

LEFA

USER MANUAL

Heavy Rotary Tiller

Model:TMZ120-tmz240

ATTENTION

Read carefully user manual before use.

Technical parameter

TMZ heavy duty series rotary tiller

Side gear driven

Model	Working width (cm)	Blades shaft speed (rpm)	Number of blades	Tilling depth (cm)	Fitted power (hp)	Net weight (kg)	Gross weight (kg)	Package size: (cm*cm*cm)
TMZ120	120	232	24	8-14	25-30	242	277	143*73*73
TMZ120	120	232	36	8-14	25-30	257	292	143*73*73
TMZ130	130	232	28	8-14	30-35	252	287	153*73*73
TMZ130	130	232	42	8-14	30-35	267	302	153*73*73
TMZ140	140	232	28	8-14	30-35	259	294	163*73*73
TMZ140	140	232	42	8-14	30-35	274	309	163*73*73
TMZ150	150	232	32	8-14	35-40	269	309	173*73*73
TMZ150	150	232	48	8-14	35-40	284	324	173*73*73
TMZ160	160	232	32	8-14	40-45	274	324	183*73*73
TMZ160	160	232	48	8-14	40-45	289	339	183*73*73
TMZ170	170	232	36	8-14	45-50	281	336	193*73*73
TMZ170	170	232	54	8-14	45-50	299	354	193*73*73

TMZ180	180	232	36	8-14	50-55	288	348	203*73*73
TMZ180	180	232	54	8-14	50-55	306	366	203*73*73
TMZ190	190	232	40	8-14	55-60	298	358	213*73*73
TMZ190	190	232	60	8-14	55-60	318	378	213*73*73
TMZ200	200	232	40	8-14	60-65	308	368	223*73*73
TMZ200	200	232	60	8-14	60-65	328	388	223*73*73
TMZ210	210	232	44	8-14	65-70	320	380	233*73*73
TMZ210	210	232	66	8-14	65-70	342	402	233*73*73
TMZ220	220	232	44	8-14	70-80	335	395	243*73*73
TMZ220	220	232	66	8-14	70-80	357	417	243*73*73
TMZ230	230	232	48	8-14	80-90	350	410	253*73*73
TMZ230	230	232	72	8-14	80-90	374	434	253*73*73
TMZ240	240	232	48	8-14	90-100	365	425	263*73*73
TMZ240	240	232	72	8-14	90-100	389	449	263*73*73

I. GUARANTEE

Materials made by us have are guaranteed to have no defects following manufacture. This guarantee is effective for 12 months following the invoiced date and will not affect your statutory rights.

Exceptions:-

(1) The guarantee will be void if:-

- a. The correct care and maintenance is not observed.
- b. The machine is misused or used for a purpose other than described in part (2).
- c. The machine is changed, incorrectly mounted or fitted to a power source unsuitable for the purpose the machine is intended for.

(2) The rototiller is intended for the cultivation of soft soils or previously prepared soils suitable for rotovating.

(3) The technical service is available for the identification and replacement of defective parts. The defective parts should be returned to the seller with an attached description of the defects. The guarantee or terms of supply will dictate the guarantee available to you. However, in most cases this will be limited to replacing the parts and not provide compensation for labour costs for the work involved.

(4) The guarantee is strictly limited to the purchaser of the machine. Any unauthorised work by the purchaser or a 3rd party without the written consent of the seller will immediately render the guarantee null and void.

(5) Our obligation is limited of the above written guarantee terms. The purchaser expressly agrees to our terms and will return the machine unused if any of the terms are not acceptable.

(6) All goods remain the property of the seller until the goods are paid for. Full title of the goods will not pass to the purchaser until verified funds are cleared and the seller has confirmed the banking process is complete.

