



FHM

**FARMER-HELPER
MACHINERY COMPANY**

EFGC FLAIL FIELD/BRUSH MOWERS



OPERATION & PARTS MANUAL

**Please read these instructions carefully before using!
Always grease all fittings and be sure to always check and
fill with oil before operating! Retain this manual for future
reference. Uses Approximately 3 quarts 80-90 gear lube**

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BETSTCO

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83371 Melton Rd, Creswell OR 97426



RUGGED LABOR SAVING EQUIPMENT SINCE 1995

Specifications subject to change without notice.

Revision 8-2016

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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:



DANGER

Indicates an imminently hazardous situation which, if not avoided, 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.



WARNING

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.



CAUTION

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 first 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.

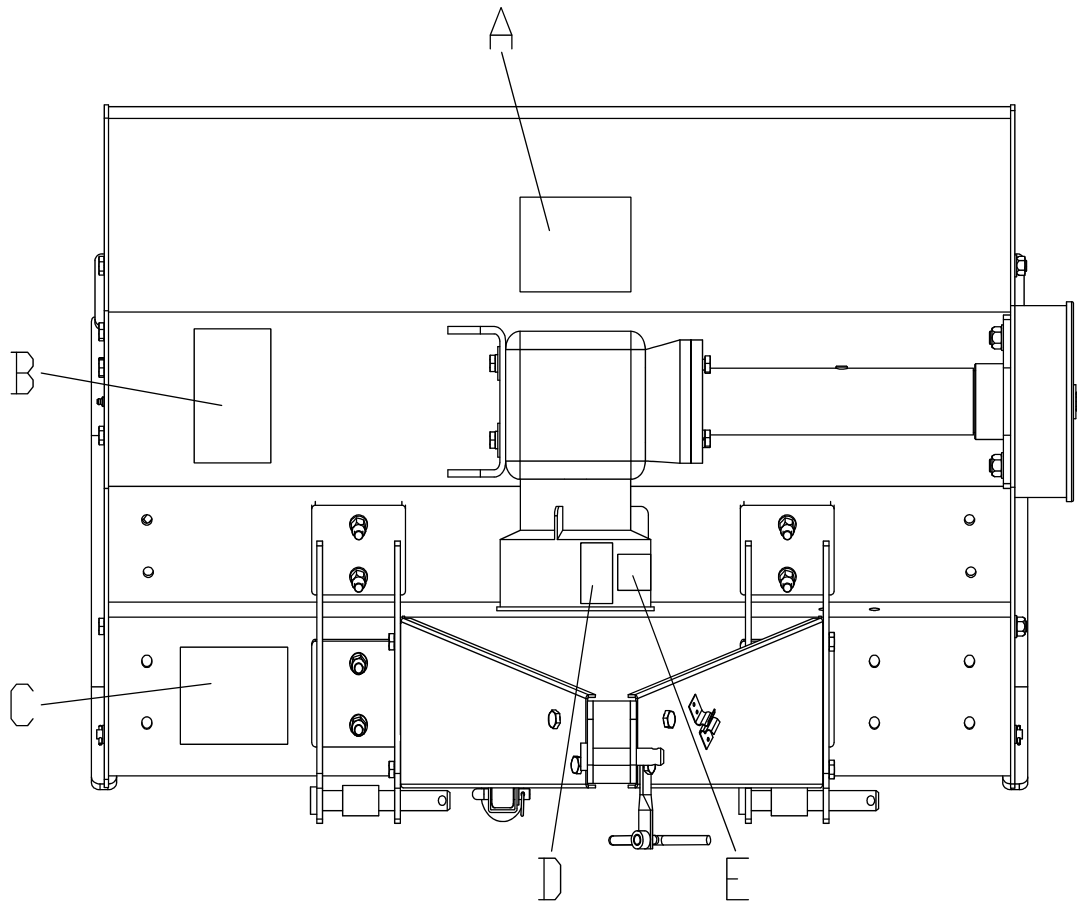
Avoid high pressure fluids hazard

- 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 Townsunny dealer or visit our dealer locator at Townsunny.com.
3. Some new equipment installed during repair requires safety labels to be affixed to the replaced component as specified by Townsunny. 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:
 - a. Clean the area the label is to be placed.
 - b. Spray soapy water on the surface where the label is to be placed.
 - c. Peel backing from label. Press firmly onto the surface.
 - d. Squeeze out air bubbles with the edge of a credit card.



