Flail Mower FRF Series Operation Manual



Important Safety Information	
Look For The Safety Alert Symbol	
Safety Labels	
Introduction	
Application	
Using This Manual	
Terminology	
Definitions	
Owner Assistance	
Serial Number Plate	
Section 1: Assembly and Set-up	
Tractor Requirements	
Assembly	
Driveline Installation	
Section 2: Operating Instructions	
Transporting	
Mowing Instructions	
Operating Instructions	
Section 3: Adjustments	
Leveling the Mower	
3-Point Hitch Adjustments	
Belt Tension	
Section 4: Maintenance and Lubrication	
Maintenance	
Knife Replacement	
V-Belt Installation	
Storage	
Lubrication	
Roller Bearing (Both Ends)	
Cutter Rotor Bearing (Both Ends)	
Gearbox	
Driveline Profiles	
Section 5: Specifications & Capacities	
Section 6: Troubleshooting	
Section 7: Appendix	
Bolt Torque	
Warranty	
Section 8: Parts illustration	

Important Safety information

Safety at all times

Thoroughly read and understand the instructions given in this manual before operation. Refer to the "Safety Decal", read all instructions noted on them.

Do not allow anyone to operate this equipment who has not fully read and comprehended this manual and who has not been properly trained in the safe operation of the equipment.

- Operator should be familiar with all functions of the unit.
- Operate implement from the driver's seat only.
- Make sure all guards and shields are in place and secured before operating the implement.
- Do not leave tractor or implement unattended with engine running.
- Dismounting from a moving tractor could cause serious injury or death.
- Do not stand between tractor and implement during hitching.
- Keep hands, feet, and clothing away from power-driven parts.
- Wear snug fitting clothing to avoid entanglement with moving parts.
- Watch out for wires, trees, etc., when raising implement. Make sure all persons are clear of working area.
- Turning tractor too tight may cause implement to ride up on wheels. This could result in injury or equipment damage.

Look For The Safety Alert Symbol

The SAFETY ALERT SYMBOL indicates there is a potential hazard to personal safety involved and extra safety precaution must be taken. When you see this symbol, be alert and carefully read the message that follows it. In addition to design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, prudence and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.

Be aware of signal words

A signal word designates a degree or level of hazard seriousness. The signal words are:



Indicates an imminently hazardous situation which, if not avoids, will result in death or serious injury. This signal word is limited to the most extreme situations, typically for machine components that, for functional purpose, cannot be guarded.



Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

For you protection

• Thoroughly read and understand the "safety label" section, read all instructions noted on them.

Shutdown and storage

- Lower machine to ground, put tractor in park, turn off engine, and remove the ignition key.
- Detach and store implements in a area where children normally do not play. Secure implement by using blocks and supports.

Use safety lights and devices

- Slow moving tractors, self-propelled equipment, and towed implements can create a hazard when driven on public roads. They are difficult to see, especially at night.
- Flashing warning lights and turn signals are recommended whenever driving on public roads. Use lights and devices provided with implement.

Transport machinery safely

- Comply with state and local laws.
- Maximum transport speed for implement is 20 mph. Do not exceed. Never travel at a speed which does not allow adequate control of steering and stopping. Some rough terrain require a slower speed.
- Sudden braking can cause a towed load to swerve and upset. Reduce speed if towed load is not equipped with brakes.
- Use the following maximum speed tow load weight ratios as a guideline:
 20 mph when weight is less than or equal to the weight of tractor.
 10 mph when weight is double the weight of tractor.
- IMPORTANT: Do not tow a load that is more than double the weight of tractor.

Keep riders off machinery

- Riders obstruct of operator's view, they could be struck by foreign objects or thrown from the machine.
- Never allow children to operate equipment.

