) years for commercial use and 24 (twenty-four) for consumer use *.

Parts subject to normal wear,(o-rings, valves, pistons, electric parts and accessories such as lances, guns, hoses and etc.)are not covered by warranty, unless they have natural faultinesses which must have been attested by an authorised Service Dealer.
Warranty consists in replacement, free of charge, only of parts that are defective in material by manufacturing defects and are not for a fortuitous event, damages occurred during transport , for negligence, or for inexperience or incompetence when using the machine (please always read the operator/owner manual).

The ordinary maintenance and the preparation of the machine must be done by the buyer.

The buyer cannot make use of the warranty when he makes an improper use of the unit, when he modifies or alters its instruction or its working, or when a non authorised service Dealer repairs the machine.

Furthermore the warranty does not cover damages occurred to the machine that results from a non respect of all the instructions you find in the owner manual, ice or bumps.

Any cost for shipment, workmanship and sending back of the unit will be borne by the buyer.

The company or the distributor are not responsible for any direct or indirect damages, caused to person or things due to average of the machine; nor for the installations or for the use which are not in compliance with laws and rules on the subjects.
The guarantee not included the parts of standard wear like: NOZZLES, FLEXIBLE PIPE, PRESSURE GAUGE, PNEUMATIC WHEELS, etc….

- **For purposes of this warranty policy, "consumer use" means personal residential household by the original retail consumer. "Commercial use" means all other possible uses, including use for commercial, income producing or rental purpose.**
- **Once a machine has experienced commercial use, it shall thereafter be consider as a commercial use machine for purposes of this warranty. Machines used on commercial or rental tracks are not warranted.**

TERMS OF DELIVERY :transport of goods charged to the consignee, even if the goods are free delivered

COMPETENT COURT : the court of MODENA will have legal jurisdiction for any and all disputes.

Any claim must be notify in written within 10 days after receipt of the goods

Model :_____

Buying date : _____

Name of the buyer : _____

Address : _____

Postal code : _____ City : _____

Stamp of the seller

DICHIARAZIONE CE DI CONFORMITA'

CE CONFORMITY DECLARATION

DECLARATION DE CONFORMITE' CE

IT Con la presente si dichiara che:

il prodotto: GRUPPO PORTATO CON ATTACCO A TRE PUNTI

TIPO GP 120 - 200 - 300 - 400 - 500 - 600 - 800 - 1000 LT

LOTTO DI PRODUZIONE: 20-06-2011

è conforme alle disposizioni pertinenti e in vigore:

2006/42/CE (Direttiva "Macchine")

Norme armonizzate applicate:EN 12100-1-2/2009 EN 4254-1-6/2010 EN 12761-1-2-3/2004

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GB We hereby declare that the following machine:

Product type: 3-POINT LINKAGE MOUNTED SPRAYER

TYPE GP 120 - 200 - 300 - 400 - 500 - 600 - 800 - 1000 L

BATCH PRODUCTION : 20-06-2011

conforms to the relevant and applicable rules of:

2006/42/EC ("Machine" Directive)

Harmonised standards applied : EN 12100-1-2/2009 EN 4254-1-6/2010 EN 12761-1-2-3/2004

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F On déclare que la suivante machine :

Produit: PULVERISATEUR PORTE' 3-POINTS

Type GP 120 - 200 - 300 - 400 - 500 - 600 - 800 - 1000 L

LOT DE PRODUCTION : 20-06-2011

répond aux dispositions pertinentes et applicables :

2006/42/CE (Directive "Machines")

Normes harmonisées appliqués: EN 12100-1-2/2009 EN 4254-1-6/2010 EN 12761-1-2-3/2004

IL FABBRICANTE : M.M. S.R.L.
THE MANUFACTURER: Via Raimondo Dalla Costa 110
LE FABRICANT : 41122 Modena - IT
Persona autorizzata alla costituzione del fascicolo tecnico: Montanini Andrea
Authorized person to the establishment of the technical file: Via Raimondo Dalla Costa 110
Personne autorisée à l'établissement du dossier technique: 41122 Modena IT

Modena 22/11/2010

Firma del Legale Rappresentante

Montanini Rino

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