A



B



C



D



E



Introduction

Townsunny 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 Townsunny 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 following 2 pages and to the parts illustrations for details.

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.



CAUTION

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



Parts Box Includes the following show in picture, you may receive extra parts that are not shown in the picture.



Attach Lower then Upper 3Pt Support Brackets, Storage Stand, and PTO Shield shown in picture



Lubrication Pont on Lower Axle and Pulley Detail Picture



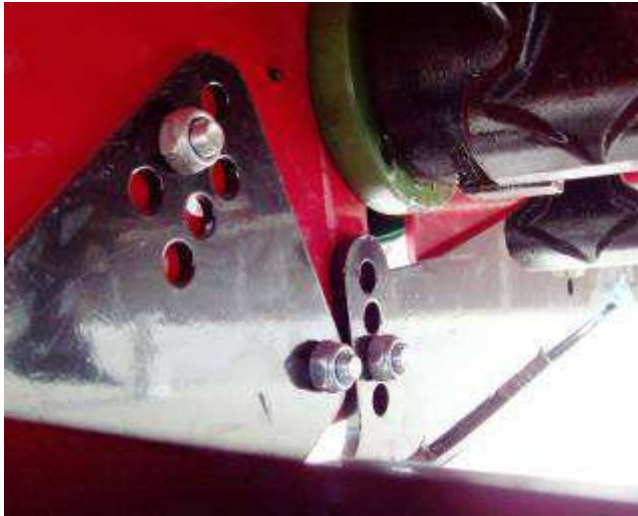


Fill Gear Box until Oil comes out plug on left side of PTO Shaft

Next Fill Tube from Gear Box to Belt Cover.



Or Grease the bearing



Bearing can take a lot of grease. Be sure you fill them.

Roller and Skid Height Adjustment



Belt Tension Adjusting Points

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.



CAUTION

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.
9. 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 machine's 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.



CAUTION

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

Belt Tension



CAUTION

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.

1. 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.



CAUTION

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.



CAUTION

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



CAUTION

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



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

Farmer-Helper EFGC Series Flail Mowers Specifications					
SPEC	FH-EFGC105	FH-EFGC125	FH-EFGC155	FH-EFGC175	FH-EFGC195
Working Width	41"	48"	60"	68"	77"
Overall Width	47"	54"	67"	75"	83"
Min. HP Req.	20 HP	22 HP	25 HP	30 HP	35 HP
Hitch	Cat.1	Cat.1	Cat.1	Cat.1	Cat.1
Gear Box Rating	65 HP	65 HP	65 HP	65 HP	65 HP
Distance Right of Center Mount*	19 inches or 23.25 inches	23.5 inches or 27.75 inches	35.25 inches or 39.5 inches	43.25 inches or 47.5 inches	47.25 inches or 51.5 inches
Hammer Blades	16 Hammer Optional	20 Hammer Optional	24 Hammer Optional	28 Hammer Optional	32 Hammer Installed
"Y" Grass Blades	32 Blades Installed	40 Blades Installed	48 Blades Installed	56 Blades Installed	64 Blades Optional
Housing Thickness	1/4"	1/4"	1/4"	1/4"	1/4"
SidePlate	1/4"	1/4"	1/4"	1/4"	1/4"
Roller Dia.	4"	4"	4"	4"	4"
Rotor Shaft Dia.	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"
Blade Swing	14"	14"	14"	14"	14"
No. of Belts	2 Belts	2 Belts	3 Belts	4 Belts	4 Belts
3pt. Conn. Width	19 3/4" - 27 1/2"	19 3/4" - 27 1/2"	19 3/4" - 27 1/2"	19 3/4" - 27 1/2"	19 3/4" - 27 1/2"
DriveLine Type	Series 4 Quick Connect, Shear Bolt, 6-Spline	Series 4 Quick Connect, Shear Bolt, 6-Spline	Series 5 Quick Connect, Shear Bolt, 6-Spline	Series 5 Quick Connect, Shear Bolt, 6-Spline	Series 5 Quick Connect, Shear Bolt, 6-Spline
Warranty	2-Years	2-Years	2-Years	2-Years	2-Years
Weight	575 lbs	610 lbs	730 lbs	789 lbs	820 lbs
Crated Weight	592 lbs	635 lbs	755 lbs	819 lbs	883 lbs

