LEFA

USER MANUAL

3 POINT Finishing Mower

Model: FM 120. 150. 180

ATTENTION



3-Point Finishing Mower of LEFA may appear dangers during its use. Read the user manual attentively before coming into service



Thank you for having bought 3 point finishing mower of LEFA.

Please follow our recommendations to be fully satisfied with this purchase.

In this manual you will find all the information of use and security.

It is important to follow the instructions for the regular operation of the apparatus and the safety of the operator.

Please read attentively and carefully all the operations and the caution concerning the security described in this manual before the startup of the machine.

LEFA declines all responsibility for damage caused by the non-reading of the instructions given in this manual or for any use not in accordance with the destination of the machine or lack of maintenance.

All these machines of LEFA are equipped with an identification plate where you will find the data which are essential to order spare parts.

The models may be different for some details.

Each machine of LEFA is equipped with an identification plate where you will find all the data which are fundamental to verify the accounting between the machine and the tractor and for all order of spare parts.

3 point finishing mower LEFA is designed for maintenance and the cutting of the grass.

Labels of safety and plate of identification



Read instruction manual before use or maintenance.



Stop the tractor engine and remove the key before working on the machine.



Risk of being caught by the transmission. Do not approach the machine and avoid wearing loose clothes which could become entangled in moving parts.



PTO Speed max.: 540 tr/min MAX



Risk of projections.
To be held apart from the operating range of the machine. Make sure that all the guards are in their place during the use.



Danger of cutting. To be held apart from the operating range of the machine. Make sure that all the guards are in their place during the use.

It is strictly prohibited to remove protections of safety, labels of safety and the plate of identification manufacturer.

Safety rules:



In order to avoid accidents during work, it is necessary to observe the most elementary rules of prudence:

1. Operator

- The operator should not start the machine if they don't have all his mental and physical faculties:
 - **§** Good eyesight and good hearing
 - **§** Read and study the manual
 - **§** Be attentive to its and others' security
 - **§** Be familiar with the use and maintenance of the machine
 - § It is strictly forbidden to drink alcohol, ingest drugs and other substances that might affect the use of the machine
- Do not wear loose floating clothing that could be caught by moving parts.
- Wear the appropriate security equipment:
 - Standardized working gloves
 - **§** Safety shoes
 - **§** Helmet
 - **§** Hearing protection device
 - **§** Protective glasses

2. Machine

- The coupling must be done only on the points provided for this purpose in accordance with safety standards.
- Prohibit using the machine as means of transport of people, animals or objects.
- The machine should be in perfect working condition, maintained with original parts.
- It is strictly prohibited to make modifications on the machine without authorization of the manufacturer.

3. Utilization

- Prudence is required during the attachment of the machine to the tractor and during its uncoupling.
- The maintenance, the cleaning as well as the adjustments must be made only if the engine of the tractor is turned off and the ignition key is removed.
- Make sure that no one is in the operating area of the machine.

LEFA declines all the responsibilities for damages of nature reason caused by the non-observance of safety rules and of use PREPARATION AND STARTUP



Before any work, make oil level of the gear box casing up with oil HD 80W90, do not overtighten the plug to avoid the deformation of the gasket

After 30 hours of work, replace the oil of the gearbox, fill with oil 80W90 and check the quantity of which is poured by using the level of gauge

Locate the operation after 100 hours of work, or every year

The rotation and the number of revolutions of the tractor PTO and the machine must be the same speed 540 t/min

The speed that is different from those which are indicated can cause important damages to the operator and the machine

REPLACEMENT OF THE BLADES

Before any repair on the machine, make sure that the engine of the tractor, the cardan joint of the PTO and all the parties in movement be stopped

Check the condition of the blades and replace those damaged ones to ensure a perfect fit

For the replacement of the blades, put the finishing mower on solid supports, loosen the nut N^04 to see plane below, remove the shaft of the blade, replace it by centering the hole of the blade on the shaft, tighten the nut N^04 by interposing the washer N^03 , the tightening should always be at least 10 kg/fm.

Every 10-12 hours of work grease the supports of the blade and the axes of wheels with grease EP2

After the work is completed, thoroughly wash the machine to keep it in perfect condition, make a lubrication after every wash

Only use original cutting blades to ensure your safety and that of others(also for a question of guarantee)

CARDAN JOINT OF TRANSMISSION

Only use the cardan joints with the protections of CE

Once the apparatus is fixed to the tractor, check the exact length of the cardan shaft, if it is too long to equal the external protections at first, then the tubes of transmission of the cardan joint by cleaning them properly

VERY IMPORTANT: during the various working positions, the tubes of the transmission of the cardan joint of shaft should be inserted one in the other at least 150mm(diagram below)

Repeat this check when the tool is fixed to another tractor

The protections of the cardan joint must be in good condition and be attached during the rotation of this one, use the chains that is provided for this purpose, for your safety, replace the protections of the cardan joint immediately as soon as they are damaged

