

FH-SG24PRO Stump Grinder



FHM
FARMER-HELPER
MACHINERY COMPANY



Tighten All Nuts and Bolts!

OPERATION & PARTS MANUAL

Please read these instructions before using. Always grease all fittings and be sure to always check and fill with oil before operating! Retain this manual for future use.

BETSTCO 

RUGGED LABOR SAVING EQUIPMENT SINCE 1995 83371 Melton Rd, Creswell OR 97426

www.Betstco.com

541-895-3083 M-F 7am-4pm PST



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INTRODUCTION

Congratulations on your purchase and welcome to FHM. This manual gives you the necessary information about your machine so you will be able to use it properly. The entire manual must be read and understood before you start using the machine. If any questions should arise that are not covered by this manual, please contact FHM.

OWNER'S RECORD

Please take a moment to record the following information about your stump grinder. If you need to call for assistance, please be ready to provide your model number. This information will allow us to help you more quickly when you call.

MODEL NUMBER

SERIAL NUMBER

DATE OF PURCHASE

This machine is designed for certain applications only. We strongly recommend this machine is not modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted us to determine if it can or should be performed on the product.

For technical questions and replacement parts, please contact FHM.

INTENDED USE

This stump grinder is designed for grinding stumps using a tractor PTO at 540 RPM.

TECHNICAL SPECIFICATIONS

Model	SG24	SG24-PRO
Recommended HP	30 HP - 50 HP	
Rotor Size	24"	
Number of Teeth	36	54
Tooth Construction	Carbide steel bolt-in	
Required PTO Speed	540 RPM	
Cutting Wheel Speed	950 RPM	
Cutting Height	18" above ground	
Cutting Depth	8" below ground	
Maximum Cutting Depth (per pass)	6"	
Maximum Horizontal Cut	26"	
Swing Arc	40°	
Hitch Category	Cat. I or II	
Shipping Weight	280kg	

GENERAL SAFETY RULES



WARNING!

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.



WARNING!

The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

NOTE: All the laws and any regulation having jurisdiction covering the safety requirements for use of the machine take precedence over the statements in this manual. Users of this machine must adhere to such regulations.

Only people that have read and understood these instructions are able to use the stump grinder.

Inspect the stump grinder and tractor at the beginning of every working day and repair any defects.

Stop the engine and make sure that the machine will not start accidentally while repairing defects or doing maintenance.

Do not remove the stump grinders safety devices or make them inactive.

Always locate buried wires, cables, and pipelines before grinding.

PERSONAL SAFETY

- ⚠ Stay alert, watch what you are doing and use common sense when operating the machine. Do not use the machine while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating machines may result in serious personal injury.
- ⚠ Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents often cover moving parts and should be avoided.
- ⚠ Use safety apparel and equipment. Use safety goggles or safety glasses with side shields which comply with current national standards, or when needed, a face shield. Use a dust mask in dusty work conditions. This applies to all persons in the work area. Also use safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate.
- ⚠ Do not over reach. Keep proper footing and balance at all times.
- ⚠ Remove adjusting keys or wrenches before connecting to the power supply or turning on the tool. A wrench or key that is left attached to a rotating part of the tool may result in personal injury.
- ⚠ Never conduct any maintenance or make any other adjustments when the engine is running. Always shut the engine off, remove the ignition key, and keep the engine off before carrying out any of the aforementioned procedures. Consult your engine manual for safe shutdown procedures to prevent accident ignition.
- ⚠ Never allow passengers on the stump grinder.

TOOL USE AND CARE

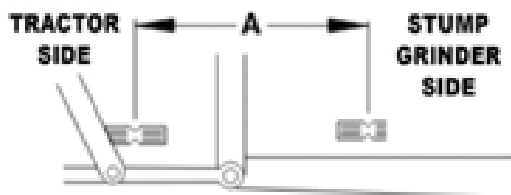
-  Always be sure operator is familiar with proper safety precautions and operation techniques before using machine.
-  Do not force the machine. Machines do a better and safer job when used in the manner for which they are designed.
-  Storing the machine. When the machine is not in use, store it in a dry, secure place or keep well covered and out of the reach of children. Inspect the machine for good working condition prior to storage and before re-use.
-  Maintain the machine. It is recommended that the general condition of the machine be examined before it is used. Keep the machine in good repair by adopting a program of conscientious repair and maintenance in accordance with the recommended procedures found in this manual. If any abnormal vibrations or noise occurs, turn the machine off immediately and have the problem corrected before further use.
-  Cleaning. Use a pressure washer to clean the carbide teeth while taking care not to pressure wash the bearings as this may introduce water into areas of the machine that will result in malfunction or damage.
-  Use only accessories that are recommended by the manufacturer. Accessories that may be suitable for another machine may create a risk of injury when used on this machine.
-  Always operate the machine with all safety devices and guards in place and in working order. DO NOT modify or make changes to safety devices. DO NOT operate the machine if any safety devices or guards are missing or inoperative.
-  Never leave the machine running unattended.
-  Never use the machine to grind anything other than stumps or for any purpose other than grinding stumps as described in this manual.

