



FHM

**FARMER-HELPER
MACHINERY COMPANY**

EFG SERIES FLAIL MOWER



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 1 quart 80-90 gear lube**

www.Betstco.com



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RUGGED LABOR SAVING EQUIPMENT SINCE 1995

Specifications subject to change without notice.

Revision 1-2016

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1. INTRODUCTION

Before using your flail mower, read and understand this operation manual and the accompanying maintenance instructions. It contains important information which will help you observe proper safety precautions, get the most work from your flail mower and help prolong the life of your flail mower.

2. SETUP and ASSEMBLY INSTRUCTIONS

Your flail mower will arrive in a metal shipping frame. This frame can be dismantled in minutes to allow access to all parts of your mower.

See Torque Value Chart at end of manual for all specific Bolts being used.

Remove Parts Box, PTO Driveline, Side Cover Shield, and then Mower from crate. See Picture and verify Parts, see picture at end of manual.

Attach Storage Stand and PTO Shield as shown in picture at end of manual.

Attach upper 3pt Bracket as shown in picture at end of manual. Hint-Do not tighten nuts & bolts until all have been loosely assembled in their proper location. Tighten from top-down.

Lube grease points on mower and driveline (4 Total Points, use lithium base General Purpose Grease) see picture at end of manual

Before attaching side cover, check all axle bolts and pulley screws for tightness (see picture at end of manual). Verify belt Deflection is $\frac{1}{4}$ " to $\frac{1}{2}$ " Attach side safety cover. 1 connecting bolt (see picture at end of manual).

Fill Gear Box with 80-90 Gear Oil (Approx. 3 Qt.) Fill Half Way to the top. See picture at end of manual for more info.

Completely read the rest of manual before attaching PTO driveline and operating the mower.

Before Operation check all Bolts, Nuts, and Zerks for tightness. Verify the tightness of all blade retaining bolts and nuts. Check all blade for free swinging action.

3. PTO DRIVESHAFT SAFETY TIPS

Your flail mower is shipped with a PTO driveshaft.

Always ensure that the PTO shaft is no more than 15 degrees of horizontal when operating.

-The following steps are recommended for safe operation of the driveshaft under field conditions.

-Test hitch angle to prevent the driveshaft from:

- Extending beyond the recommended maximum length.
- Bottoming out
- Reaching a position that allows joints to lock
- Exceeding the maximum allowable angle for constant velocity (CV) joints.

-Specify and test telescoping members to allow the lowest possible thrust loads, considering the expected working conditions.

-Specify and test torque limiters to control excessive shock.

-Where necessary, specify and test overrun clutches to prevent inertial loads from overpowering the tractor.

-Provide a means to support the drive shaft when it is disconnected from the tractor, to prevent damage during storage or transportation.

-Provided drive shaft is of Shear design using a Grade 4 bolt, if replacing this bolt do not use higher grade as this may cause damage to the PTO driveshaft, Implement, or your tractor.

-On drive shafts with torque-limiting or overrun devices, be sure to connect the device on the end of the drive shaft nearest the chipper.

-Provide a proper clearance zone for the operation of the driveshaft, to avoid damage to the shielding components.

-It is not recommended to use PTO adaptors which may defeat the purpose of the tractor's master shield and/or adversely affect the performance of the driveshaft.

4. PROTECTIVE GUARDS AND SHIELDS

Do not allow the flail mower to be operated without the side cover or fender deflector's properly in place. PTO driveshaft should consist of a PTO master shield, integral driveshaft shield, and a mower input connection shield.

1. Follow all flail mower and tractor instruction labels and manuals. The flail mower should be used only with the tractor's PTO master shield in place.
2. Specify and test an integral driveshaft shield with end cones which will overlap, but not interfere with the PTO master shield or flail mower input connection shield.
3. A flail mower input connection shield should be used in addition to the integral driveshaft shield, in order to guard the shaft coupling and any torque limiting device installed on the driveshaft.
4. Check that all routine maintenance of the driveshaft can be done without removal of the shields.

5. SAFETY INSTRUCTIONS

Do not attempt to operate the flail mower until you have read and understood this manual. Always keep guards and flail mower shields properly installed while operating the flail mower.

Keep the decals in place and verify they are understandable. New labels can be ordered from Betst Power Equipment upon request. If your flail mower is repainted, be sure the labels and decals remain visible.

Never leave the flail mower running unattended.

Do not attempt alterations, repairs or adjustments while blade rotor is turning. Always disconnect the PTO and stop the tractor motor, then put keys in your pocket.

Only use tractor of specified HP for your model flail mower as defined in the specifications.

Keep hands, feet and other extremities out of and away from the blade rotor area. When checking blades, EXERCISE EXTREME CAUTION! If accidentally rotated, the blade rotor can contain enough residual energy to cause serious injury.

Never allow anyone to stand beside or behind mower while operating.

Keep everyone, especially children and animals, away from the operation area.

Anyone who has not read and understood this manual should not be in the area.

6. OPERATOR PROTECTIVE GEAR

The following protective clothing and gear is recommended when using your flail mower.