When the machine is stopped, use the extra chain that is supplied with the cardan joint, so that this last one is not based on the floor

When you fix the cardan joint on the tractor and the machine, make sure it is securely locked

DESCRIPTION OF LABELS FOR ALL THE MODELS

Plate that indicates the model of the machine

For the reasons of transport, the machine is delivered without oil

Read the standards of safety, use and maintenance before putting the machine into service

The revolutions of each minute should have the PTO of the tractor which is 540t/m

Never put the hands or feet under the cutting of the machine when it works and before each intervention, make sure that the tractor is turned off and that all moving parts are stopped

Always keep safety distance when the machine works

Never remove the protections of the machine that is running, and make sure that they are closed before operation

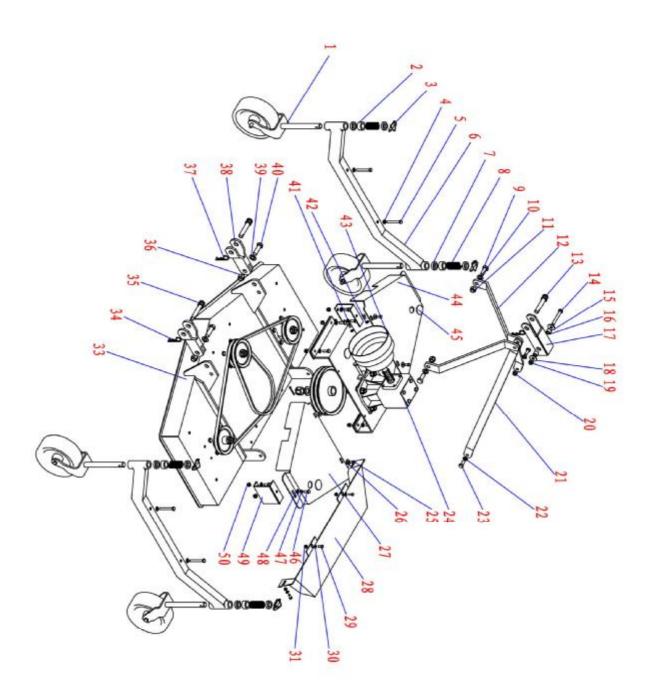
Don't climb on the machine when it is working or when the PTO is turning

Diagram of Mounting

Finishing Mower Assembly 英式割草机总成

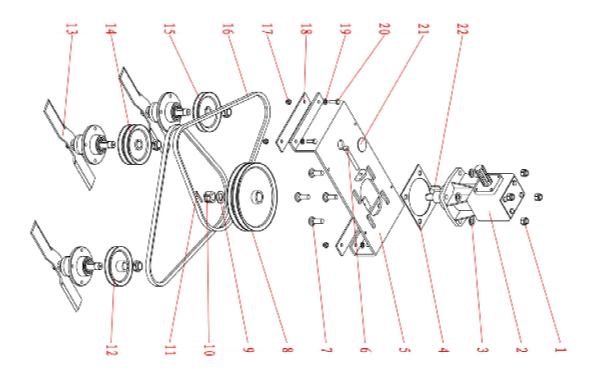
Ser.No	代 号	名 称	Name	Qty.
1	FM120-00-013	滚轮总成	Wheel Assembly	4
2	TM100-00-132	长调整圈	Long adjusting spacer	4
3	EF105-00-020	插销合件	Lock pin	4
4	GB/T95(10)	平垫圈 10	Plain washer 10	4
5	GB/T5782(M10X80)	半螺纹螺栓 M10X80	Bolts M10X80	4
6	FM120-00-011	滚轮支架焊和	Wheel bracket	2
7	TM100-00-131	短调整圈	Short adjusting spacer	8
8	FM100-WG-102	弹簧	Spring lock	4
9	GB/T5783(M16X40)	螺栓 M16X40	Bolts M16X40	2
10	GB/T95(16)	平垫圈 16	Plain washer 16	2
11	GB/T889.1(M16)	锁紧螺母 M16	Locknuts M16	2
12	FM120-00-107	前拉杆	Front link rod	2
13	FM120-00-105	悬挂销	Suspension pin	1
14	GB/T5782(M12X90)	螺栓 M12X90	Bolts M12X90	1
15	GB/T96(12)	特大平垫圈 12	Plain washer 12	1
16	FM120-00-111	隔圈	Spacer	2
17	FM120-00-108	上提升架	Upper suspension linkage	1
18	GB/T96(12)	特大平垫圈 12	Plain washer 12	1
19	GB/T889.1(M12)	锁紧螺母 M12	Locknuts M12	1
20	GB/T889.1(M12)	锁紧螺母 M12	Locknuts M12	2
21	FM120-00-112	后拉杆	Rear link rod	2
22	GB/T95(12)	平垫圈 12	Plain washer 12	2
23	GB/T5783(M12X30)	螺栓 M12X30	Bolts M12X30	2
24	FM120-02-001	传动总成	Transmission Assembly	1
25	GB/T5783(M8X20)	螺栓 M8X20	Bolts M8X20	4
26	GB/T96(8)	特大平垫圈 8	Plain washer 8	4
27	FM120-00-113	皮带轮罩(右)	Right cover for belt pulley	1
28	FM120-00-109	后出草门	Protecting plate	1
29	GB/T5783(M8X20)	螺栓 M8X20	Bolts M8X20	4
30	GB/T95(8)	平垫圈 8	Plain washer 8	4
31	GB/T889.1(M8)	锁紧螺母 M8	Locknuts M8	4
33	FM120-01-001	机体焊和	Main welding assembly	1
34	FM100-00-119	R 型销	R-pin	2
35	FM120-00-105	悬挂销	Suspension pin	2
36	GB/T889.1(M18)	锁紧螺母 M18	Locknuts M18	2
37	FM100-00-119	R 型销	R-pin	1
38	FM120-00-106	下提升架	Lower suspension linkage	2
39	GB/T95(18)	平垫圈 18	Plain washer 18	2