STUMP GRINDER SET-UP PROCEDURES

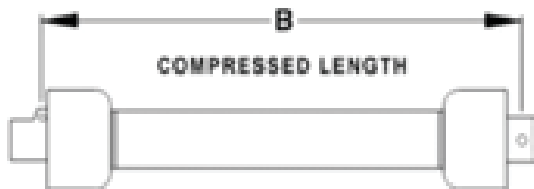
TRIMMING THE PTO SHAFT

The stump grinder is shipped with a PTO shaft that can be fitted to most tractors. The PTO shaft may need to be trimmed depending on your tractor and configuration. Follow the below steps to ensure that the PTO shaft is fitted to your tractor correctly.

1. Attach the stump grinder to the tractor, but do not install the PTO shaft.
2. Raise the stump grinder using the tractors 3 point hitch system so that the shaft on the tractor is level with the shaft on the stump grinder.
3. Measure the distance between the locking grooves on the shaft of the tractor and stump grinder (A) as shown below.



4. Measure the distance between the locking pins on the PTO shaft itself when it is in the compressed/shortest length (B) as shown below.



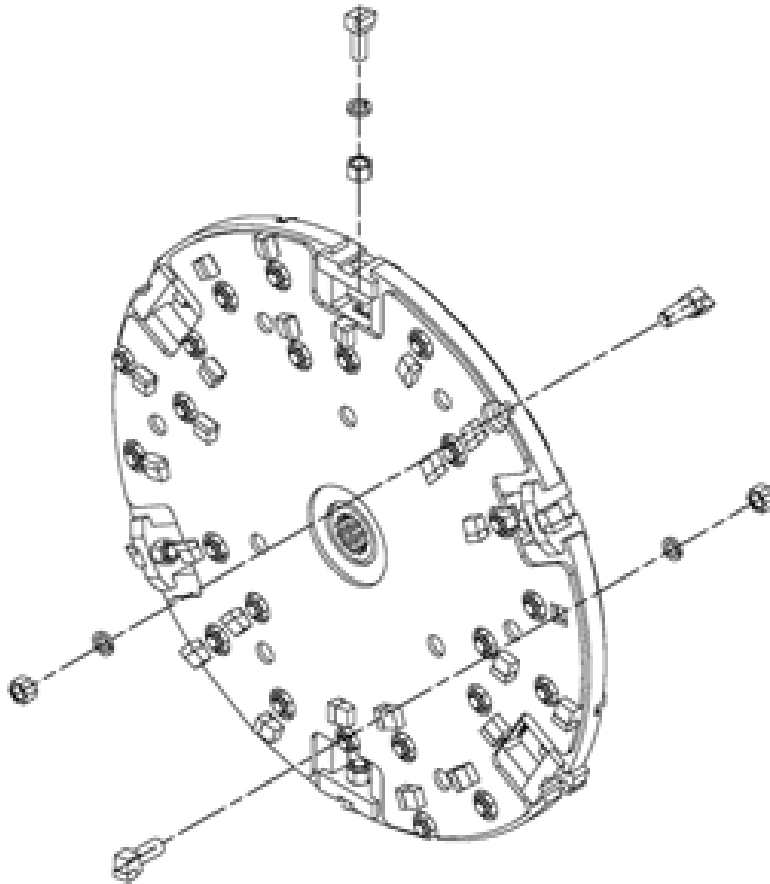
5. If (A) is at least 1" longer than (B), the PTO shaft will not need to be cut.
6. If dimension (B) is longer than (A), the PTO shaft will need to be cut. The below equation may be used to calculate the correct amount to trim.
$$(B-A) + 1 \text{ INCH} = C \text{ (AMOUNT TO CUT)}$$
7. Once (C) has been calculated; this amount will need to be cut off of BOTH halves of the PTO shaft.
8. After both halves of the PTO shaft have been cut, use a file to remove any burrs or sharp edges and slide the shaft together ensuring it telescopes in and out freely. The PTO shaft can now be attached to the stump grinder and tractor, ready for use.