EYES	--	Wraparound Safety Glasses or Goggles
EARS	--	Ear Plugs
HANDS	--	Leather Gloves
FEET	--	Steel-Toed Boots
LEGS	--	Heavy Pants
ARMS	--	Long-Sleeved Shirt

NO LOOSE CLOTHING SHOULD BE WORN AROUND THE Flail Mower

7. OPERATION CHECKLIST

CAUTION: Look under flail mower before operating to be sure the blade area is clear.

Make sure that:

- You have completed all steps of the assembly instructions
- The PTO shaft doesn't come apart or bottom out during the normal lifting range.
- There is no person around mower.
- Remove Tractor Drawbar

During and after operation, check the grass clippings or mulched limbs for size and quality of cut. It may be necessary to adjust the cutting height. See adjusting cutting height.

8. Flail Mower Connection and Operation

Remember that if flail mower blades are blunted they will not cut properly. Dirt, rocks, nails, or other foreign material will shorten blade life.

Always review the manual before operating the flail mower.

Operate mower in a safe well known area with the rear pointed away from doorways, sidewalks, or any areas where your view is obstructed or people may approach.

Only use 540 RPM PTO Selection, any other use will void the warranty and may cause severe damage to the gear box or mower.

Connecting to Tractor

Make sure there are no obstructions under the flail mower.

Align lower link arms of tractor to hitch clevises on mower, Insert lower hitch pins into lower ball swivels and attach linch pins.

Attach tractor top link to upper floating hitch on mower with pin supplied. Secure with Lock pin.

Slide driveline end with shear system over the tractor's splined PTO shaft and secure it with locking device of driveline.

Slide driveline end with twist system over the mower's splined PTO shaft and secure it with locking device of driveline.

Driveline should now be moved back and forth to insure that it is secure on the PTO shaft of the tractor and mower gearbox.

When raising the mower to the 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.

When moving over paved or rock road way be sure mower is lifted off the surface.

To Begin Mowing

Clear the Area to be mowed of objects and debris that might be picked up and thrown by the mower blades.

Grass is best cut when dry. Mowing wet grass can cause plugging resulting in grass clumps behind the mower.

Grass should be cut frequently as smaller clippings deteriorate faster.

If cutting extremely tall grass, it is best to raise the cutting height and mow the area, then lower the cutting height and mow a second time at the desired height.

To begin cutting, observe all safety guidelines in the manual.

Always check Gear Oil Level before mowing.

Engage PTO driveline at 540 RPM selection, Tractor engine RPM should be at least 1200 RPM, or as defined by tractor manufactures' "PTO RPM RANGE"

At low engine rpm's you may experience jerking in the mower, increase the engine rpm until at 540 RPM PTO speed. Most cutting is preformed with the 3-pt lift system in the float position.

If the blades are touching the surface while in float position, either adjust cutting height or raise mower with 3pt lift into fixed height position. See Cutting Height Adjustment.

At first begin mowing at a slow forward speed. Mower knives will cut better at a faster blades speed and slower travel speed.

After mowing 50 feet, stop and check to see that the mower is adjusted properly for the cutting conditions.

Do Not make sharp turns or attempt to back up while the mower is on the ground.

Do Not engage PTO with mower fully raised off the ground.

Normal mowing speed will be between 2-5 mph and you will need to maintain tractor PTO speed to produce a clean cut so select a tractor gear and range that will maintain this combination. The quality of cut or degree of debris pulverization will be better at lower ground speeds and cutting denser ground cover or heavier brush may create the need to slow down. Remember to look back often.

7. CUTTING HEIGHT ADJUSTMENT

The flail mower cutting height depends upon the height of roller, height of adjustable skids, and length of top center link. See pictures at end of manual.

On uneven terrain the roller and skids should both be touching the surface of cutting area. On even terrain the roller only needs to be touching the cutting surface. On Rough and Rocky terrain it is recommend that you cut high with all parts of the mower 3" above the ground. To achieve lowest cutting height in this type of terrain, raise roller and skids so mower can be operated with 3 pt in fixed position, remember change in elevation may require you to adjust cutting height to insure blades do not make contact with the surface.

To adjust height of roller or skids, remove bolts and nuts that affix them, lift or lower both sides in equal measurements, replace bolts and re-tighten. See picture at end of manual.

The top center link can also be used to adjust cutting height and aggressiveness of blades. In level grass areas the top link should be adjust so the mower sits on a slightly lifted horizontal plane. In dense or rough terrain the mower should sit in a slightly higher horizontal plane.

8. BLADE REPLACEMENT

The best way to tell if the blades need replacing is to watch the results of your mowing.

Dull blades cause many problems, including:

- Loss of cutting power
- Jamming or Plugging
- Rough cutting with more vibration than usual
- Rowing left in cut

To remove the blades, take the PTO shaft out of gear. Shut off the tractor and keep the keys in your pocket.

The blades are accessed underneath the mower.

Prop up mower with suitable device to hold the weight of the mower.

Inspect and remove/replace dull or missing blades.

9. BELT TENSION ADJUSTMENT

To adjust belt tension, take the PTO shaft out of gear. Shut off the tractor and keep the keys in your pocket.

The belts are accessed behind black side cover.

Prop up mower with suitable device to hold the weight of the mower.

Check the deflection of belts, should be between $\frac{1}{4}$ " and $\frac{1}{2}$ "

To adjust Tension, loosen Bolts and Nuts as shown in picture at end of manual.