40	GB/T5783(M18X55)	螺栓 M18X55	Bolts M18X55	2
41	GB/T5783(M8X16)	螺栓 M8X16	Bolts M8X16	2
42	GB/T95(8)	平垫圈 8	Plain washer 8	2
43	EF105-00-103	防护罩	Plastic cover	1
44	FM120-00-110	皮带轮罩(左)	Left cover for belt pulley	1
45	EF105-02-108	密封盖	Rubber cover	2
46	GB/T5783(M10X25)	螺栓 M10X25	Bolts M10X25	6
47	GB/T93(10)	弹簧垫圈 10	Spring lock washer 10	2
48	GB/T95(10)	平垫圈 10	Plain washer 10	6
49	FM120-00-013	盖板支座	Coverplate support	2
50	GB/T889.1(M10)	锁紧螺母 M10	Locknuts M10	4



Transmission Assembly 传动总成

Ser.No	Reference	Description	Name	Qty.
1	GB/T889.1(M16)	锁紧螺母 M16	Locknuts M16	4
2	LEFA-FM120-02-012	齿轮箱	Gear box	1
3	GB/T95(16)	平垫圈 16	Plain washer 16	4
4	LEFA-FM120-02-107	齿轮箱垫板	Gear box pad	1
5	LEFA-FM120-02-011	齿轮箱座	Gear box seat	1
6	GB/T5783(M12X100)	螺栓 M12X100	Bolts M12X100	1
7	GB/T12(M16X45)	半圆头方颈螺栓 M16X45	Bolts M16X45	4
8	LEFA-FM120-02-115	大皮带轮(双)	Big belt pulley(double)	1
9	GB/T95(24)	平垫圈 24	Plain washer 24	1
10	GB/T6178(M24)	六角开槽螺母 M24	Nut M24	1
11	GB/T91(5X50)	开口销 5X50	Cotter pin 5X50	1
12	LEFA-FM120-02-113	小皮带轮(右单)	Small belt pulley(single)	1
13	LEFA-FM120-03-001	刀轴总成	Blade axle assembly	3
14	LEFA-FM120-02-114	小皮带轮(双)	Small belt pulley(double)	1
15	LEFA-FM120-02-116	小皮带轮(左单)	Small belt pulley(single)	1
16	GB/T11544	V 带(B1549/1753/1930)	Belt B-1549/1753/1930	2
17	GB/T889.1(M10)	锁紧螺母 M10	Locknuts M10	4
18	LEFA-FM120-02-106	橡皮垫	Rubber pad	2
19	GB/T95(10)	平垫圈 10	Plain washer 10	4
20	GB/T5783(M10X30)	螺栓 M10X30	Bolts M10X30	4
21	LEFA-EF105-02-108	堵头	Plug	1
22	GB/T1096(A10X40)	键 A10X40	Key A10X40	1



Blade Axle Assembly 刀轴总成

Ser.No	代 号	名 称	Name	Qty.
1	GB/T6172.2(M24X1.5)	圆螺母 M24+止退垫圈 24	Nuts M24+washer 24	1
2	GB/T276(6205)	轴承 6205	Bearing 6205	2
3	GB/T5783(M10X30)	螺栓 M10X30	Bolts M10X30	4
4	GB/T95(10)	平垫圈 10	Plain washer 10	4
5	LEFA-FM120-03-011	刀轴座焊和	Blade axle seat	1
6	GB/T889.1(M10)	锁紧螺母 M10	Lock nuts M10	4
7	LEFA-FM120-03-105	刀轴隔套	Blade axle spacer	1
8	GB/T95(24)	平垫圈 24	Plain washer 24	1
9	LEFA-FM120-03-104	刀轴护罩	Protective cover for blade axle	1
10	GB/T1096(A8X28)	键 A8X28	Key A8X28	1
11	LEFA-FM120-03-103	刀轴	Blade axle	1
12	LEFA-FM120-02-108	刀	Blade	1
13	GB/T889.1(M18)	锁紧螺母 M18	Lock nuts M18	1