* 3-Point Hitch may be attached in two positions to change offset when looking at mower from operators seat.

Section 6: Troubleshooting

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

ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter	Bolt Torque					
	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
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

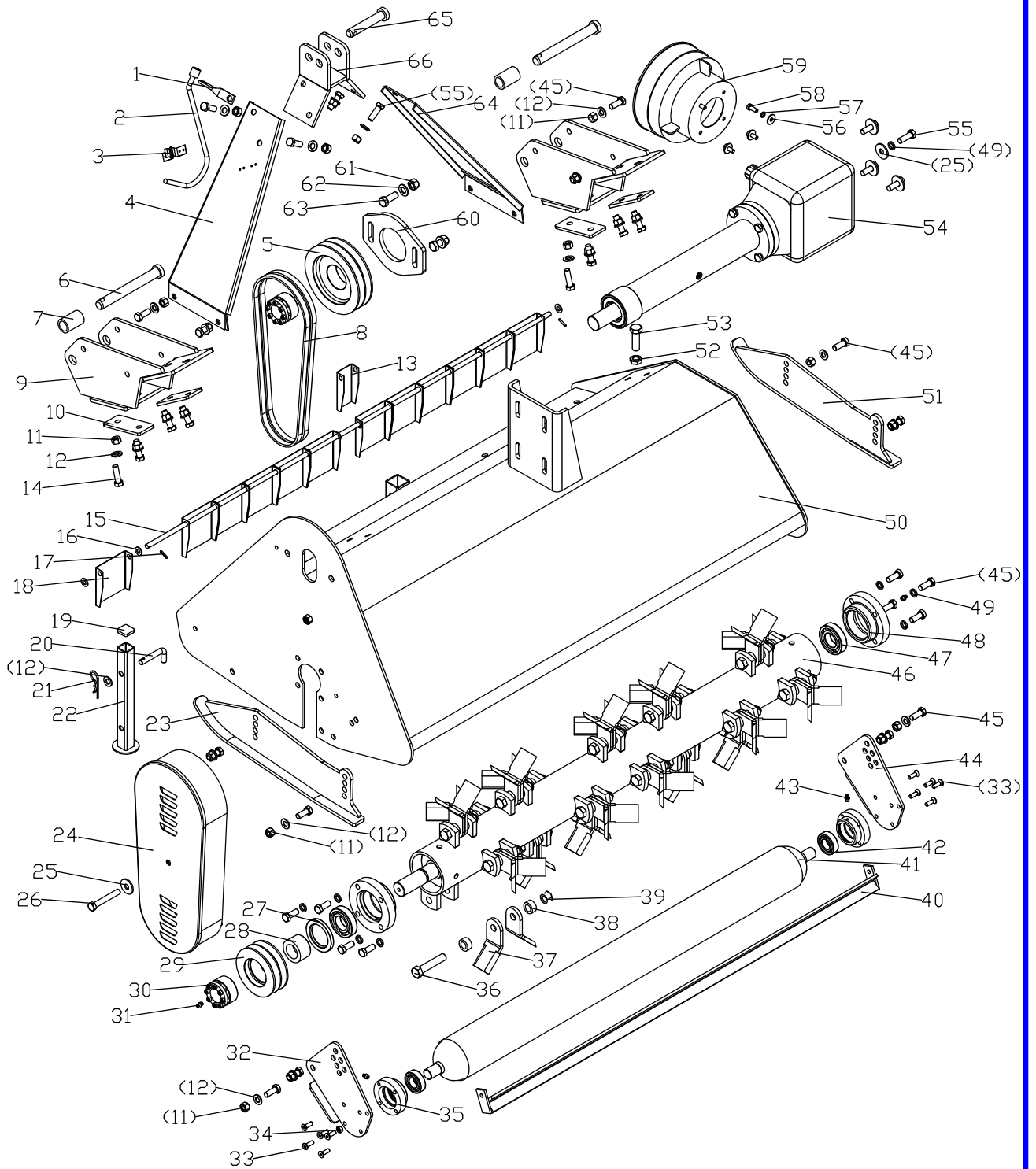
METRIC TORQUE SPECIFICATIONS

Bolt Diameter	Bolt Torque			
	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%.