Then using support move gearbox and shaft horizontally to adjust tension, then adjust support bolt and lock nut to the adjusted height, see picture at end of manual.

Tighten all bolts and nuts that were loosed to adjust the tension.

10. LUBRICATION FREQUENCIES AND LOCATIONS

PTO SHAFT – 2 zerks on Universal Once a day with lithium based Multipurpose Grease.

ROTOR DRIVESHAFT – There is a zerk on each end of rotor shaft. Add multipurpose grease before each use. (2-3 Pumps)

GEAR BOX – Check Level each time before operating, drain/fill as needed.

11. PREVENTIVE MAINTENANCE

Check all bolts & nuts after initial 4 hours of operation, and once per day thereafter before beginning operation.

Check belt Tension 4 hours after initial operation, and every 24 hours of operation thereafter before beginning operation.

12. TROUBLESHOOTING

PROBLEM: *Belt Slipping*

<u>Possible Causes</u>	<u>Solution</u>
Rotor Shaft Area Clogged	Unplug and clean mower deck.
Pulley Sheaves Clogged/Dirty	Remove shield and clean sheaves
Belt Tension insufficient	Check and adjust belt tension
Travelling to fast	Reduce Travel Speed
Belt Worn	Replace Belt
Blades Dull	Reverse/Replace

PROBLEM: *Patches of Uncut Grass*

<u>Possible Causes</u>	<u>Solution</u>
Low Throttle	Increase Engine RPM
Travelling to fast	Reduce Travel Speed
Blades Dull	Reverse/Replace

PROBLEM: *Excessive Vibration*

<u>Possible Causes</u>	<u>Solution</u>
Missing Blades	Replace missing blades
Worn Drive Belt	Replace worn belt
Pulley Miss-Aligned/Damaged	Re-Align/Replace
Debris in Belt Area	Remove cover and clean area
PTO Driveline Bent	Replace Bent/Broken Parts
Engine Speed	Increase Engine Speed

PROBLEM: *Gear Box Noisy*

<u>Possible Causes</u>	<u>Solution</u>
Low Oil Level	Check and Fill with Oil
Broken/Damaged Internal Parts	Dismantle/Replace Parts

PROBLEM: *Knives Scalping Grass*

Possible Causes

Incorrect Cutting Height
Mowing Pattern
Turning to Quickly

Solution

Adjust Cutting height
Change Mowing Pattern
Reduce Speed during turns

PROBLEM: *Uneven Cut*

Possible Causes

Missing/Dull Blades
Travelling to Fast
Mower Not Level

Solution

Remove/Replace Blades
Reduce Travel Speed
Adjust 3Pt Linkage

PROBLEM: *Tractor Loaded Down by Mower*

Possible Causes

Low Engine Speed
Travelling to Fast
Blade Area Clogged

Solution







Increase Engine Throttle
Reduce Travel Speed
Clean Blade Area

13. PARTS AND FASTENERS

Your Flail Mower is designed for ease of maintenance. Replacement parts are available from Betst Power Equipment at 1-541-895-3083 or Support@Betstco.com Check the parts list for specification.

See Parts Diagrams at end of manual

Torque Values Chart

	Bolt Head Identification							Bolt Head Identification					
													
	Grade 2		Grade 5		Grade 8			Class 5.8		Class 8.8		Class 10.9	
in-tpi ¹	N · m	ft-lb ³	N · m	ft-lb	N · m	ft-lb	mm x pitch	N · m	ft-lb	N · m	ft-lb	N · m	ft-lb
1/4" - 20	7.4	5.6	11	8	16	12	M 5 X 0.8	4	3	6	5	9	7
1/4" - 28	8.5	6	13	10	18	14	M 6 X 1	7	5	11	8	15	11
5/16" - 18	15	11	24	17	33	25	M 8 X 1.25	17	12	26	19	36	27
5/16" - 24	17	13	26	19	37	27	M 8 X 1	18	13	28	21	39	29
3/8" - 16	27	20	42	31	59	44	M10 X 1.5	33	24	52	39	72	53
3/8" - 24	31	22	47	35	67	49	M10 X 0.75	39	29	61	45	85	62
7/16" - 14	43	32	67	49	95	70	M12 X 1.75	58	42	91	67	125	93
7/16" - 20	49	36	75	55	105	78	M12 X 1.5	60	44	95	70	130	97
1/2" - 13	66	49	105	76	145	105	M12 X 1	90	66	105	77	145	105
1/2" - 20	75	55	115	85	165	120	M14 X 2	92	68	145	105	200	150
9/16" - 12	95	70	150	110	210	155	M14 X 1.5	99	73	155	115	215	160
9/16" - 18	105	79	165	120	235	170	M16 X 2	145	105	225	165	315	230
5/8" - 11	130	97	205	150	285	210	M16 X 1.5	155	115	240	180	335	245
5/8" - 18	150	110	230	170	325	240	M18 X 2.5	195	145	310	230	405	300
3/4" - 10	235	170	360	265	510	375	M18 X 1.5	220	165	350	260	485	355
3/4" - 16	260	190	405	295	570	420	M20 X 2.5	280	205	440	325	610	450
7/8" - 9	225	165	585	430	820	605	M20 X 1.5	310	230	650	480	900	665
7/8" - 14	250	185	640	475	905	670	M24 X 3	480	355	760	560	1050	780
1" - 8	340	250	875	645	1230	910	M24 X 2	525	390	830	610	1150	845
1" - 12	370	275	955	705	1350	995	M30 X 3.5	960	705	1510	1120	2100	1550
1-1/8" - 7	480	355	1080	795	1750	1290	M30 X 2	1060	785	1680	1240	2320	1710
1 1/8" - 12	540	395	1210	890	1960	1440	M36 X 3.5	1730	1270	2650	1950	3660	2700
1 1/4" - 7	680	500	1520	1120	2460	1820	M36 X 2	1880	1380	2960	2190	4100	3220
1 1/4" - 12	750	555	1680	1240	2730	2010							
1 3/8" - 6	890	655	1990	1470	3230	2380							
1 3/8" - 12	1010	745	2270	1670	3680	2710							
1 1/2" - 6	1180	870	2640	1950	4290	3160							
1 1/2" - 12	1330	980	2970	2190	4820	3560							

