

OPERATING INSTRUCTIONS ATV MULCHING MACHINE 800-ATVM100



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1 Introduction

Dear Customer and User!

Thank You for Your trust which has been demonstrated by purchasing of our product.

This mulching machine is intended for mowing large meadows. The height of growths must not exceed 0.6 m.

Please, read these operating instructions carefully.

1.1 Basic Notice

The user is obliged to become acquainted with these operating instructions and to respect all instructions regarding an operation of the machine to prevent any danger the user's healthy and property and of other persons.

Safety instructions being contained in this manual cannot describe all the possibilities and situations which could occur during practical applications. Safety factors as a common sense, carefulness and diligence are not a part of this manual, but it is supposed that every person using this machine or performing its maintenance possess them.

Only sane and physical healthy persons can work with this machine. If the machine is intended for professional applications, the owner of the machine is obliged to secure training in the occupational safety and operating the machine for the persons supposed to work with the machine: The owner is obliged to keep records about the education training and to perform a so called categorization of works according to particular national laws.

If You won't understand some information in this manual, do not hesitate and contact Your dealer or direct the machine manufacturer.

Operating instructions delivered with the machine represent an integral part of it. The operating instructions must be available at any time, be saved on an accessible spot and protected against destroying. If the machine is sold to another person, the operating instructions are to be handed over on a new owner.

The manufacturer is not responsible for any risks, dangers, accidents and injuries caused by the machine operation if the above mentioned conditions are not met. The manufacturer is not responsible for damages caused by an unauthorized use, a wrong operation of the machine and for damages due any modifications of the machine without the permission of its manufacturer.

During work it is necessary to respect safety regulations in order to eliminate an injury danger for himself/herself, persons in the area or damages of properties.



If You will see this symbol in this manual, read the following notifications carefully!



This international safety symbol indicates important notifications regarding the safety. If You will see this symbol, be alert because of the injury danger for himself/herself and other persons and read the following notifications carefully.

Table 1: Symbols

The manufacturer reserves a right to technical modifications and innovations which does not affect the machine function and its safety.

These modifications could not be contained in these operating instructions. Misprints are reserved.

2 Operational Safety

The machine has been designed in reference to maximal possible protection of persons against flying parts of growths under mowing. Do not remove any passive or active safety elements. So could expose you to an injury risk.



2.1 Safety Regulations



Operating personnel of the machine must be above age of 18 years. They are obliged to become acquainted with instructions for the machine usage and general principles of the occupational safety.



Stop always the engine and wait till the supporting cylinder of knives stops before you are going to perform any activities close the machine! Before you leave the machine, stop the engine!



Before every use of the machine check if some of its parts (especially working machinery or covers) are is not damaged or loosed. The ascertained mistakes must be removed immediately. Use only original spare parts for repairs.



A growth under mowing is to be removed of solid bodies (e.g. stones, wires, free construction rests, etc.), which could be ejected or which could damage the machine. If it is not possible, avoid such places.



The machine is equipped with a rotational working tool. Pay attention that other persons are in a safe sufficient distance during work of the machine (possibility of flying the growth under mowing or ejecting solid objects)!



During work it is necessary to use operational aids approved according to ČSN EN 166 or ČSN EN

Do not start the engine in closed rooms! Pay attention during handling the machine. After stopping the engine its exhaust silencer stays hot. Pay attention that during refilling the fuel no escape and stains of engine parts occur. If it be to the contrary, dry the stained parts or wait till the gasoline evaporates.



During work the machine every other (especially children) and animals must be out of the machine working space. The operating personnel can continue work after their expulsion into the safe distance.



It is not allowed to remove all the protection equipment and covers from the machine.



Maximal tilt of the engine may be 20° on a long-term basis, 30° on a short-term basis.



All repairs, adjustments, lubrications and cleaning the machine must be performed in still stand of the machine, the spark plug cable is to be disconnected.