(7) Neither party shall be liable in damages or have the right to terminate this Agreement for any delay or default in performing hereunder if such delay or default is caused by conditions beyond its control including, but not limited to Acts of God, Government restrictions (including the denial or cancellation of any export or other necessary license), wars, insurrections and/or any other cause beyond the reasonable control of the party whose performance is affected.

(8) Neither party shall be liable for any failure or delay in performance under this Agreement (other than for delay in the payment of money due and payable hereunder) to the extent said failures or delays are proximately caused (I) by causes beyond that party's reasonable control and occurring without its fault or negligence, including, without limitation, failure of suppliers, subcontractors, and carriers, or party to substantially meet its performance obligations under this Agreement, provided that, as a condition to the claim of non-liability, the party experiencing the difficulty shall give the other prompt written notice, with full details following the occurrence of the cause relied upon. Dates by which performance obligations are scheduled to be

met will be extended for a period of time equal to the time lost due to any delay so caused.

(9) Licensor's failure to perform any term or condition of this Agreement as a result of conditions beyond its control such as, but not limited to, war, strikes, fires, floods, acts of God, governmental restrictions, power failures, or damage or destruction of any network facilities or servers, shall not be deemed a breach of this Agreement

II Rotating Blades

This symbol means possible danger to you, so please pay attention to this symbol and the possible hazards it represents.

III PREVENTIVE STEPS FOR ACCIDENT

During operation, you should always observe the correct operating procedures and the safety rules applicable. Make sure you are fully conversant with the methodology and risk assessments before commencing operations.



The following basic safety rules are intended to assist you to avoid danger. They are not intended to replace your company safety rules or methodology required before commencing operation of the machine.



(1) General care and maintenance:- Stop the tractor, disengage the PTO drive and ensure the blades have ceased to rotate before commencing any work on the rototiller.



(2) Before first use:- ensure all nuts and bolts are correctly tightened. Particular attention should be given to the cutting blade bolt tightness.



(3) Ensure the carded shaft is restricted from turning by the use of the supplied chains. After the operation is finished, the cardan shaft should be checked for signs of wear and be replaced as required.



(4) Before and during operation, you must ensure the work area is clear of personnel. Small stones can be ejected and cause injury during the rotating process.



(5) Always ensure the tractor is correctly manned with trained personnel. Unauthorised operators are strictly prohibited from operating this machine.



(6) During maintenance or repair, a proper safety procedure should be implemented such as the key removal from the tractor. Make sure the tractor cannot inadvertently move to avoid damage to the maintainer



(7) Do not wear loose clothing or clothing which may become entangled in the blades of the machine.



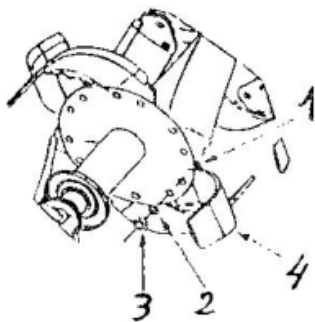
(8) Only original manufacturers parts may be fitted to this machine or the guarantee will be void.

IV OPERATION & TRAVEL

- 1 Before using, ensure you are fully compliant with the safe operation of the machine and you have read and understood the manual.
- 2 After 10 hours of operation, ensure all nuts and bolts are re-checked for tightness. Check oil levels and any signs of oil loss.
- 3 Before operation, the tractor must have the right speed output of 540rpm to avoid damaging the machine.
- 4 The operating speed is 1.2-1.5km/h. Any deviation will cause irreparable damage and void your warranty.

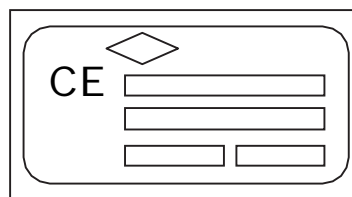
V CUTTING TOOL REPLACING

- 1 Before changing the cutting blades, stop the engine of the tractor, and after all moving parts have stopped, disconnect the PTO shaft.
- 2 Check the condition of each blade by carefully rotating the shaft. screw down all the bolts(1), replace used or damaged cutting tools and bolts making sure of the correct orientation of the blades, install left and right(4) blades carefully, tighten bolts(1) with shim(2)(if required) and nut (3), and tighten bolt(1).
- 3 For best performance of the implement, use the original cutting tools only.