MAINTENANCE

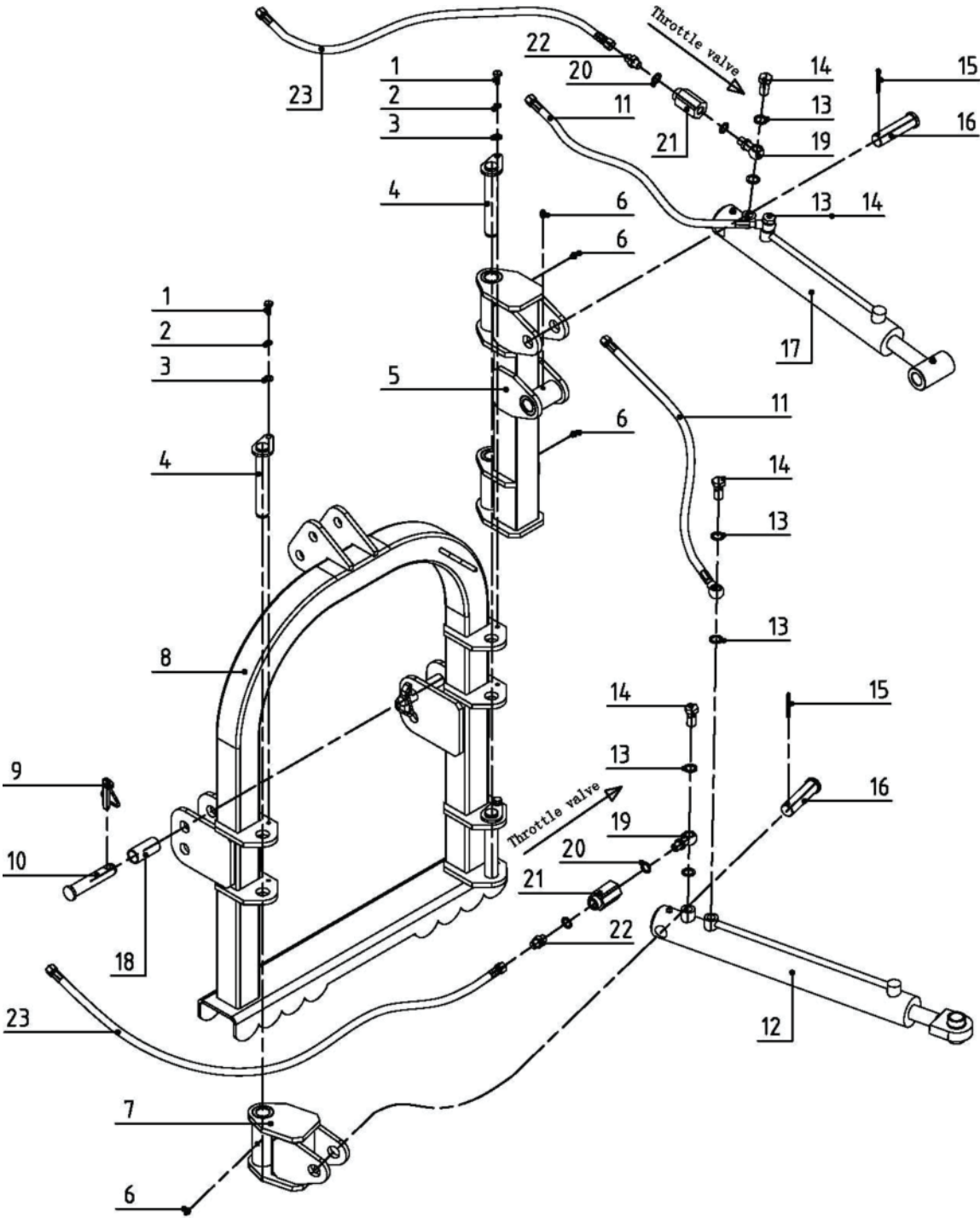
1. Proper and routine maintenance is critical to operator safety, achieving proper stump grinding results and in prolonging the life of the machine.
2. For cleaning and maintenance of the stump grinder, switch off the tractor PTO shaft and turn the engine off.
3. Inspect the unit before each use for loose nuts and worn cutting teeth. Also clean any build up of debris.
4. After 2 hours of operation, check for loose nuts and worn cutting teeth. Tighten and replace as necessary.
5. Grease the bearings and the pivot pins on the main housing as needed before each use. Do not over grease the the bearings as this will blow out the seals and cause premature bearing failure.
6. Inspect the clutch plates on the PTO shaft periodically to ensure that they are not seized together. Refer to “***PTO Shaft Clutch Run In***” in the “***Stump Grinder Set Up Procedures***” section of the manual.