2.2 Noise and Vibration Values

- Declared value of emission sound pressure level A in an operational site of the operating personnel $L_{pAd} = 86.0 + 4.0 [dB]$ (measured according to ČSN EN ISO 4254-12 and ČSN EN ISO 11201).
- Declared value of sound power level A L_{WA,d} = 102 + 4 [dB] (measured according to CSN EN ISO 4254-12 and ČSN EN ISO 3744).
- Aggregate acceleration of vibrations transferred to hand-arms of the operating personnel and emission acceleration of total vibrations affected the operating personnel during working on the machine, being dominantly emitted by the push machine of ATV.

Note:

- Mentioned values of emission levels are in force for operating the mulching machine itself without noise emissions of push machine of ATV.
- In consideration of a value of the declared emission sound pressure level A in an operational site of the operating personnel it shall be necessary to use personal protective devices against the noise being effective for the above mentioned noise level.

2.2 Safety Picture-Writings

The user is obliged to keep picture-writings on the machine in readable conditions and in a case of damages to perform their renewal.



Fig. 1: Read the operational instructions before using the machine.



Fig. 2: Injury risk due flying fragments, chippings, ejected objects, etc. Other persons and animals – keep the safety distance to the machine.



Fig. 3: Do not touch anything in the wedge-shaped belt space.



Fig. 4: It is not allowed to put hands or legs into the working space of the mowing knife – danger of cutting.

3 Basic Information

3.1 Machine Applications

The ATVM-100 mulching machine has been designed and produces according to latest knowledge in the field of the small garden and agriculture technology. It is represented by an easy controllability, by a silent high-performance economic engine of HONDA and a trouble free maintenance.

This mulching machine is intended for mowing grass growths in meadows pup to maximum height 60 cm in maintained areas. Areas must not contain solid objects in the growths and bigger unevennesses. The mulching machine is not intended for for modifications of grass growths in parks.

A use for any of not intended purposes shall be observed as the use for a not intended purpose!



The mulching machine can be operated in all tilted positions determined by the engine manufacturer and by the manufacturer.

Protective equipment is in accordance with requirements of the EN 12733 and ČSN EN 12733 standards. These standards especially take into account the operating personnel safety. The operating personnel must not be attacked by stones or other objects ejected by the rotational system of the machine. Because of that the operating personnel must be always situated in the normal control position, i.e. behind the machine.



It is not allowed to remove all the protection equipment and covers from the machine.

3.1.1 Technical Data

ATVM-100	Value	Unit
Length:	770	mm
Width:	1,215	mm
Height:	785	mm
Width of the machine stroke:	1,000	mm
Weight:	81	kg
Rotation speed of the supporting cylinder of knives:	2,080	min ⁻¹

Table 2: Technical information about ATVM-100

3.1.2 Information about the Engine

Motor	Value	Unit
Туре:	-	HONDA GX-270
Engine cylinder capacity:	cm ³	270
Boring x stroke:	mm	77 x 58
Maximum power / at rotational speed:	kW/min ⁻¹	6.3/3600
Maximum driving torque / at rotational speed:	kW/min ⁻¹	19.1/2500
Fuel consumption:	l (liter)/hour	2.4
Tank volume:	l (liter)	5.3
Fuel:	-	gasoline of octane index 91-
		95
Oil volume in the engine:	l (liter)	1.1
Oil quality:	-	SAE 10W30
Spark plug:	_	BPR6ES (NGK) W20EPR-
орат річу.	_	U (DENSO)