Section 8: Parts illustration

EFGC Flail Mower Assembly



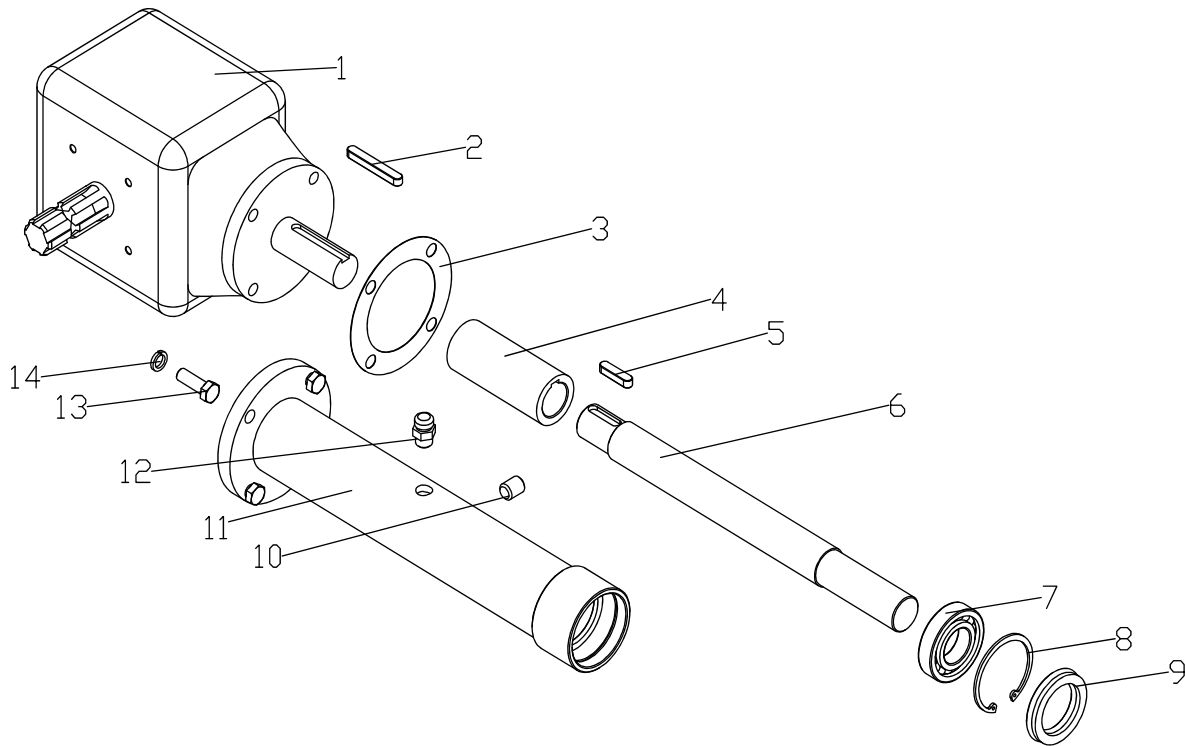
EFGC Flail Mower Parts List

REF	PART NUMBER	DESCRIPTION	名称	QTY
1	EFGC125.101	Fixing plate	挂钩支板	1
2	EFGC125.124	Hook	挂钩	1
3	EFGC125.102	Clamp for hook	挂钩夹	2
4	EFGC125.021	Suspension plate (R)	右侧悬挂板焊合件	1
5	EFGC125.121	Big belt ptley	大皮带轮	1
6	EFGC125.109	Pin shaft weldment	下悬挂销	2
7	EFGC125.108	Spacer	悬挂销隔套	2
8	GB/T1154-97/A965	Strap SPB991	齿形 V 带 SPB991	2 (EFGC125)
				2 (EFGC105)
				3 (EFGC145)
				3 (EFGC155)
				3 (EFGC165)
				4 (EFGC175)
9	EFGC125.013	Hanging weldment	下悬挂焊合件	2
10	EFGC125.103	Splint	夹板	4
11	GB6184-86/M12	Locking nut M12	防松螺母 M12	24
12	GB97.1-85/12	Plain washer 12	垫圈 12	40
13	EFGC125.114	Fender	挡板	1
14	GB5783-86/M12X40	Bolt M12x40	螺栓 M12X40	8
15	EFGC125.104	Shaft for fender	挡板挂杆	1
16	GB97.1-85/10	Plain washer 10	垫圈 10	17 (EFGC125)
				15 (EFGC105)
				19 (EFGC145)
				20 (EFGC155)
				21 (EFGC165)
				22 (EFGC175)
17	GB879-86/4X22	Elastic cylindrical pin 4x22	弹性圆柱销 4X22	2
18	EFGC125.113	Fender	宽挡板	12 (EFGC125)
				10 (EFGC105)
				14 (EFGC145)
				15 (EFGC155)
				16 (EFGC165)
				17 (EFGC175)
19	EFGC125.112	Cover	端盖	1
20	1G135.00.107	Bent pin	支撑脚插销	1
21	EFGC125.110	R pin	R 销 3.2	1