Practice safe maintenance

- Understand procedure before doing work. Use proper tools and equipment. refer to Operator's Manual for additional information.
- Work in a clean dry area.
- Lower the implement to the ground, put tractor in park, turn off engine, and remove key before performing maintenance.
- Allow implement to cool completely.
- Do not grease or oil implement while it is operation.
- Inspect all parts. Make sure parts are in good condition and installed properly.
- Remove buildup of grease, oil or debris.
- Remove all tools and unused parts from implement before operation.

Prepare for emergencies

- Be prepared if a fire starts.
- Keep a fist aid kit and fire extinguisher handy.
- Keep emergency numbers for doctor, ambulance, hospital and fire department near phone.

Wear protective equipment

- Protective clothing and equipment should be worn.
- Wear clothing and equipment appropriate for the job. Avoid loose fitting clothing.
- Prolonged exposure to loud noise can cause hearing impairment or hearing loss. Wear suitable hearing protection such as earmuffs or earplugs.
- Operating equipment safely requires the full attention of the operator. Avoid wearing radio headphones while operating machinery.

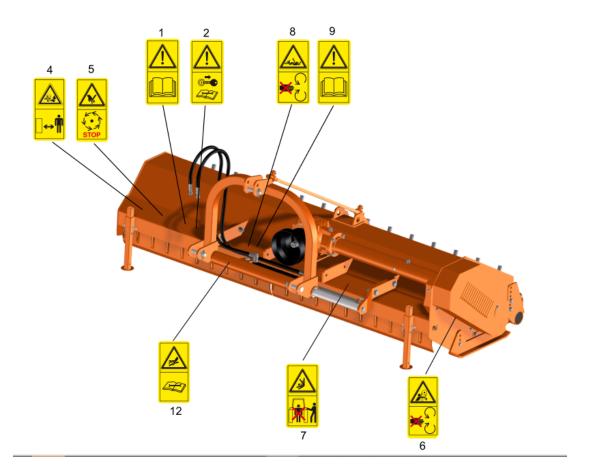
Avoid high pressure fluids hazard

- Escaping fluid under pressure can penetrate the skin causing serious injury.
- Avoid the hazard by relieving pressure before disconnecting hydraulic lines.
- Use a piece of paper or cardboard, not body parts, to check for suspected leaks. Wear protective gloves and safety glasses or goggles when working with hydraulic systems.
- If an accident occurs, see a doctor immediately. Any fluid injected into the skin must be treated within a few hours or gangrene may result.

Safety Labels

Your Flail Mower comes equipped with all safety labels in place. They were designed to help you safely operate your implement. Read and follow their directions.

- 1. Keep all safety labels clean and legible.
- 2. Replace all damaged or missing labels. To order new labels go to your nearest Cosmo dealer or visit our dealer locator at Cosmo.com.
- 3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Cosmo. When ordering new components make sure the correct safety labels are included in the request.
- 4. Refer to this section for proper label placement. To install new labels:



Introduction

Cosmo welcomes you to the growing family of new product owners. This implement has been designed with care and built by skilled workers using quality materials. Proper assembly, maintenance, and safe operating practices will help you get years of satisfactory use from the machine.

Application

The Flail Mowers are designed for Category 1 - three point hitch or Quick-Hitch System mounting. These Fixed Bar Flail Mowers are ideal for ripping, leveling, finish grading, and backfilling applications at feedlots, outdoor arenas, building sites, and maintenance operations on farm and ranch lanes or roadways.

Using This Manual

- This Operator's Manual is designed to help familiarize you with safety, assembly, operation, adjustments, troubleshooting, and maintenance. Read this manual and follow the recommendations to help ensure safe and efficient operation.
- The information contained within this manual was current at the time of printing. Some parts may change slightly to assure you of the best performance.
- To order a new Operator's or Parts Manual contact your authorized dealer. Manuals can also be printed from the Cosmo Service & Support Center by your dealer.

Terminology

" Right" or "Left" as used in this manual is determined by facing the direction the machine will operate while in use unless otherwise stated.