Table 3: Technical information about the engine

3.2 Description of the Machine and its Parts

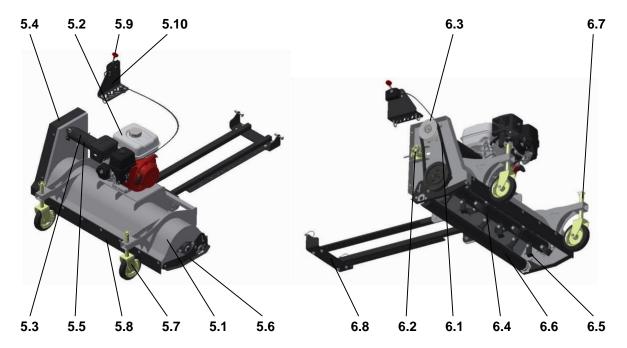


Fig. 5: Machine description - view A

Fig. 6: Machine description - view B

A main part of the ATVM-100 mulching machine consists of a welded steel body structure (5.1). The engine (5.2) is situated in the middle because of the machine balance. The force of the engine is transferred by means of a shaft (5.3) to a belt gear protected by a cover (5.4). This shaft is also situated between two covers (5.5). The belt gear is provided with two belts (6.1), an tension pulley (6.2) and a centrifugal clutch pulley (6.3). This system is intended for activating and deactivating the supporting cylinder of knives (6.4). This cylinder is provided with knife flappers (6.5). Mowing height is 20–100 mm. This height can be adjusted by means of a slip roller (6.6) loaded in side stiffeners (5.6) and by means of front pivot wheels (5.7). These pivot wheels are provided with shifting rings (6.7) intended for height settings. There is a protective rubber ledge (5.8) in the front bottom part of the machine. A gas lever (5.9) of the engine along is fixed into a supporting bracket (5.10), which is situated on the ATV pressure machine at the driver's place. The mulching machine is fixed to the ATV by means of a connecting frame (6.8).

4 Operating Instructions

4.1 Assemblage of the Machine

You can ask Your dealer for unpacking the machine and instructions as a part of pre-sale servicing!

4.2 Specifications of the Carrier (ATV)

After connecting the mulching to the ATV, the total weight must not be exceeded.

There shall be taken into account the operating weight of the ATV + the mulching machine weight (81 kg) + the operating personnel weight.

The operating and total weight is stated by the ATV manufacturer in the Service Manual.

The ATV stability gets worse with the mulching machine connected.

4.2.1 Operation on Communications over Land

The mulching machine is not approved to be operated on communications over land.

4.3 Connection of the Machine to ATV

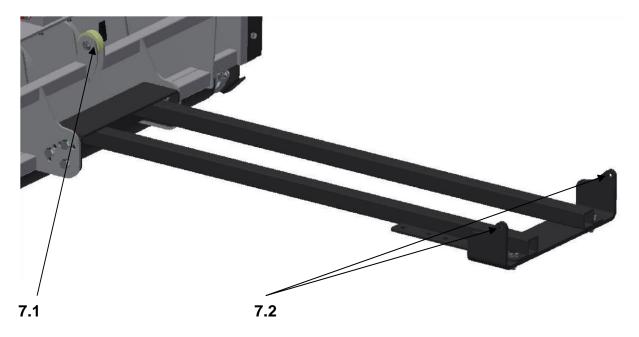


Fig. 7: Connection of the Machine to ATV

The machine can be connected to the adapter installed in the ATV bottom part by means of two pins intended for openings (7.2). Loose the pulley (7.1) and pull a cable from the ATV reeler through. Mount the pulley back. Fix the hook on the protective frame of the ATV bonnet.

4.4 Putting into Operation

Read the instruction manual of the engine carefully first of all! You can prevent an eventually damage of the engine.

- 1. Connect the machine to ATV;
- 2. Lift the machine on the maximum height by means of the ATV reeler;
- 3. Check if the pulley control lever is not activated;
- 4. Start the engine. The engine start is closely described in the attached service manual of the engine.



Do not leave the machine.

4.4.1 Starting Up the Knives Supporting Cylinder



Check, if all persons, animal and children are in safety distance from the machine! If it is not the case, do not continue the activity!

- 1. Start the engine,
- 2. Set maximum revolving of the engine by the gas lever. (If the engine is cold, let it warm at maximum revolving for about 1 minute),

4.4.2 Machine Stop

- 1. Move the throttle lever to the position. When the speed drops, the centrifugal clutch disengages. In that way the supporting cylinder of knives progressively stops.
- 2. Shift the gas lever into the MIN position,
- 3. Put the engine switch into the *OFF* position.