22	EFGC125.111	Supporting frame	支撑脚	1

23	EFGC125.014	Base plate (L)	左底座焊合件	1
24	EFGC125.012	Belt cover	皮带轮防护罩	1
25	GB96-85/12	Plain washer 12	加大垫圈 12	5
26	GB5782-86/M12X80	Bolt M12×80	螺栓 M12X80	1
27	GB13871-94/55X80X8	Oil seal FB55X80X8	油封 FB55X80X8	1
28	EFGC125.116	Oil-sealing sleeve	油封套	1
29	EFGC125.117	Small belt ptlley	小皮带轮	1
30	JB/T7934Z3/35X60	Swellable sleeve	涨套 REACH 04 型 35X60	2
31	GB1152-89/M8X1	Oil cup M8X1	油嘴 M8X1	2
32	EFGC125.105	Supporting for roller (R)	右滚筒支撑板	1
33	GB2673-86/M8X25	Hex.head bolt M8X25	内六角花形沉头螺钉 M8X25	10
34	GB6184-86/M8	Locking nut M8	防松螺母 M8	2
35	EFGC125.107	Bearing	法兰轴承座	2
36	GB5782-86/M16X1.5X85	Bolt M16x1.5x85	螺栓 M16X1.5X85	20 (EFGC125)
				16 (EFGC105)
				24 (EFGC145)
				24 (EFGC155)
				28 (EFGC165)
				28 (EFGC175)
37	EFGC125.122	Blade	刀	40 (EFGC125)
				32 (EFGC105)
				48 (EFGC145)
				48 (EFGC155)
				56 (EFGC165)
				56 (EFGC175)
38	EFGC125.119	Sleeve	刀座隔套	40 (EFGC125)
				32 (EFGC105)
				48 (EFGC145)
				48 (EFGC155)
				56 (EFGC165)
				56 (EFGC175)
39	GB6184-86/M16X1.5	Locking nut M16X1.5	防松螺母 M16X1.5	20 (EFGC125)
				16 (EFGC105)
				24 (EFGC145)
				24 (EFGC155)
				28 (EFGC165)
				28 (EFGC175)
40	EFGC125.016	Mud shield	刮泥板焊合件	1