VI INFORMATION SYMBOLS

1. Label No. 1 means the model.
2. Check the oil levels carefully. Depending on the specification of your supplier the machine can be delivered with or without engine oil.
3. Read operation instruction carefully before using.
4. Output power is 540rpm.



VII CORRECT OIL LEVEL

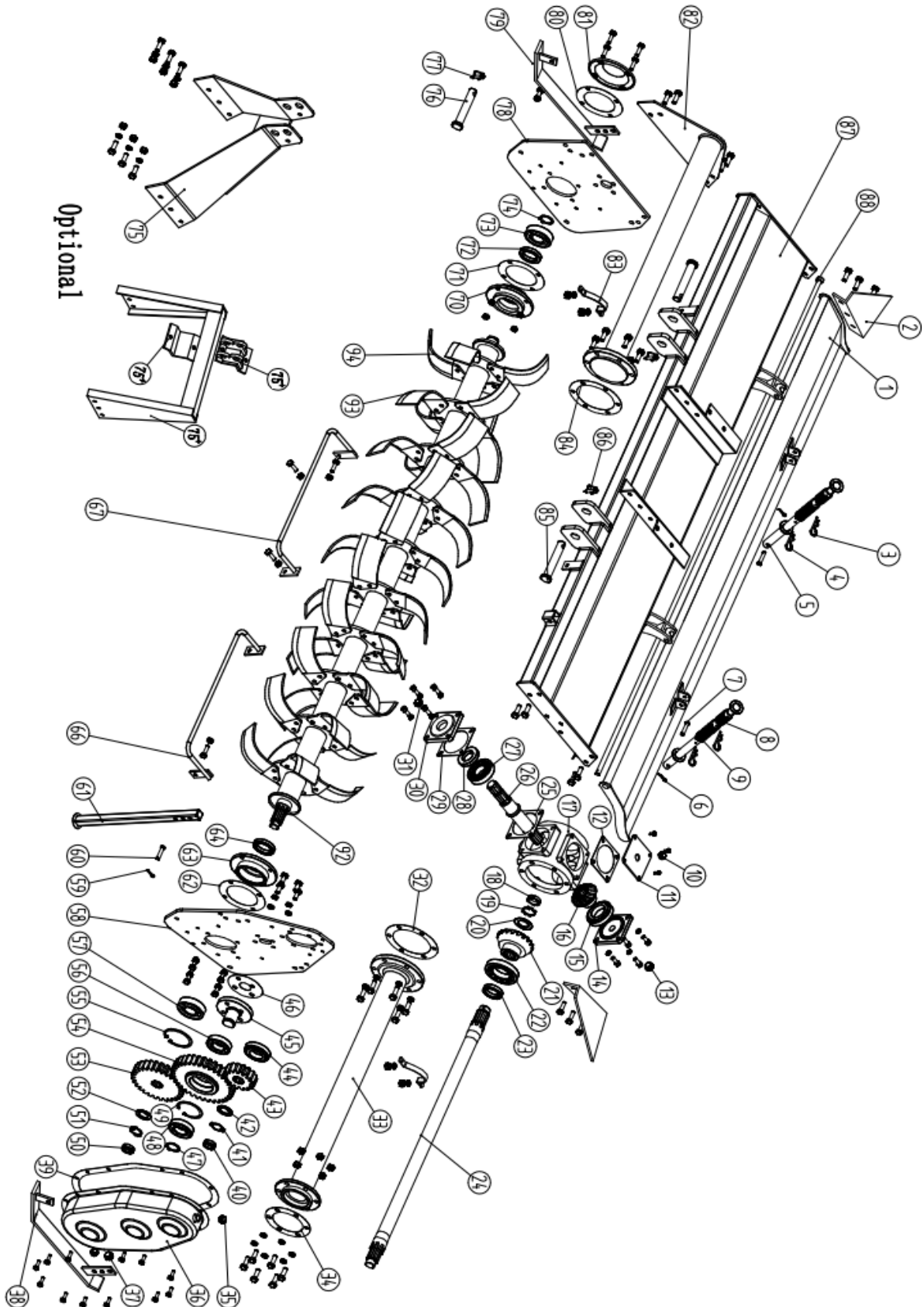
1. Correct oil level of the middle gear box: in the middle level of the oil check plug center
 2. Correct oil level of the side chain box: in the middle level of the oil check plug center
- Please check the picture as below:

VIII OIL TYPE IN THE MIDDLE GEAR BOX AND SIDE CHAIN BOX: Use gear oil **IX** OIL

AND BOLTS CHECKING:

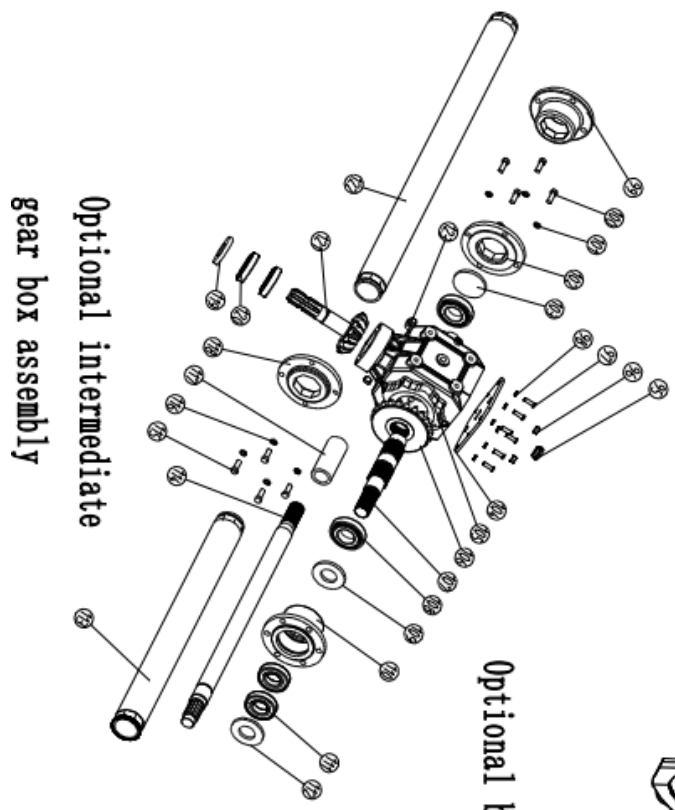
1. Make sure to check each bolt is tight enough before your working each time
2. Make sure to check the oil in the gear box and chain box before work each time
3. Make sure to change the new oil instead of the oil from manufacturer after one week working