Before launching any activity in the close area of the machine, switch always the engine off and wait till the moving cylinder with knives stops! Before you leave the machine, stop the engine!

Never leave the engine running at maximum revolving on a long-term basis or idling at \bigwedge the clutch of a drive of mowing discs and the taxi clutch switched off! Machine drive parts (V-belts, drive pulley, the clutch pulley, etc.) can be damaged!

4.4.3 Mowing on the Slope



Do not use the machine on wet grass. Do not mow on strong slopes.



The safe slope access of the machine is 10°. Mowing on strong slopes you could made on your own responsibility.

4.5 Work with the Machine

4.5.1 Stroke of the Machine

A stroke width must always match with the growths density.

4.5.2 Selection of Taxiway Speed

There is a main principle that the more higher or denser growth are, the slower must be the taxiway speed.

Taxiway speed [km*h ⁻¹]	Application:
0	Starting the engine
2	Operational speed for very dense and middle high growths
3.5	Operational speed for middle dense and middle high growths or for dense and low growths
5	Operational speed for very thin and low growths

Table 4: Taxiway speeds

4.5.3 Adjusting the Operational Height

The operational height is to be selected similarly as at taxiway speed according to the height and the density of growths. That means the higher and denser growth, the operational height must be higher.

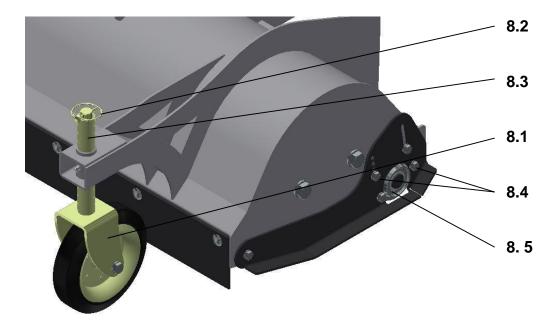


Fig. 8: Adjusting of the operational height

The operational height adjustment is to be perform in such a way that the machine is going to be lifted into the upper position by means of the ATV reeler and secured with supporting trestles.

The engine must be switched off.



Procedure:

Hold a circlet with the bracket (8.1) and remove the securing pin (8.2). Shift the circlet out. According to need let rings (8.3) on the bracket and shift the circlet back into its bearing. Shift remained rings on the bracket and secure them by a pin.



Loose the screw connection (8.4). Adjust a height of the slip roller (8.5). Install the screw connection back.

4.5.4 Way of Mowing Growths



A growth under mowing is to be removed of solid bodies (e.g. stones, wires, free construction rests, etc.), which could be ejected or which could damage the machine. If it is not possible, avoid such places.

Adjust maximum revolutions of the engine, let run the supporting cylinder with knives on the maximum revolutions and then start driving against growths which you want to mow. The growth under mow will be crushed and directed into the space below the machine.

If the growth under mow is very dense, overgrown, rotted or depressed, it is necessary to reduce the machine stroke with in order to prevent big reducing resolutions of the supporting cylinder of knives and therefore to the degradation of the mulching quality.

4.5.4.1 Problems during Mowing



The engine must be always switched off during cleaning the space around the supporting cylinder of knives!



Pay especially attention during cleaning the space around the supporting cylinder of knives! Blades of knives are sharp. Use protecting gloves at cleaning!



Before you want to continue with any activity on the machine or in its area you must always wait till the supporting cylinder with knives stops.

1. The supporting cylinder with knives reduces its rotation speed, the same goes for the engine, but it does not stop.

Stop the ATV pushing machine. Lift the mulching machine. Drive the ATV back. Let the mulching space clean automatically. You can continue forward.

- **2.** The supporting cylinder with knives has stopped, the engine has switched itself off. Stop the ATV pushing machine. Lift the mulching machine. Drive the ATV back. Clean the mulching space. Start the engine. Set the maximum speed. You can continue forward.
- **3.** The reaped growth cannot go through below the mulching machine (due very density of the growth).