REPLACING TEETH

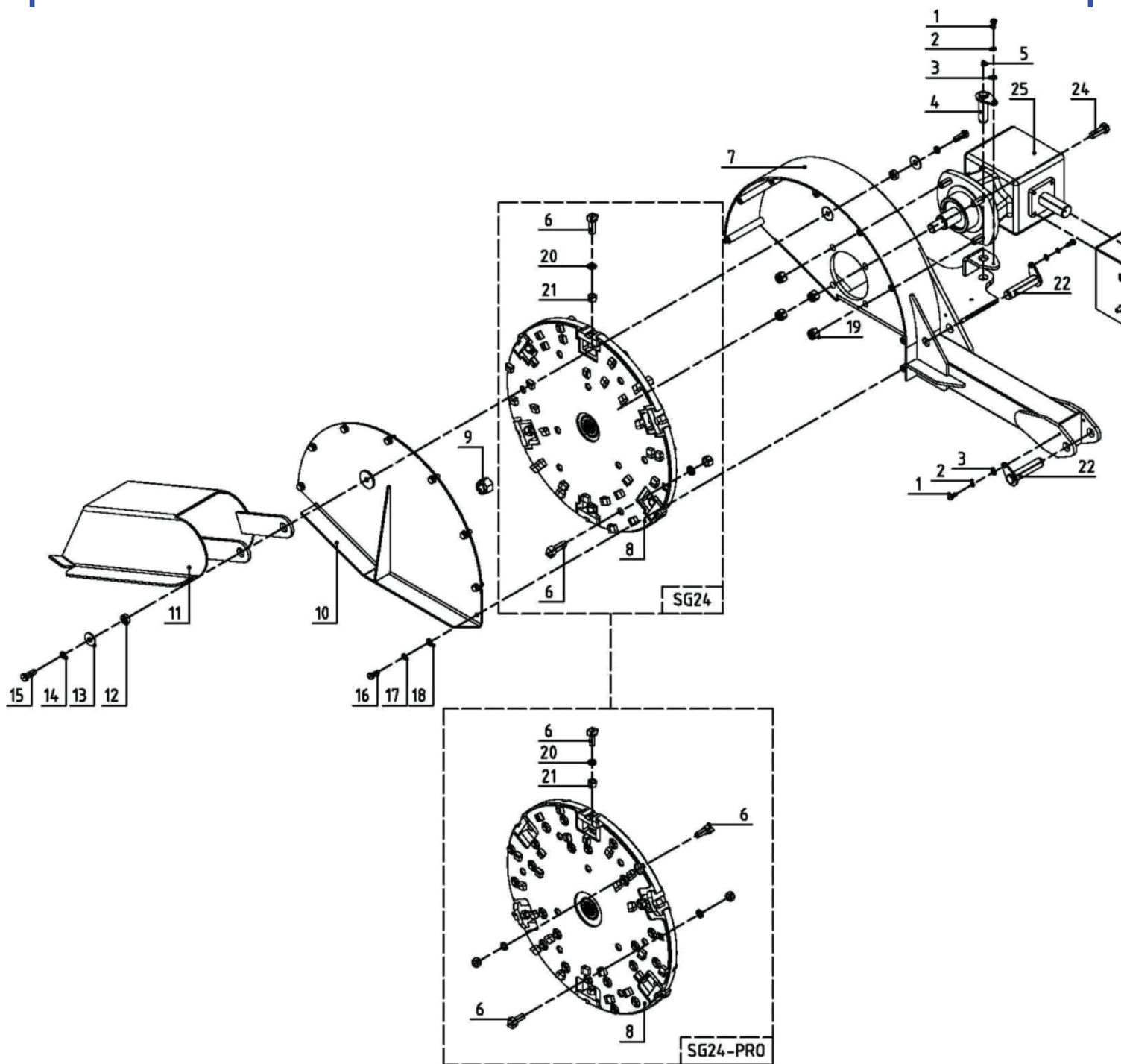
1. Disconnect the PTO shaft from the tractor and set the stump grinder on a flat and level surface.
2. Remove the lock nut using a wrench or socket.
3. Remove the cutting tooth.
4. Install a replacement tooth and lock nut using a torque wrench set to 160 ft-lbs (215 Nm)