Definitions

Note: A special point of information that the operator must be aware of before continuing. **Important**: A special point of information related to its preceding topic. The intention is that this information should be read and noted before continuing.

Owner Assistance

The Warranty Registration card should be filled out by the dealer at the time of purchase. This information is necessary to provide you with quality customer service. If customer service or repair parts are required contact a dealer. A dealer has trained personnel, repair parts and equipment needed to service the machine. The parts on your machine have been specially designed and should only be replaced with genuine parts.

Serial Number Plate

For prompt service always use the serial number and model number when ordering parts from your dealer. Be sure to include your serial and model numbers in correspondence also.

Section 1: Assembly and Set-up

Tractor Requirements

This mower is designed with a 3-Point category I hitch. Tractor horse power rating should not exceed 80 PTO horse power.

Assembly

Refer to the parts illustration.

Tractor Hook-Up

- 1. Be certain that tractor draw bar will not interfere. Move draw bar ahead or remove if required. Draw bar should also be checked for clearance when unit is being raised for the first time.
- 2. Align lower link arms of tractor to hitch clevises on mower. Insert lower hitch pins into lower ball swivels and attach linch pins.
- 3. Attach tractor top link to upper floating hitch on mower with pin supplied. Secure with lock pin.
- 4. Adjust tractor top link in or out to place upper hitch pin vertically above or slightly behind lower hitch pins to allow mower flotation. The mower should be run with the back 15 degrees lower than the front.

Driveline Installation

- 1. Slide driveline end with extended safety cone over splined shaft of gearbox and secure with attaching device.
- 2. Slide driveline over tractor's splined PTO shaft and secure with locking device of driveline.
- 3. Driveline should now be moved back and forth to insure that it is secure on the PTO shaft of the tractor and

mower gearbox.

- 4. Attach chain from the driveline shield to one of the upper hitch braces to ensure that the shield does not rotate.
- 5. Should driveline require shortening:
 - a. Hold the half-shafts next to each other in the shortest working position and mark them.
 - b. Shorten inner and outer guard tubes equally.
 - c. Shorten inner and outer sliding profiles by the same length as the guard tubes.
 - d. Proper overlap is a minimum of one-half the length of each tube, with both tubes being of equal length.
 - e. Round off all sharp edges and remove burrs. Grease sliding profiles.



Tractor PTO shield and all mower guards must be in place at all times during operation!

Section 2: Operating Instructions

Transporting

NOTE: Always disengage PTO before raising mower to transport position.

- 1. When raising the mower to transport position, be sure that driveline does not contact tractor or mower. Adjust and set the tractor's 3-point hitch lift height so that the driveline does not contact mower deck in the fully raised position.
- 2. Be sure to reduce tractor ground speed when turning, leaving enough clearance so that the mower does not contact obstacles such as buildings, trees or fences.
- 3. Select a safe ground travel speed when transporting from one area to another. When traveling on roadways, transport in such a way that faster moving vehicles may pass safely.
- 4. When traveling over rough or hilly terrain, shift tractor to a lower gear.



When traveling on public roads, whether at night or during the day, use accessory lights and devices for adequate warning to operators of other vehicles. Comply with all Federal, State, and local laws.

Mowing Instructions

- 1. Clear area to be mowed of objects and debris that might be picked up and thrown by the mower blades.
- 2. Grass is best cut when it is dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.
- 3. Grass should be mowed frequently as shorter clippings deteriorate faster.
- 4. If mowing extremely tall grass, it is best to raise cutting height and mow the area, then lower cutting height and mow a second time at the desired height.

Operating Instructions

Proper servicing and adjustments are the key to the long life of any machine. With careful and systematic

inspection of the mower, costly maintenance, time and repair can be avoided.