Use a lower taxi speed and reduce the stroke width.

5 Maintenance, Service, Storage



During a maintenance the machine is going to be lifted into the upper position by means of the ATV reeler and secured with supporting trestles.



The engine is to be switched off and the cable of the spark plug removed!

In order to save satisfaction with our product on a long-term basis it is necessary to pay attention to a due maintenance and service. The regular maintenance of this machine is going to prevent a quick wear and tear of it and to assure the correct function of all its parts.

Respect all the instructions regarding maintenance intervals and adjustments of the machine. We recommend keeping records regarding numbers ow working hours of the machine and its working conditions (for needs of a service). We recommend perform the after-season machine maintenance by some of our authorized service centers. The same goes for the common maintenance if you are not sure in your technical skills.



Before every use of the machine check additional tightening of screws fastening the knives and its supporting cylinder.

5.1 Lubrication of the Machine



Respect the basic hygienic regulations and regulations of environmental safety during work with the machine.



If you are not sure in your technical skills, let that perform it at a professional service center.

It is necessary to pay duly attention to the lubrication in order to secure trouble free and easy movements of all the mechanical parts. In most cases a few oil drops are enough (e.g. oil intended for bicycles).

5.1.1 Renewing Oil in the Engine

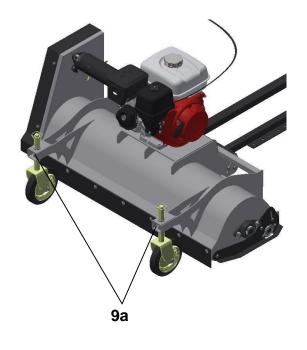
Respect instructions in the service manual of the engine. Reduce the renewing interval to one half provided that the machine works in dusty environment.

(i)

If you are not sure in your technical skills, let that perform it at a professional service center.

5.1.2 Greasing Points

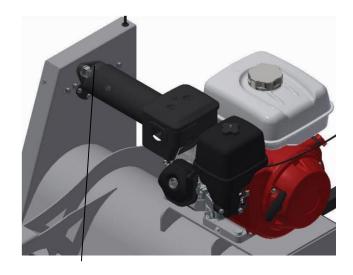
The greasing points are accessible without dismantling covers. Any engine or gear oil or oil in a spray is suitable for lubrication. Any grease (lubricating grease) intended for greasing water pumps is completely sufficient. However it is mostly necessary to dismantle the particular plain-bearing for its application. If a grease with graphite ingredients, it is possible to prolong the greasing intervals in a season up to **25** hours.



10a 10b 10c

Obr. 9: Greasing points

Obr. 10: Greasing points



11a

Obr. 11: Greasing points

Greasing points – description	Interval in a season	After a season	Lubricant	Figure
Bowden cables	min 2x (5 drops)	yes	oil	-
Bushing front wheels	-	yes	grease	Fig. 9
Bearing housing of the supporting cylinder of knives	-	yes	grease	Fig. 10
cover cases	min 5x	yes	grease	Fig. 10
Tin bearing housing of the slip roller	min 2x (5 drops)	yes	oil	Fig. 10
Bearing housing of the shaft	-	yes	grease	Fig. 11
Adjustable tension pulley of the supporting cylinder of knives	after 10 hours (2 drops)	yes	oil / grease	Fig. 12

Table 5: Greasing intervals

5.2 Sharpening and Exchanging Working Knives

if you are not sure in your technical skills, let that perform it at a professional service center.

If blades of working knives are worn out or damaged because of vibrations of the machine, the blades are to be renewed or the knives exchanged.

The manufacturer is not responsible for damages of the machine in a case of unprofessional repairs of knives without using original spare parts. There is a mark impacted on a knife which determines the manufacturer and represents a check mark of the fact that the knife is an original spare part.



The machine must be situated on a solid pad and secured in such a way to secure a good access to the knife and to prevent any unwanted automatic movement of the machine.



Pay attention to enhanced security during disassembly of knives. Blades of knives are sharp. Use protecting gloves!