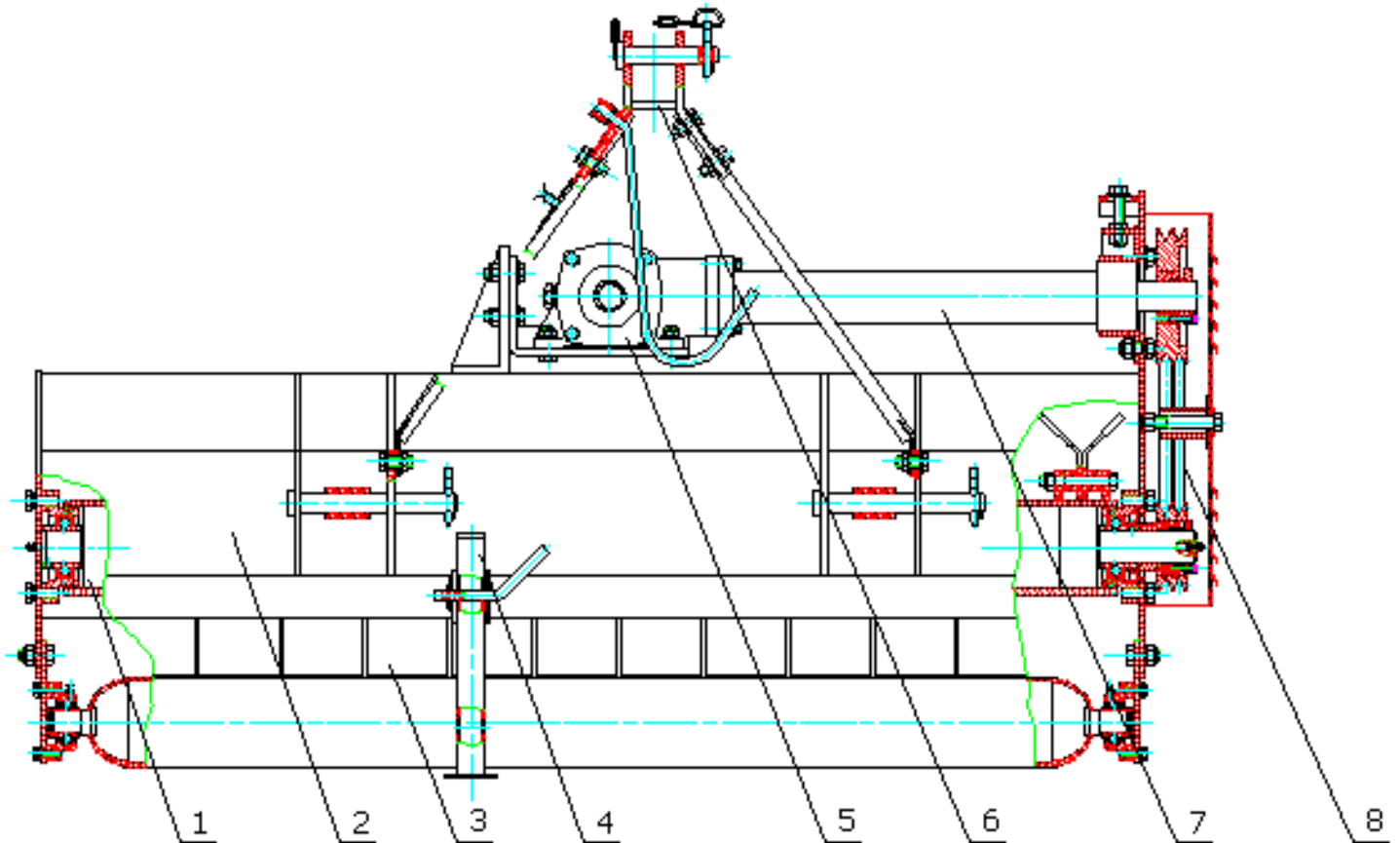
¹ in-tpi = nominal thread diameter in inches-threads per in.