Before beginning to mow, the following inspection should be performed:

- 1. Check oil level in gearbox.
- 2. Check that all plugs in gearbox have been replaced and tightened properly.
- 3. Be sure all mower knives, bolts and nuts are tight.
- 4. Be certain all guards and shields are in place and secure.
- 5. Grease driveline shaft and all other grease fittings.
- 6. Clear area to be mowed of rocks, branches and other foreign objects.
- 7. Lower mower to ground. Set tractor throttle at approximately 1/4 open. Engage PTO to start blades rotating.
- 8. Operate with 540 rpm PTO tractor.
- At first begin mowing at a slow forward speed and shift up until the desired speed is achieved maintaining 540 PTO rpm.
- 10. Mower knives will cut better at a faster blade speed than at reduced throttle.
- 11. After mowing the first 50 feet, stop and check to see that the mower is adjusted properly.
- 12. Do not make sharp turns or attempt to back up while mower is on the ground.
- 13. Do not engage PTO with mower in the fully raised position. Do not engage PTO at full throttle.

Section 3: Adjustments

Leveling the Mower

NOTE: Tractor and mower should be on level ground.

Leveling can be adjusted at the tractor's 3-point arms and center link.

Cutting Height Adjustment

The machines cutting height depends upon the position of the rear roller.

- 1. Remove the bolts that fix the roller on both sides.
- 2. Lift or lower both sides of roller in equal measurements.
- 3. Replace bolts and re-tighten.

3-Point Hitch Adjustments

The 3-point hitch system on this mower has been designed for front to back flotation when mowing on uneven terrain. Adjust tractor's top center link to place the upper hitch pin vertically above or slightly behind the lower hitch pins. The mower should be run with the back 15 degrees lower than the front.

The hitch can also be adjusted from side to side by turning the adjustment handle. Turn handle until you have achieved your desired location.



Engage parking brake, shut off tractor, remove key and disengage PTO before making any height

Belt Tension



Belt drive system under spring tension; use care to avoid bodily harm!

The Belt tension should be checked after the first 20 hours of use. And then every 40 hours of use.

- Tension on the belt can be adjusted with the belt tension bolt. Turn the bolt until desired tension is achieved. When the belt has the correct tension the gearbox should be adjusted so that the gearbox extension is running straight (parallel) with the flail mower. Loosen bolts at the bottom of the gearbox and move gearbox until gearbox extension is running straight.
- 2. Excessive tension on the belt may lead to premature failure of belt and drive components.



Excessive tension on the belt may lead to premature failure of belt and drive components. Excessive tension on the belt may also lead to a safety hazard to the operator or bystanders.

Section 4: Maintenance and Lubrication

Maintenance

Proper servicing and adjustment is the key to the long life of any farm implement. With careful and systematic inspection, you can avoid costly maintenance, time and repair.



For safety reasons, each maintenance operation must be performed with tractor PTO disengaged, mower lowered completely to ground and tractor engine shut off with ignition key removed.

- After using the mower for several hours, check all bolts to be sure they are tight and check drive belt tension.
- Replace any worn, damaged or illegible safety decals by obtaining new decals from dealer.

Knife Replacement

IMPORTANT: Make sure that the knife is the same length as the others on the mower. This will keep the rotor rotation balanced.

- 1. Remove bolt and nut.
- 2. Remove old knife.
- 3. Install new knife and existing bolt.
- 4. Secure with nut.

V-Belt Installation



Belt drive system under spring tension; use care to avoid bodily harm!

- 1. Remove belt guard fender and belt cover.
- 2. Disengage belt tension by loosening belt tension bolt until belt can be removed.
- 3. With tension relieved from belt remove old belt from pulleys.
- 4. Tighten belt tension bolt.
- 5. Reinstall belt guard and belt guard fender.

Storage

At the end of the working season or when the mower will not be used for a long period, it is good practice to clean off any dirt or grease that may have accumulated on the mower and any of moving parts.