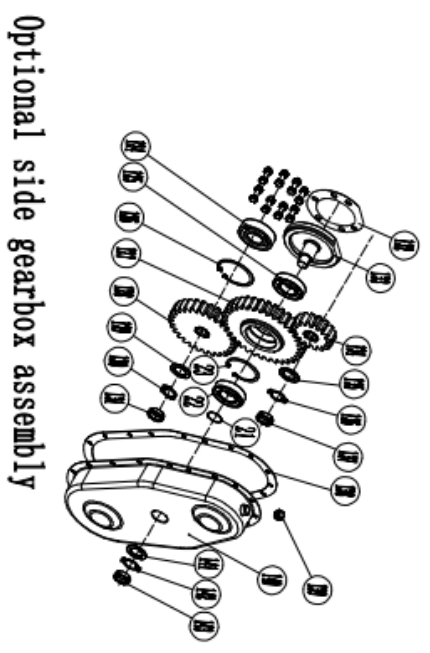


Optional tail plate



Optional blade shaft

Optional intermediate gear box assembly



Optional side gear box assembly

TMZ spare parts list

Ser. No.	Name	Qty
1	Tail pal te	1
2	The lateral tail plate	2
3	B type pin	2
4	B type pin	2
5	Forced rod	2
6	B type pin	2
7	Pin	2
8	Small spring	2
9	Big spring	2
10	oil filling plug	1
11	upper cap	1
12	paper washer of the upper cap	1
13	oil check plug	2
14	back cap	1
15	bearing	1
16	small bevel gear	1
17	empty intermediate gearbox	1
18	circular nut	1
19	stop washer	1
20	washer	1
21	big bevel gear	1

Ser. No.	Name	Qty
22	bearing	1
23	oil seal	1
24	second shaft	1
25	paper washer of front cap	1
26	first shaft	1
27	bearing	1
28	oil seal	1
29	paper washer of front cap	1
30	front cap	1
31	inside hexagonal bolts	8
32	paper washer of the frame pipe	1
33	main frame pipe	1
34	paper washer of the frame pipe	1
35	oil filling plug	1
36	side gear box	1
37	oil check plug	1
38	anti-friction plate	1
39	paper washer for side box	1
40	circular nut	1
41	stop washer	1
42	washer	1

43	driving gear	1
44	bearing	1
45	support shaft	1
46	paper washer of support shaft	1
47	circlip for shaft	1
48	bearing	1
49	circlip for hole	1
50	circular nut	1
51	stop washer	1
52	washer	1
53	driven gear	1
54	transition gears	1
55	circlip for hole	1
56	bearing	1
57	bearing	1
58	right side board	1
59	B type pin	1
60	Pin	1
61	stay bar	1
62	paper washer	1
63	bearing seat	1
64	oil seal of bearing seat	1
65	blade shaft	1

66	protective guard	1
67	protective guard	1
68	left-bent blade	20
69	right-bent blade	20
70	bearing seat	1
71	paper washer	1
72	oil seal of bearing seat	1
73	bearing	1
74	circlip for shaft	1
75 75+	top protective cover	1
76	lower suspension pin	2
77	spring lockpin	2
78	left side board	1
79	anti-friction plate	1
80	paper washer	1
81	bearing cap	1
82	connecting plate	1
83	U-shaped hoop	2
84	paper washer	1
85	Pin	2
86	spring lockpin	2
87	Top plate	1
88	rod of back plate	1

89	Tail palte	1
90	rod of back plate	1
91	B type pin	1
92	blade shaft	1
93	left-bent blade	20
94	right-bent blade	20
95	oil check plug	1
96	inner hex nut	5
97	bolt	6
98	spring washer	6
99	flange plate	1
100	bolt	4
101	spring washer	4
102	flange plate	1
103	flange plate	1
104	cap	1
105	empty middle gear box	1
106	gear	1
107	horizontal axis	1
108	bearing	2
109	oil seal	1
110	flange	1
111	bearing	2
112	oil seal	1
113	long tube	1
114	long shaft	1
115	bolt	4
116	spring washer	4

117	shaft sleeve	1
118	flange	1
119	oil seal	1
120	bearing	2
121	vertical axis	1
122	hollow tube	1
123	vent plug	1
124	bearing	1
125	bearing	1
126	circlip for hole	1
127	transition gears	1
128	driven gear	1
129	washer	1
130	stop washer	1
131	circular nut	1
132	paper washer of support shaft	1
133	support shaft	1
134	driving gear	1
135	washer	1
136	stop washer	1
137	circular nut	1
138	paper washer for side box	1
139	oil filling plug	1
140	side gear box	1
141	washer	1
142	stop washer	1
143	circular nut	1
144		