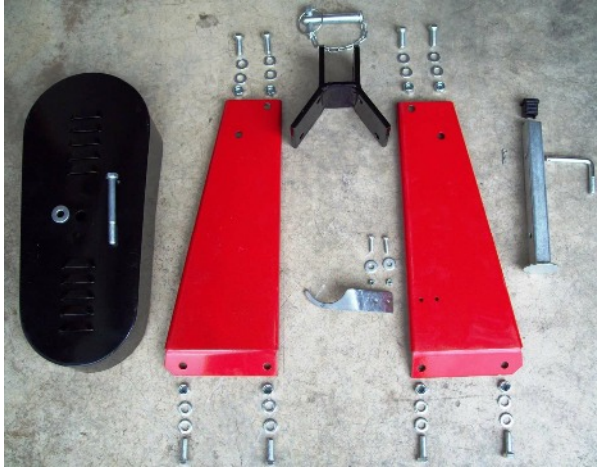
² N · m = newton-meters

³ ft-lb= foot pounds

⁴ mm x pitch = nominal thread diameter in millimeters x thread pitch

1. Blade axle
2. Mower Housing
3. Combined Safety Fender
4. Support Leg
5. Gearbox Assembly
6. 3Pt Bracket
7. Transmission shaft
8. Pulleys and Belts

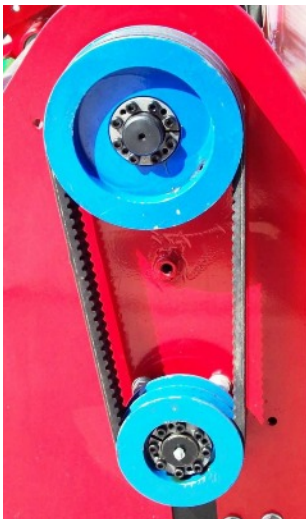




Parts Box Includes the following show in picture, you may receive extra parts that are not shown in the picture.



Attach 3Pt Support Bracket, Storage Stand, and PTO Shield shown in picture



Lubrication Pont on Lower Axle and Pulley Detail Picture





Fill Gear Box ½ way to the top



If bearing near belt cover has grease zert fill this bearing with grease. It can take a lot of grease.