- 1. Clean as necessary.
- 2. Check knives for wear and replace if necessary.
- 3. Inspect mower for loose, damaged or worn parts and adjust or replace as needed.
- 4. Store unit inside if possible for longer life.
- 5. Repaint parts where paint is worn or scratched to prevent rust.
- 6. Replace all damaged or missing decals.

Lubrication

Driveline Shaft U-Joints



Type of Lubrication: Multi-purpose Grease

Roller Bearing (Both Ends)



Type of Lubrication: Multi-purpose Grease

Cutter Rotor Bearing (Both Ends)



Type of Lubrication: Multi-purpose Grease

Gearbox

 As

 Required

Type of Lubrication: SAE 90W Gear Lube

Check oil level in gearbox by removing the plug located on the right hand side. Oil should be level with bottom of plug hole. Add oil if necessary by removing top fill plug and side plug. Add oil until it flows from side plug hole.

Do not overfill!

IMPORTANT: Mower should be level when checking oil in gearbox!

Driveline Profiles

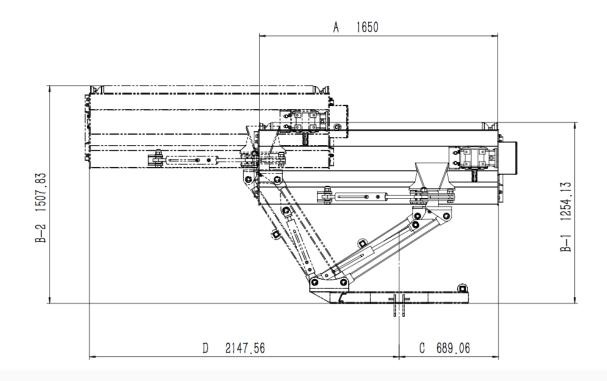


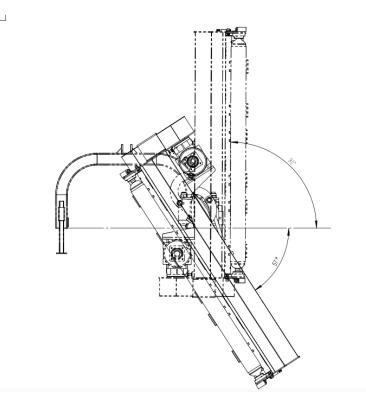
Type of Lubrication: Multi-purpose Grease

Section 5: Specifications & Capacities

Model	FRF125	FRF145	FRF165
Structure	286kg	305kg	319kg
Weight			
Working	1200mm	1400mm	1600mm
Width			
PTO Turning	540r/min	540r/min	540r/min
Speed			
Number Of	Hammer: 20/	Hammer: 24	Hammer: 28
Flails			
Tractor HP	20-40hp	30-45hp	40-50hp

Model	А	B-1	B-2	С	D
FRF125	1250mm	1254mm	1507mm	689mm	1747nn
FRF145	1450mm	1254mm	1507mm	689mm	1947mm
FRF165	1650mm	1254mm	1507mm	689mm	2147mm





Section 6: Troubleshooting

Problem	Solution							
	A CAUTION							
Do not try to clean r	ear discharge area when mower is running. Bodily harm may occur!							
	Unplug and clean mower deck.							
Belt slipping	Remove belt guard shields and clean sheaves.							
	Replace belt.							
	Mow at full throttle (540 PTO rpm), check PTO speed and tractor engine.							
Patches of uncut	Shift transmission to a lower gear.							
grass	Tighten belts.							
	Replace missing knives.							
	Replace knives.							
Excessive	Replace drive belt.							
vibration	Replace pulleys or align.							
	Remove belt guard shields & clean debris from belt area & sheaves.							
Gearbox noisy	Check lubricant level.							
	Raise cutting height by adjusting roller.							
Knives scalping grass	Change mowing pattern.							
grubb	Reduce speed turns.							
	Shift to a lower gear.							
Uneven cut	Level mower.							
	Replace missing knives.							
	Mow at full throttle (540 PTO rpm).							
Tractor loaded down by mower	Shift to a lower gear.							
down by mower	Clean mower.							