41	EFGC125.017	Roller weldment	滚筒焊合件	1
42	UC205	Flange UC205	轴承 UC205	2
43	GB1152-89/M6	Oil cup M6	油嘴 M6	2
44	EFGC125.106	Supporting for roller (L)	左滚筒支撑板	1
45	GB5783-86/M12X30	Bolt M12x30	螺栓 M12X30	23
46	EFGC125.018	Blade axle weldment	刀轴焊合件	1
47	UC207-Z	Flange UC207-Z	轴承 UC207-Z	2
48	EFGC125.115	Bearing	刀轴轴承座	2
49	GB93-87/12	Spring washer 12	垫圈 12	12
50	EFGC125.011	The cover weldment	机罩焊合件	1
51	EFGC125.015	Base plate (R)	右底座焊合件	1
52	GB6173-86/M16x1.5	Nut M16x1.5	螺母 M16x1.5	1
53	GB5786-86/M16X1.5X50	Bolt M16X1.5X50	螺栓 M16X1.5X50	1
54	EFGC125.019	Gearbox assembly	传动箱总成	1
55	GB5783-86/M12X35	Bolt M12x35	螺栓 M12X35	5
56	GB96-85/8	Plain washer 8	加大垫圈 8	4
57	GB93-87/8	Spring washer 8	垫圈 8	4
58	GB5783-86/M8X20	Bolt M8x20	螺栓 M8X20	4
59	FM150.120	Guard shade	传动轴罩	1
60	EFGC125.120	Tension plate	张紧板	1
61	GB6184-86/M14	Locking nut M14	防松螺母 M14	2
62	GB97.1-85/14	Plain washer 14	垫圈 14	2
63	GB5783-86/M14X35	Bolt M14x35	螺栓 M14X35	2
64	EFGC125.023	Suspension plate (L)	左侧悬挂板焊合件	1
65	EFGC125.123	Pin shaft	上拉杆销	1
66	EFGC125.022	Bracket weldment	上拉杆支架焊合件	1

Gearbox Assembly



Gearbox Parts List

REF	PART NUMBER	DESCRIPTION	名称	QTY
1	XH50. 300Z. 02	Gearbox assembly	齿轮箱总成	1
2	GB1096-79/A10X70	Key A10X70	键 A10X70	1
3	EFGC125. 166	Paper gasket	纸垫	1
4	EFGC125. 167	Connected sleeve	连接套	1
5	GB1096-79/A10X40	Key A10X40	键 A10X40	1
6	EFGC125. 168	Shaft	轴	1
7	GB/T276-94/6207	Bearing 6207	轴承 6207	1
8	GB893. 1-86/72	Circlip 72	挡圈 72	1
9	GB13871-94/35X72X10	Oil seal 35×72×10	油封 FB35X72X10	1
10	ZBT 32001. 3-87	Retainer	内六角锥形螺塞 ZG3/8"-19	1
11	EFGC125. 020	Shaft tube weldment	轴管焊合件	1
12		Bolt of plug screw M16X1. 5	通气螺塞 M16X1. 5	1
13	GB5783-86/M12X35	Bolt M12X35	螺栓 M12X35	4
14	GB93-87/12	Spring washer 12	垫圈 12	12



FHM
FARMER-HELPER
MACHINERY COMPANY

Parts Request Form

Fax to 541-895-2756 or E-mail
parts@betstco.com

Name: _____

Address: _____

City State Zip: _____

Phone: _____

E-mail: _____

Model Number: _____

Serial Number: _____

Purchased From: _____

Purchase Date: _____

Item No.	Description	Qty	Price	Amount

Comments:

Farmer Helper Machinery Brand LIMITED WARRANTY

FARMER HELPER MACHINERY CO. LTD. warrants to original Purchaser that FARMER HELPER MACHINERY CO. LTD. products are free from major defects in material under normal use and service for a period of Two (2) Years from the date the product is purchased or shipped, whichever is later. Commercial use 180 days. Use at address that is not yours, is considered commercial use. Consumable, Expendable, Wear Items (Examples: Rubber & plastic parts, hydraulic hoses, belts, tires, cables, blades, tines, wedges, teeth, tips, chains, pins, brushes, filters, etc.) and cracked hydraulic pumps, bent or broken cylinder rods are not covered under this warranty. Warranty does not cover items that have been modified, damaged by abuse or usage not in accordance with design or maintenance.