Roller and Skid Height Adjustment



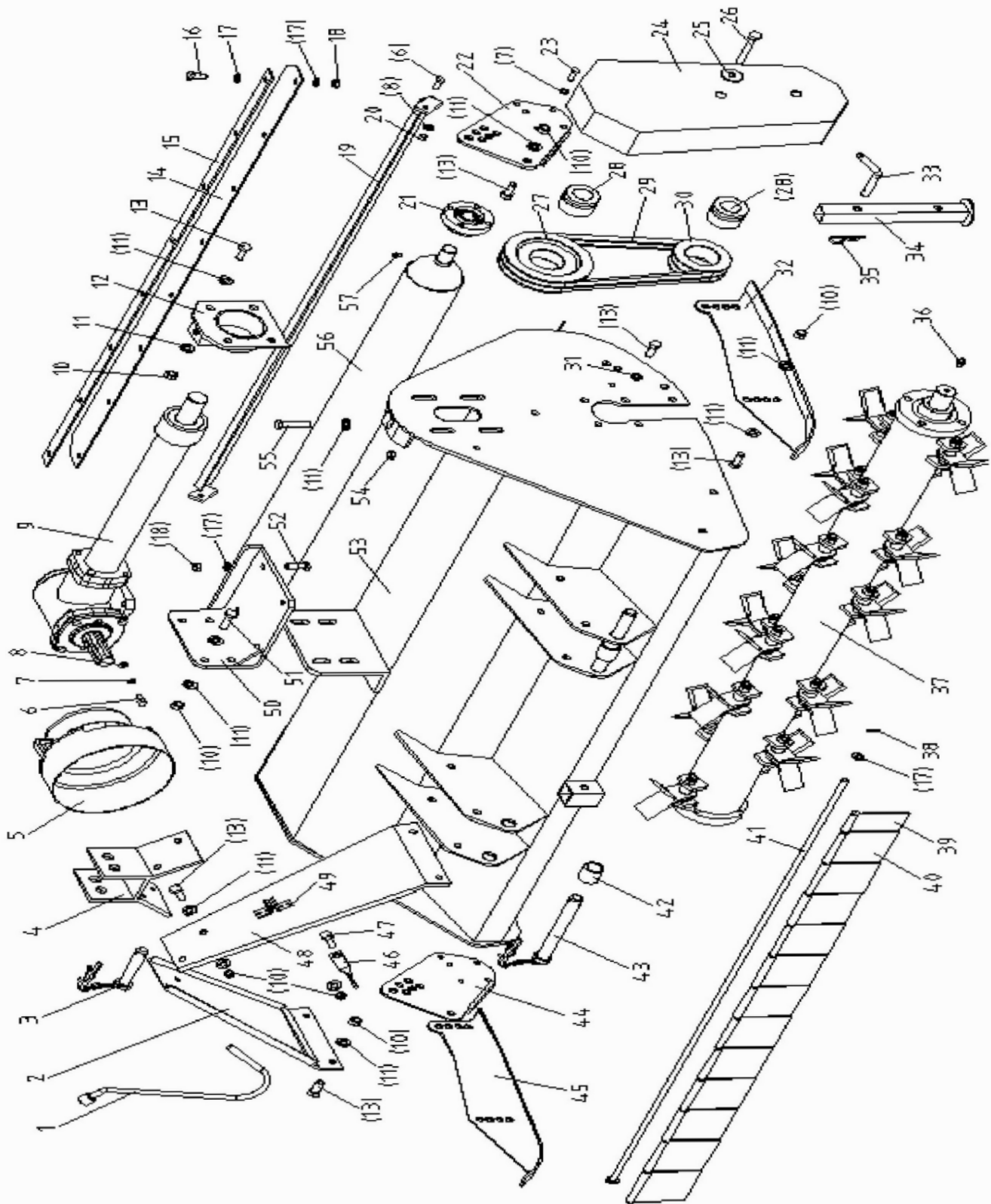
Belt Tension Adjusting Points

Farmer-Helper EFG Series Flail Mowers Specifications

SPEC	FH-EFG105	FH-EFG125	FH-EFG155	FH-EFG175
Working Width	41"	48"	60"	68"
Overall Width	47"	54"	67"	75"
Min. HP Req.	18 HP	20 HP	24 HP	28 HP
Hitch	Cat 1	Cat 1	Cat 1	Cat 1
Gear Box Rating	45 HP	45 HP	45 HP	45 HP
Changeable Cutting Offset From Center*	Left 1.5" or Right 2.75" from center	Left 0.5" or Right 3.75" from center	Right 0.5" or Right 4.75" from center	Right 4.5" or Right 8.75" from center
Optl Hammer Blades	16 Hammer	20 Hammer	24 Hammer	28 Hammer
Grass Blades	32 Blades	40 Blades	48 Blades	56 Blades
Housing Thickness	1/4"	1/4"	1/4"	1/4"
SidePlate Thickness	1/4"	1/4"	1/4"	1/4"
Roller Dia.	4"	4"	4"	4"
Rotor Shaft Dia.	4 1/2"	4 1/2"	4 1/2"	4 1/2"
Blade Swing	14"	14"	14"	14"
No. of Belts	2	2	3	4
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"
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
Warranty	2 Year	2 Year	2 Year	2 Year
Weight	528 lbs	565 lbs	665 lbs	726 lbs
Crated Weight	553 lbs	590 lbs	690 lbs	756 lbs

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

5.1 Flail Mower Assembly



Flail Mower Assembly

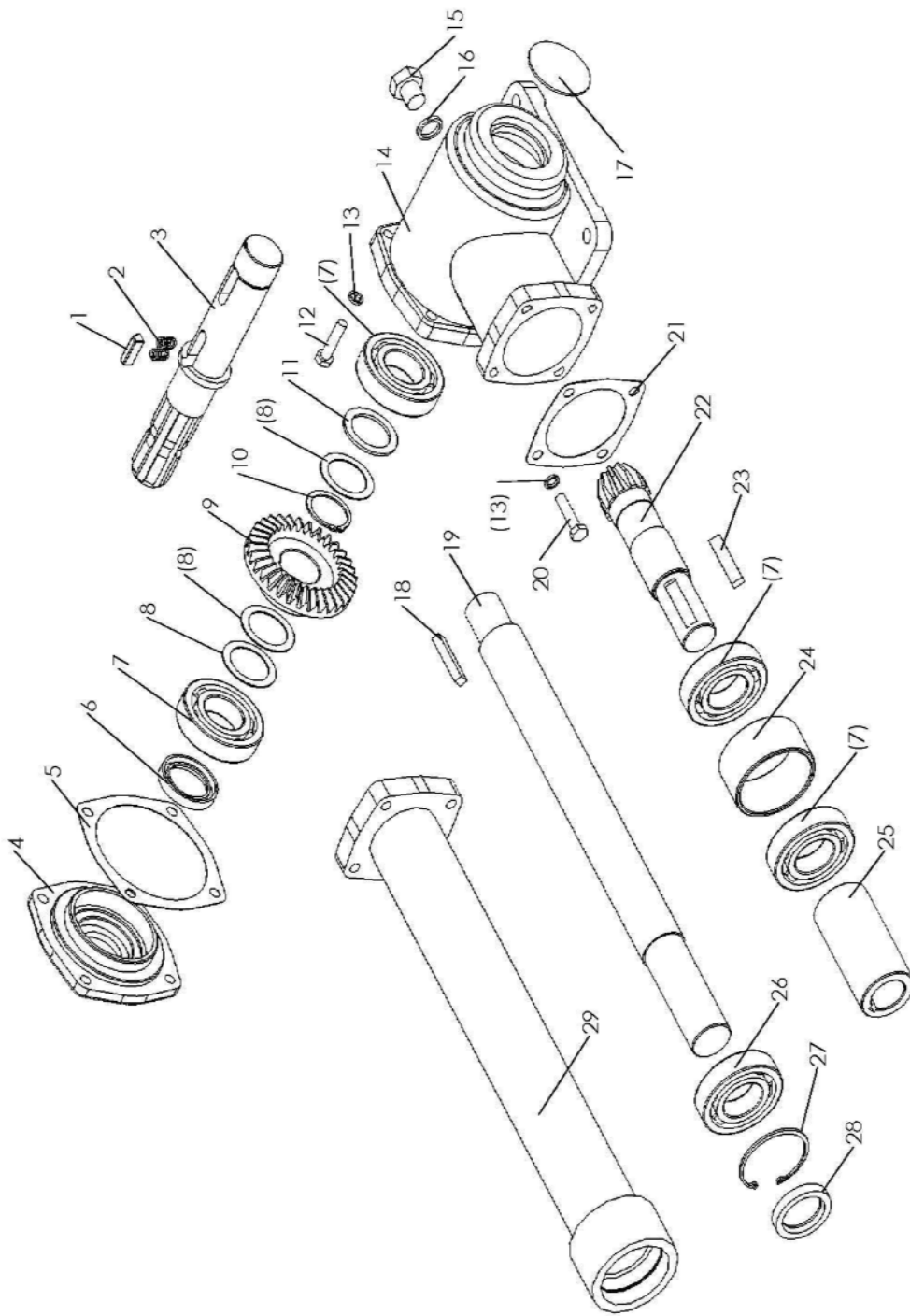
NO.	Part NO.	Name & Specifications	Quantity	Remark
1	EF100.00.017	Hook	1	
2	EF100.00.020	Suspension plate □R□	1	
3	EF100.00.019	Pin shaft weldment	1	
4	EF100.00.018	Bracket weldment	1	
5	EF100.00.112	Guard shade	1	
6	GB5783-86	Bolt M8×20	4	
7	GB93-87	Spring washer 8	10	
8	GB97.1-85	Plain washer 8	4	
9	RK120.019	Gear box assembly	1	
10	GB6184-86	Locking nut M12	34	
11	GB97.1-85	Plain washer 12	41	
12	EFG120.015	Tension seat weldment	1	
13	GB5783-86	Bolt M12×30	27	
14	EFG120.103	Rubber blanket	1	
15	EFG120.104	Press plate	1	
16	GB5783-86	Bolt M10×25	8	
17	GB97.1-85	Plain washer 10	36	
18	GB6184-86	Locking nut M10	12	
19	EF100.00.024	Mud shield	1	
20	GB6184-86	Locking nut M8	2	
21	EF100.00.012	Bearing with flange UC205	2	
22	EFG120.102	Supporting for roller □L□	1	
23	GB5783-86	Bolt M8×25	8	
24	EF100.00.021	Belt cover	1	
25	GB96-85	Plain washer 12	1	