Section 7: Appendix

Bolt Torque

The tables shown below give correct torque values for various bolts and cap screws. Tighten all bolts to the torques specified unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same trength bolt.

		Bolt Torque					
Bolt Diameter	SAE 2		SAE 5		SAE 8		
	N.m	lb-ft	N.m	lb-ft	N.m	lb-ft	
1/4"	8	6	12	9	17	12	
5/16"	13	10	25	19	36	27	
3/8"	27	20	45	33	63	45	

ENGLISH TORQUE SPECIFICATIONS

7/16"	41	30	72	53	100	75
1/2"	61	45	110	80	155	115
9/16"	95	60	155	115	200	165
5/8"	128	95	215	160	305	220
3/4"	225	165	390	290	540	400
7/8"	230	170	570	420	880	650

METRIC TORQUE SPECIFICATIONS

		Bolt Torque		
Bolt Diameter	8.8		10.9	
	N.m	lb-ft	N.m	lb-ft
M3	0.5	0.4	1.8	1.3
M4	3	2.2	4.5	3.3
M5	6	4	9	7
M6	10	7	15	11
M8	25	18	35	26
M10	50	37	70	52
M12	90	66	125	92
M14	140	103	200	148
M16	225	166	310	229
M20	435	321	610	450
M24	750	553	1050	744
M30	1495	1103	2100	1550
M36	2600	1917	3675	2710

Torque figures indicated above are valid for non-greased or non-oiled threads and heads otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

Warranty

Cosmo warrants to the original purchaser that this product will be free from defects in material and workmanship beginning on the date of purchase by the end user according to the following schedule when used as intended and under normal service and conditions for personal use.

Overall Unit and Driveline: One year Parts and Labor

Gearbox: One year on all components.

Blades and Belts: Considered wear items.

This warranty is limited to the replacement of any defective part by manufacturer and the installation by the dealer of any such replacement part, and does not cover common wear items such as blades, belts, tines, etc. Cosmo reserves the right to inspect any equipment or parts which are claimed to have been defective in material or workmanship.

This warranty does not apply to any part or product which in Cosmo's judgment shall have been misused or damaged by accident or lack of normal maintenance or care, or which has been repaired or altered in a way which adversely affects its performance or reliability, or which has been used for a purpose for which the product not designed. Misuse also specifically includes failure to properly maintain oil levels, grease points, and driveline shafts.

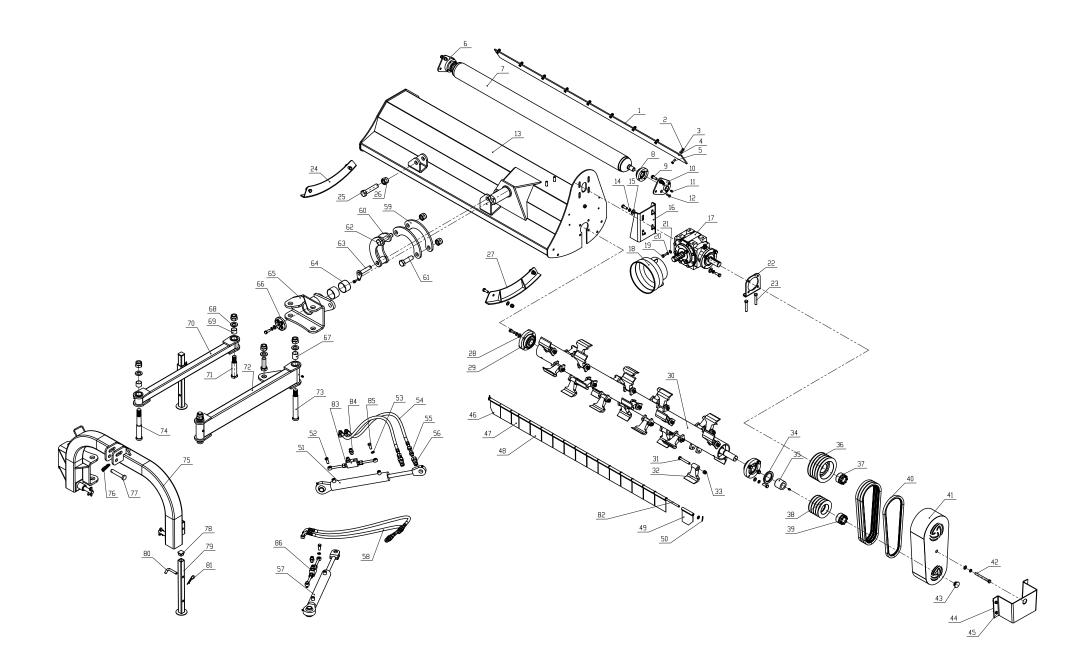
Claims under this warranty must be made to the dealer which originally sold the product and all warranty adjustments must be made through such dealer. Cosmo reserves the right to make changes in materials or design of the product at any time without notices.