FARMER HELPER MACHINERY CO. LTD.'s obligation under this warranty is to repair or replace defective product. upon determination by; Betst Products, llc., 83371 Melton Rd. N., Creswell OR 97426 that Warranty Claim is Valid. Product shall be returned upon request of Betst Products, llc. Transportation charges to be prepaid by buyer. **Gasoline or diesel engines used to powered FARMER HELPER MACHINERY CO. LTD. products are covered by the warranty of the appropriate engine manufacture and Purchaser must look to the engine manufacture for all issues relating to engine operation.**

Farmer-Helper Machinery nor Betst Products, llc. assumes any responsibility for labor.

PERMISSIBLE BY APPLICABLE LAW, FARMER HELPER MACHINERY CO. LTD. HEREBY DISCLAIMS ALL WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, ANY IMPLIED WARRANTIES WITH RESPECT TO THE PRODUCT PURCHASED, WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, FARMER HELPER MACHINERY CO. LTD. HEREBY EXPRESSLY DISCLAIMS ALL LIABILITY FOR PRODUCT DEFECT OR FAILURE, CLAIMS THAT ARE DUE TO NORMAL WEAR, PRODUCT MISUSE, ABUSE, PRODUCT MODIFICATION, IMPROPER PRODUCT SELECTION, NON-COMPLIANCE WITH ANY CODES, OR MISAPPROPRIATION. • FARMER HELPER MACHINERY CO. LTD.. MAKES NO WARRANTIES TO THOSE DEFINED AS "CONSUMERS" IN THE MAGNUSON-MOSS WARRANTY-FEDERAL TRADE COMMISSION IMPROVEMENTS ACT . THE FOREGOING EXCLUSIONS OF IMPLIED WARRANTIES DO NOT APPLY TO THE EXTENT PROHIBITED BY LAW. PLEASE REFER TO YOUR LOCAL LAWS FOR ANY SUCH PROHIBITIONS

THERE SHALL BE NO LIABILITY FOR PRODUCT LIABILITY OR LIABILITY ON THE PART OF BETST PRODUCTS, LLC. FOR ANY GENERAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE SALE OR USE OF ANY PRODUCTS SOLD BY BETST PRODUCTS, LLC OR AN AGENT THEREOF. BETST PRODUCTS, LLC. MAKES NO WARRANTIES, EXPRESS OR IMPLIED, (INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCTS FOR ANY PURPOSE) WITH RESPECT TO THE PRODUCTS COVERED BY THIS AGREEMENT EXCEPT AS IN THIS PARAGRAPH OTHERWISE EXPRESSLY PROVIDED.

THIS IS THE SOLE AND ONLY WARRANTY OF FARMER HELPER MACHINERY CO. LTD. PRODUCTS. NO OTHER WARRANTY IS APPLICABLE, EITHER EXPRESSED OR IMPLIED, IN FACT OR BY LAW,

This warranty shall not be interpreted to render Betst Products, llc., or any authorized agent liable for injury or damages of any kind or nature, direct, consequential, or contingent, to person or property.

The sole and only remedy in regard to any defective products shall be the repair or replacement thereof as herein provided. Betst Products, llc., agent(s) of Betst Products, llc. shall not be liable for any consequential, special, incidental or punitive damages resulting from or caused by any such defects.

Farmer-Helper Machinery reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligations to owners of units previously sold.

No one is authorized to alter, modify, or enlarge this warranty nor the exclusions, limitations, and reservation thereof.

Revised 9-20-14

WARRANTY VOID IF REGISTRATION IS NOT RECEIVED OR RECORDED ONLINE WITHIN 30 DAYS OF PURCHASE DATE OR SHIP DATE, WHICHEVER IS LATER.