Flail Mower Assembly

NO.	Part NO.	Name & Specifications	Quantity	Remark
26	GB5782-86	Bolt M12×80	1	
27	RK120.113	Big belt pulley	1	
28	JB/T7934Z3	Swellable sleeve	2	
29	GB-T1154-97	Strap A930	2	
30	RK120.110	Small belt pulley	1	
31	GB93-87	Spring washer 12	8	
32	MFP120.00.025	Base plate □L□	1	
33	EF100.00.111	Bent pin	1	
34	EF100.00.027	Supporting frame	1	
35		R pin	1	
36	GB1152-89	Oil cup M8X1	2	
37		Blade axle subassembly	1	
38	GB879-86	Elastic cylindrical pin 4x22	2	
39	EF100.00.121	Fender	1	
40	EF100.00.122	Fender	13	
41	EF100.00.123	Shaft for fender	1	
42	EF100.00.106	Spacer	2	
43	EF100.00.014	Pin shaft weldment	2	
44	EFG120.101	Supporting for roller □R□	1	
45	MFP120.00.026	Base plate □R□	1	
46	EF100.00.107	Fixing plate	1	
47	GB5783-86	Bolt M12×85	1	
48	EF100.00.016	Suspension plate □L□	2	
49	EF100.00.105	Clamp for hook	2	
50	EFG120.016	Gear box seat	1	

Flail Mower Assembly

NO.	Part NO.	Name & Specifications	Quantity	Remark
51	GB5783-86	Bolt M12×40	4	
52	GB5783-86	Bolt M10×35	4	
53	EFG120.011	The cover weldment	1	
54	GB6172-86	Nut M12	1	
55	GB5783-86	Bolt M12×55	1	
56	EFG120.012	Roller weldment	1	
57	GB1152-89	Oil cup M6	2	