The engine is to be switched off and the cable of the spark plug removed!

Procedure:

- 1. Loose the screw connection of knives by means of two wrenches No. 17;
- 2. Remove knives and a bearing ring from the supporting cylinder. Align blades and sharp blades of the knife. An inclination of the sharpened blade should be 30° in reference to the bottom plane of the knife;
- 3. Check if the ring is without any visible damage. If it be to the contrary, renew this part.
- 4. Slip knives over the ring again and put into bearing. Tight the screw connection strong!

5.3 Belt Gears

The machine is provided with belts of an advanced design which does not need a special care. It is only necessary to check them regularly and if any cracks or breaks on the belt surface occur then it is necessary to renew them. An adjustment of tension pulleys from the production must be checked after the first about 5 hours of operation when the belt is running-up. During running-up it is necessary to check the function of the adjustable tension pulleys to prevent a damage of the belt due a pure tension of the pulleys.

5.3.1 Exchanging wedge-shaped belts



The engine is to be switched off and the cable of the spark plug removed!

Renewing of wedge-shaped belts must be performed if any cracks or breaks on the belt surface occur and when belts are so worn-out that they cannot be tensed by means of the adjustable tension pulley. **Both of the belts must be always renewed.** An exact procedure of exchanging belts is not contained here, because due its range it would exceed the frame of these instructions. There is necessary to maintain the route of belts around all guide elements (see *Fig. 12*)!

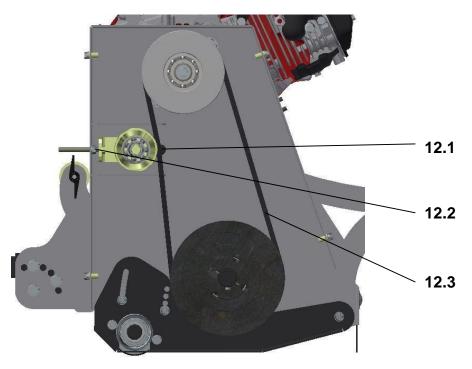


Fig. 12: Belt gear

(i) If you are not sure in your technical skills, let that perform it at a professional service center.

The correct function of belt gears you can check by the following way:

After adjusting the motor at maximum speed and subsequent rotation of the blade carrier roller, the slippage must not occur.

If this check failed, there is necessary to set the adjustable tension pulley!

5.3.2 Adjusting of the adjustable tension pulley

ilf you are not sure in your technical skills, let that perform it at a professional service center.

Dismantle the belt gear cover (5.4). Loosen the tensioning pulley master nut (12.1). Tighten the pulley by means of setting screw (12.2) in such a way that it tenses belts (12.3) enough. Then tighten the master nut. If the pulley is not tightened, the belts must be replaced.

5.4 Service Intervals

Activity	Before mowing	During a season	Before storage
Check oil conditions in the engine	yes	according to the engine service manual	yes
cleaning the engine air filter	Check-up:	every 10 hours	yes
Washing	-	2x	yes
Removing impurities and rests of the mowed growth	-	after every mowing	yes
Sharpening knives	-	as necessary	yes

Check of knives and their bearing	yes	in a case of some damage they must be renewed immediately	yes
Bearing housing of the supporting cylinder of knives	yes	-	yes
Check out additional tightening screw connections	yes	every 5 hours	yes
Greasing	condition check-up	Table 5	Table 5
Check of wedge-shaped belts	-	every 20 hours	yes

Table 6: Greasing intervals

5.5 Problems and their Solutions

Problem	Reason	Solution
the supporting cylinder	the engine has not been started up	start the engine
of knives does not rotate	The engine does not run at max.	set the maximum speed
Totale	belts are not tightened enough	adjust the tension pulley
	belts broken	renew the belts
	the centrifugal clutch does not switch	visit a service center
	fallen belts	install the belts again
	another mistake	visit a service center
The engine does not	there is not any gasoline in the tank	refill the gasoline
start	fuel feed pipe is closed	open the fuel feed pipe
	low oil level	refill the oil
	another mistake	visit a service center
The supporting cylinder	the centrifugal clutch is not disengaged	visit a service center
of knives cannot stop	another mistake	visit a service center
Another mistake		visit a service center

Table 7: Problems and their Solutions

5.6 Storage

Before storage the machine (e.g. after a season) must be removed of all impurities and remainders of growths. Keep unauthorized persons away of the machine. Protect the machine against wetter conditions, however do not use airtight packing because of an enhanced danger of corrosion.