This warranty shall not be interpreted to render Cosmo liable for damages of any kind, direct, consequential, or contingent to property. Furthermore, Cosmo shall not be liable for damages resulting from any cause beyond its reasonable control. This warranty does not extend to loss of crops, any expense or loss for labor, supplies, rental machinery or for any other reason.

No other warranty of any kind whatsoever, express or implied, is made with respect to this sale; and all implied warranties of merchantability and fitness for a particular purpose which exceed the obligations set forth in this written warranty are hereby disclaimed and excluded from this sale.

Section 8: Parts illustration

FRF Flail Mower Assembly



No.	Code	Description	Qty	REMARK
	AGL125COS.27		1	FRF125
1	AGL145COS.27	Rubber Plate	1	FRF145
	AGL165COS.27		1	FRF165
			7	FRF125
2	LN8	Locking Nut M8	8	FRF145
			9	FRF165
			12	FRF125
3	SW8	Spring Washer 8	13	FRF145
			14	FRF165
			12	FRF125
4	PW8	Plain Washer 8	13	FRF145
			14	FRF165
			7	FRF125
5	BOT825	Bolt M8*25	8	FRF145
			9	FRF165
6	AGL165COS.19B	New Supporting for roller(Right)	1	
	AGL125COS.21B		1	FRF125
7	AGL145COS.21B	Rear Roller (New by 121mm diameter)	1	FRF145
	AGL165COS.21B		1	FRF165
8	UC205-AGL	Bearing seat with bearing UC205	2	Roller
9	BOT 1230	Bolt M12*30	22	
10	AGL165COS.20B	New Supporting for roller (Left)	1	
11	JB/T 7940.1	Grease nipple M8*1	8	
12	HH BOT825	Hex.head bolt M8X25	8	
	AGL125COS.13B		1	FRF125
13	AGL145COS.13B	Mower deck	1	FRF145
	AGL165COS.13B		1	FRF165
14	SW12	Spring washer 12	12	
15	BW12	Bigger wahser 12	10	
16	AGL165.16	Adjusting frame for the gear box	1	
17	XH50.300Z.03	Gear box assembly	1	
18	FM150.120	Guard shade	1	
19	BOT 1020	Bolt M10*20	4	
20	SW10	Spring Washer 10	4	
			19	FRF125
21	PW10	Plain washer 10	21	FRF145
			23	FRF165
22	AGL165.17	Adjusting plate	1	