5.2 GEAR BOX ASSEMBLY

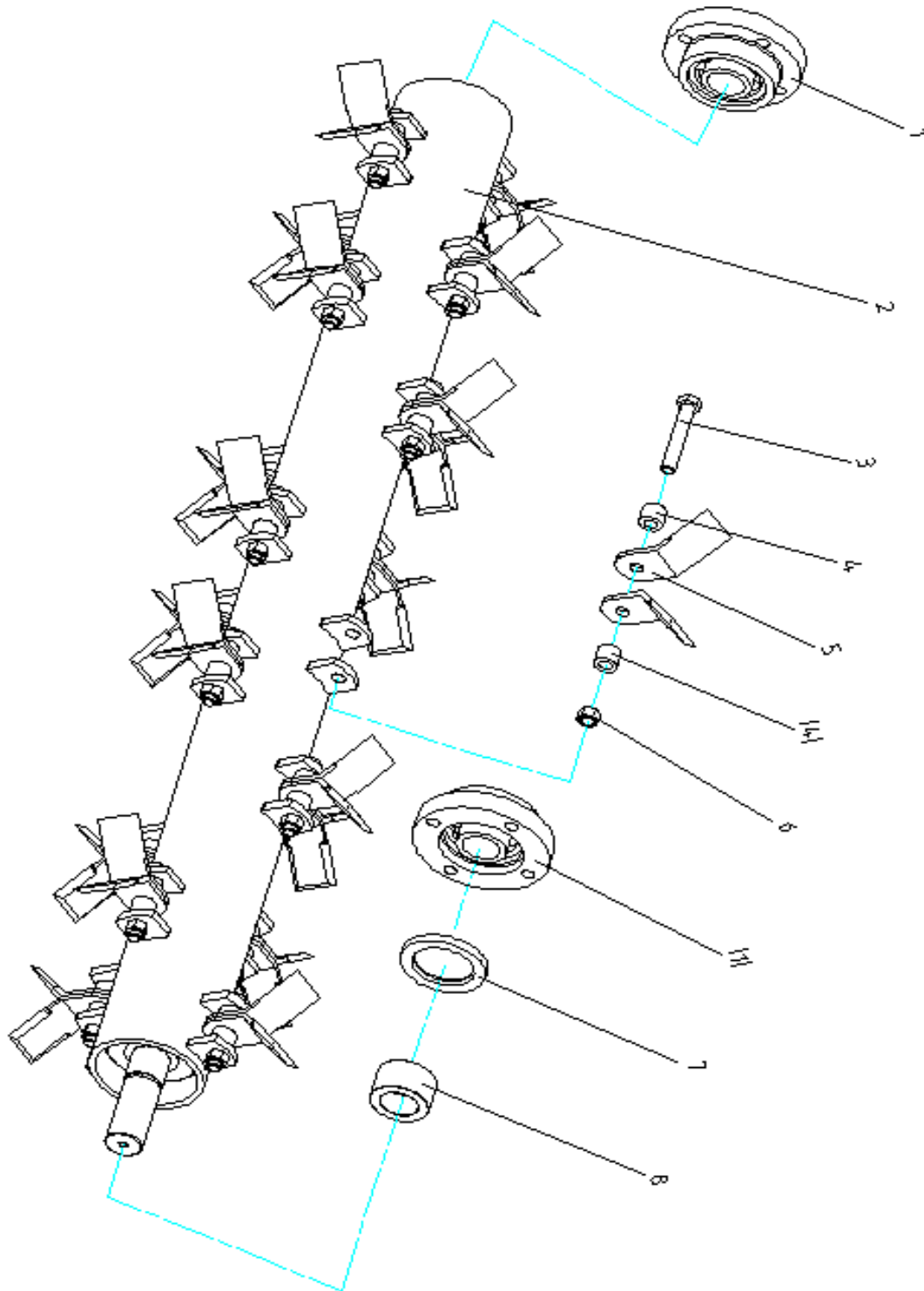
Gearbox Assembly

No	Part No	Name □ Specification	Quantity	Remarks
1	EF100.01.110	Key	1	
2	EF100.01.111	Pressure spring	2	
3	EF100.01.106	Input shaft	1	
4	EF100.01.107	Bearing cover	1	
5	EF100.01.108	Paper gasket	1	
6	GB13871-94	Oil seal 35×55×8	1	
7	GB/T276-94	Bearing 6207	4	
8	EF100.01.109	Adjusting shim	4	
9	EF100.01.112	Bevel gear	1	
10	GB894.1-86	Blocked patch 35	1	
11	EF100.01.114	Retainer	1	
12	GB5783-86	Hex. head bolt M8×80	4	
13	GB93-87	Plain washer 8	8	
14	EF100.01.113	Case	1	
15	12.37.149	Combined seal washer	1	
16	200.38.024	Oil drain plug	1	
17	ZB T32 002-88	Blocked patch	1	
18	GB1096-79	Key 10×80	1	
19	RK120.166	Shaft	1	
20	GB5783-86	Hex. head bolt M8×85	4	
21	EF100.01.103	Paper gasket	1	
22	EF100.01.105	Output shaft	1	
23	GB1096-79	Key 10×45	1	
24	EF100.01.104	Spacer sleeve	1	

Gearbox Assembly

No	Part No	Name □ Specification	Quantity	Remarks
25	EF100.01.101	Connected sleeve	1	
26	GB/T276-94	Bearing 6007	1	
27	GB893.1-86	Blocked patch 62	1	
28	GB13871-94	Oil seal 35×62×10	1	
29	RK120.026	Shaft tube weldment	1	

5.3 Blade Axle and Bearing Parts



Blade Axle Subassembly

NO.	Part NO.	Name & Specifications	Quantity	Remark
1	UC207-Z	Bearing with flange 90207	2	
2	EFG120.013	Blade axle weldment	1	
3	GB5782-86	Bolt M12x80	20	Varies
4	EF100.00.103	Sleeve	40	Varies
5	EF100.00.102	Grass Blade	40	Varies
6	GB6184-86	Locking nut M12	20	Varies
7	GB13871-94	Oil seal FB55X80X8	1	
8	RK120.109	Oil-sealing sleeve	1	



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.

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 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 or E-Mail cservice@betstco.com

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 or E-Mail cservice@betstco.com

Revised 9-20-14

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 all the above to me. I understand this extended warranty does not cover any labor. I have filed my Original Warranty Registration and fully understand my requirements. I **understand that I alone am responsible for proper maintenance, care and safe operation of this item.**

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 SAFETY MANUALS..

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 extended warranty is not effective unless the Purchaser faxes or mails this Registration Form within 30 days of purchase. NOTE: The manufacturer may refuse warranty of any kind unless Betst Products receives a completed, legible and signed extended warranty registration. It is the responsibility of the purchaser 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