Check the operational knives integrity, sharpen their blades (renew them if they are damaged).

WE recommend:

- 1. Conserve knives,
- 2. remove all impurities from the machine,

- 3. repair damaged spots on painted metals,
- 4. drain gasoline from the fuel tank and from the carburetter (other instructions in the engine service manual),
- 5. perform an after season greasing the machine according to *Table 5*.

5.6.1 Washing and Cleaning the Machine



During cleaning and washing the machine it is necessary to proceed such a way to maintain valid laws and regulations regarding protection of water courses and other water sources against their contamination with chemicals.

- Never wash the engine by a water stream! It could occur a damage of the engine electrical equipment.
- Do not use any pressure washing machine for washing the machine.

5.7 Disposal of Packages and the Machine after their Expiration

Having unpacked the machine you are obliged to perform a package disposal according to valid national regulations and Public Notices about handling wastes.

We recommend the following procedure for disposal of the machine after the expiration of its service life:

- 1. Dismantle all parts of the machine which could be still utilized.
- 2. Drain the oil from the gear unit and the engine into a suitable close container and hand it over to a collecting place.
- 3. Dismantle parts from plastic and non-ferrous metals.
- 4. Dispose the dismantled remainder of the machine along with dismantled parts according to valid national regulations and Public Notices about handling wastes.

5.8 Name Plate

The machine is provided with this name plate:

Fig. 14: Name plate

6 Spare Parts List

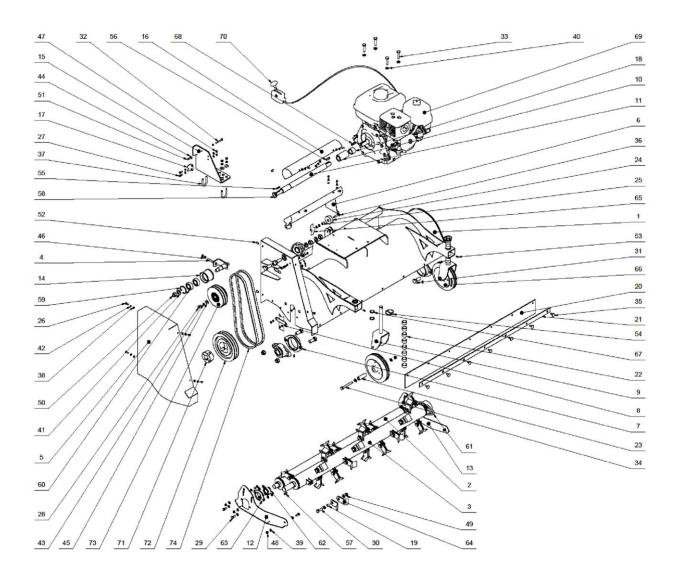


Fig. 15: Decomposition

POSITION	STORAGE NUMBER	TITLE	NORM	pc.
1	1650-10.000	MAIN FRAME		1
2	1650-11.000	SLIPING CYLINDER		1
3	1650-12.000	CYLINDER WITH KNIVES		1
4	1650-13.000	TENSION		1
5	1650-14.000	COVER OF BELTS		1
6	1650-15.000	COVER OF THE SHAFT		1
7	1650-16.000	COVER OF THE CIRCLET		2
8	1650-17.000	PLUG		1
9	1303-17.000	CIRCLET BRACKET		2
10	1650-00.001	BUSHING	Ø40–75	1
11	1650-00.002	SHAFT	Ø30–464	1
12	1650-00.003	RIGHT BRACKET OF THE CYLINDER	BURNOUT	1
13	1650-00.004	LEFT BRACKET OF THE CYLINDER	BURNOUT	1