No.	Code	Description	Qty	REMARK
23	BOT1250	Bolt M12*50	2	
24	AGL165COS.14A	Skid (Right)	1	
25	BOT24110	Bolt M24*110	1	
26	LN24	Locking Nut M24	8	
27	AGL165COS.15A	Skid (Left)	1	
28	PW12	Plain washer 12	26	
29	UC207-Z	Bearing seat with bearing UC207-Z	2	Rortor
	AGL125.22		1	FRF125
30	AGL145.22	Rotor weldment	1	FRF145
	AGL165.22		1	FRF165
			20	FRF125
31	BOT1280	BOT1280 Bolt M12*80	24	FRF145
			28	FRF165
			20	FRF125
32	AGL165.39	.165.39 Hammer	24	FRF145
			28	FRF165
	LN12	LN12 Locking Nut M12	28	FRF125
33			32	FRF145
			36	FRF165
34	GB13871-94	Oil seal FB55*80*8	1	
05	EFGC155.26	Duckies	1	FRF125/145
35	EFGC175.26	Bushing	1	FRF165
00	EFGC155.31	Big Belt Pulley	1	FRF125/145
36	EFGC175.31	Big Belt Pulley	1	FRF165
37	JB/T7934Z3-1	Power lock 04 type 33X60	1	
20	EFGC155.27		1	FRF125/145
38	EFGC175.27	Small Pulley	1	FRF165
39	JB/T7934Z3 -2	Power lock 04 type 35X60	1	
40			3	FRF125/145
40	GB/T1154-97	Belt SPB991	4	FRF165
4.4	AGL145COS.18A	Belt cover	1	FRF125/145
41	AGL165COS.18A	Belt cover	1	FRF165
40	BOT 12110	Bolt M12*110	1	FRF125/145
42	BOT 12130	Bolt M12*130	1	FRF165
43	RUBBER 25	Rubber plug	1	
	AGL165.24A	Belt cover protection	1	FRF125/145
44	AGL165.24B	Belt cover protection	1	FRF165
45	BOT 820	Bolt M8*20	5	

No.	Code	Description	Qty	REMARK
46	EF100.00.122A	Fender	1	
47	EF100.00.121	Fender	1	
		Fender	10	FRF125
48	EF100.00.122	Fender	12	FRF145
		Fender	14	FRF165
49	EF100.00.122B	Fender	1	
50	GB/T91	Circlip 3.5*30	2	
51	AGL165COS.12B	Swing cylinder	1	
52	SWBOT1212530	Swing bolt M12*1.25*30	2	
53	JB/T982-1977	Combined washer	8	
54	AGL165COS.26B.4	Oil pipe	2	
55	1B-04-08WD	Connetion G1/2-G1/4BSP	4	
56	GB/T5862-2004	Quick Couple	4	
57	AGL165COS.7B	Side shift cylinder	1	
58	AGL165COS.26B.5	Oil pipe	2	
59	AGL165.10	Up moon plate	2	
60	AGL165.11	Down moon plate	1	
61	BOT2475	Bolt M24*75	2	
62	BOT24100	Bolt M24*100	1	
63	AGL165.23	Pin shaft	1	
64	SF-2.63.68.40	Bushing 63*68*40	2	
65	AGL165COS.8	swing weldment plate	1	
66	AGL165.9	plate	1	
67	SF-2.30.34.40	Bushing 30*34*40	4	
68	PW24	Plain washer 24	8	
69	SF-2.30.34.25	Bushing 30*34*25	4	
70	AGL165.4	arm weldment	1	
71	AGL165.6	Pin shaft	1	
72	AGL165.3	arm weldment	1	
73	AGL165.2	Pin shaft	2	
74	AGL165.B1	Pin2	1	
75	AGL165COS.1	3-point-linkage	1	
76	LP10.40	Lock pin	3	
77	AGL140.109	Top pin shaft	1	
78	RUBBER 28	Rubber plug	2	
79	AGL165.5	stand foot	2	

No.	Code	Description	Qty	REMARK
80	1G135.00.107	pin shaft	2	
81	RP 3.2.25	R pin	2	
	AGL125.25		1	FRF125
82	AGL145.25	Shaft bar	1	FRF145
	AGL165.25		1	FRF165