FARMER HELPER MACHINERY REGISTRATION

Item _____ Model # _____ Purchase
Date ____/____/____ Purchased From: _____ Gift Inv#/Order#
_____ Owner Name: _____ Serial # (if
Applicable) _____
Owner Address: _____
City: _____ County: _____ ST: _____ Zip Code:
_____ Phone: _____ Email: _____

Acceptance of responsibility:

I (Purchaser) have read operators manual and Limited Warranty or someone has read/and explained all instructions to me. I understand this warranty does not cover any labor and that all disputes will be settled by binding arbitration. Binding arbitration is conducted by the Better Business Bureau (BBB) located at 4004 SW Kruse Way Place Ste 375 Lake Oswego OR 97035 or the current BBB location closest to Betst Products, I acknowledge my Limited Warranty is void if any attempt to repair or replace defective parts has been made by unauthorized personnel. I acknowledge receipt of my Operators Manual and have read the Safe Operation Section. I acknowledge understanding maintenance and safe operation requirements, item specifications, operation, controls, and storage requirements. **I understand that I alone am responsible for proper maintenance, care and safe operation of this Value-Leader item.**

I (Purchaser) agree that persons not familiar with the operation of this item should not be allowed to use it. Children especially should not operate or be near Power Products when in use. **ANYONE OPERATING FARMER-HELPER PRODUCTS SHOULD HAVE READ OPERATIONS MANUALS AND SAFETY MANUALS.**

Owners Signature: x _____ **Date:** ____/____/____

You must sign this warranty and mail or fax copy to Betst Products, 83371 Melton Rd N.#3, Creswell OR 97426. If you prefer you may complete your registration on line. This warranty is not effective unless the Purchaser completes Registration and Warranty Form within 30 days of purchase or ship date whichever is later.

Fax to 1-904-216-2059

NOTE: We may refuse warranty of any kind unless Betst Product, llc., receives a completed, legible and signed warranty registration. It is the responsibility of the purchaser to assure that registration document is received by Betst Products, llc..

Fax to 1-904-216-2059

2 YEAR EXTENDED WARRANTY & REGISTRATION

Farmer Helper Machinery Branded Products

2 YEAR EXTENDED WARRANTY

2 Year Extended Warranty amends to original Recorded Manufacturers Warranty Registration the time period of described coverage. Extended Warranty does not apply to Consumable and Expendable Items as described in Product Warranty Registration.

This Amendment does not affect any other part of recorded Warranty Registration or Policy. This Warranty Extension is the soul responsibility of Betst Products, Ilc.

No one is authorized to alter, modify, or enlarge this addition to the original manufacturers recorded warranty registration.

EXTENDED REGISTRATION & PAYMENT MUST BE RECEIVED WITHIN 30 DAYS OF PURCHASE DATE

EXTENDED WARRANTY REGISTRATION

Product & Model # :

_____ Serial #:

Owner Name: _____

Betst Products Invoice # _____

Acceptance of responsibility:

I (Purchaser) have Read and understand the Extended Warranty or someone has read/and explained allthe above to me. I understand this extended warranty does not cover any labor. I have filed my OriginalWarranty Registration and fully understand my requirements. I **understand that I alone am responsible for proper maintenance, care and safe operation of this tractor implement.**

~~I (purchaser) also understand that persons not familiar with the operation of this equipment should not be allowed to use it. Children especially should not operate or be near equipment. ANYONE OPERATING EQUIPMENT SHOULD HAVE READ ALL EQUIPMENT OPERATIONS MANUALS AND SAFETYMANUALS..~~

Owners Signature: x _____

Date: _____

You must sign this extended warranty and email to support@betstco.com or Fax to 1-305-397-1780 or mail copy to Betst Products, 83371 Melton Rd N.#3, Creswell OR 97426. This extendedwarranty is not effective unless the Purchaser faxes or mails this Registration Form within 30days of purchase. NOTE: The manufacturer may refuse warranty of any kind unless Betst Productsreceives a completed, legible and signed extended warranty registration. It is the responsibility of thepurchaser to assure that this registration document is received by Betst Products.

To Make Payment for Extended Warranty Call: 1-877-876-7895

Revised 9-20-14