14	1650-00.005	DRIVE PULLEY	Ø70–53	1
15	1650-00.006	CONSOLE MOTOR CONTROL	BURNOUT	1
16	1650-00.007	UPPER COVER OF THE SHAFT	BURNOUT	1
17	1650-00.008	STOP CONTROL	BURNOUT	1
18	1650-00.009	TERMINATION OF THE SHAFT	TR Ø35x5-30	1
19	1650-00.010	TERMINATION OF THE KNIFE	TR Ø14x2–12	24
20	1650-00.011	FRONT RUBBER	3x1105x100	1
21	1650-00.012	FRONT WASHER	BURNOUT	1
22	1300-00.002	SPACER RING	TR Ø28x2,6-15	16
23	1303-00.004	CIRCLET BEARING	TR. 20x5-61	2
24	1510-00.008	PULLEY 50	Ø50-20	1
25	1510-00.009	TERMINATION	TR. Ø12x2–17,5	1
26	71061	SCREW M6x16	DIN 933	14
27	71062	SCREW M6x20	DIN 933	2
28	71080	SCREW M8x16	DIN 933	1
29	71081	SCREW M8x20	DIN 933	10
30	71135	SCREW M10x35	DIN 933	24
31	71644	SCREW M16x40	DIN 933	6
32	72320	SCREW M6x50	DIN 931	1
33	71146	SCREW M10x45	DIN 931	4
34	71182	SCREW M10x85	DIN 931	2
35	72307	COACH BOLT M8x20	DIN 603	7
36	72323	COACH BOLT M8x40	DIN 603	1
37	70260	RECEPTACLE ETR 20 - 27 3/4"		2
38	73063	WASHER A6.4	DIN 125	23
39	73081	WASHER A8.4	DIN 125	29
40	73104	WASHER A10.5	DIN 125	60
41	73170	WASHER A17	DIN 125	6
42	73065	SPRING WASHER A6	DIN 127	10
43	73086	SPRING WASHER A8	DIN 127	6
44	73064	LARGE AREA WASHER 6.4	DIN 9021	1
45	73082	LARGE AREA WASHER 8.4	DIN 9021	5
46	70080	NUT M8	DIN 934	1
47	70064	LOCK NUT M6	DIN 985	6
48	70086	LOCK NUT M8	DIN 985	17
49	70102	LOCK NUT M10	DIN 985	30
50	70161	LOCK NUT M16	DIN 985	8
51	70060	COVER NUT M6	DIN 1587	1
52	78906	RIVETING NUT M6		8
53	78999	GREASE FITTING M6 – TYP A	DIN 71412	4
54	69198	AXLEPIN 4.5x32	DIN 11023	2
55	73695	SPRING 5x5x28	DIN 6885	1
56	73691	SPRING 7x7x32	DIN 6885	1
57	73690	SPRING 8x7x25	DIN 6885	1
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58	69030	LOCK RING 30	DIN 471	1
59	69047	LOCK RING 47	DIN 472	1
60	68204	BEARING 6204 2RS	DIN 625	2
61	68699	BEARING UCFL 206		3
62	68701	BEARING SB 205		2
	00700	TIN LIQUICING DEL 205		2
63	68702	TIN HOUSING PFL 205		

65	77499	PLAST. WING NUT BC68 M8		1
66	75147	CIRCLET 180 20R		2
67	92010	O-RING 20x4	NBR70	4
68	73709	ENGINE SPRING GX270		1
69	83113	ENGINE HONDA GX270		1
70	83205	OPERATING THE ENGINE		1
71	TB 2012-30	TAPER BUSHING Ø30 TB 2012		1
72	SPA0180-02 2012	WEDGE DRIVE PULLEY Ø180 SPA2		1
73	M79481	CENTRIFUGAL CLUTCH		1
74	63112	WEDGE BELT 13x1143Li		2

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