STUMP GRINDER ASSEMBLY & PARTS LIST



NO.	PART NO.	Name & Specifications	Quantity
1	GB/T5783-2000	Bolt M8×20	3
2	GB/ T93-1987	Spring washer 8	3
3	GB/T97.1-2002	Plain washer 8	3
4	SG24.01.011	Pin weldment	3
5	SG24.01.012	Swing frame weldment	1
6	JB/T7940.1-1995	Oil cup M8	4
7	SG24.01.013	Pivot cross	1
8	SG24.01.014	3-Pt. toke weldment	1
9		Lock pin	2
10	SG24.01.101	Pin for lifting	2
11	SG24.01.015	Hose, Horizontal	2
12	SG24.01.016	Hydraulic cylinder, Horizontal	1
13	JB/T 982-1977	Gasket 16	8
14	BH5.60.110	Hollow bolt 16	2
15	GB/T91-2000	Cotter pin 5×40	2
16	SG24.01.102	Pin	2
17	SG24.01.017	Hydraulic cylinder	1
18	SG24.01.103	Sleeve	2
19	BH5.60.108	Ball adapter	4
20	JB/T 982-1977	Gasket 14	4
21	MK6	Throttle valve	2
22	BH5.60.109	Adapter 14-14	2
23	SG24.01.018	Hose	2



NO.	PART NO.	Name & Specifications	Quantity
1	GB / T5783-2000	Bolt M8×20	7
2	GB/ T93-1987	Spring washer 8	7
3	GB / T97. 1-2002	Plain washer 8	7
4	SG24.02.011	Pin weldment	1
5	JB/T7940.1-1995	Oil cup M8	1
6	SG24.02.012	Carbide tooth weldment	36 (SG24)
			54 (SG24-PRO)
7	SG24.02.013	Housing weldment	1
8	SG24.02.014	Grinder wheel weldment, SG24	1
	SG24-PRO.02.014	Grinder wheel weldment, SG24-PRO	1
9	GB/T6178-1986	Slotted nut M24	1
10	SG24.02.015	Wheel guard weldment	1
11	SG24.02.016	Guard weldment	1
12	SG24.02.101	Sleeve	2
13	GB / T96.2-2002	Plain washer 12	2
14	GB/ T93-1987	Spring washer 12	2
15	GB / T5783-2000	Bolt M12×35	2
16	GB / T5783-2000	Bolt M10×25	12
17	GB/ T93-1987	Spring washer 10	12
18	GB / T97. 1-2002	Plain washer 10	12
19	GB / T889. 1-2000	Lock nut M16	4
20	GB/ T93-1987	Spring washer 14	36 (SG24)
			54 (SG24-PRO)
21	GB / T6171-2000	Nut M14*1.5	36 (SG24)
			54 (SG24-PRO)
22	SG24.02.018	Pin	2
23	SG24.02.017	Lid, shield	1
24	GB / T5783-2000	Bolt M16×50	4
25	XH50.169Z.01L	Gearbox assembly (1: 1.77)	1



FHM
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Parts Request Form

Phone 541-895-3083 or E-mail
cservice@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 Limited Warranty

Unless otherwise stated on purchase invoice, Betstco warrants to original Purchaser that Farmer-Helper products are free from major defects in material under normal use and service for a period of 90 Days from the date the product is purchased or shipped, whichever is later. Commercial use 90 days. Use at address that is not yours, is considered commercial use. Consumable, Expendable, Wear Items (Rubber plastic parts, hydraulic hoses, belts, tires, cables, blades, tines, wedges, teeth, tiups, 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.

Betstco obligation under this warranty is to repair or replace defective upon approval by; Betstco, 83371 Melton Rd. N, Creswell OR 97426 that Warranty Claim is valid. Product shall be returned upon request of Betstco. Transportation charges to be prepaid by user.

Gasoline or diesel engines used to powered Farmer-Helper products are covered by the warranty of the appropriate engine manufacturean Purchaser must look to the engine manufacture for all issues relating to engine operation.

Betstco assumes no responsibility for outside labor.

PERMISSABLE BY APPLICABLE LAW, BETSTCO 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, BETSTCO 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. BETSTCO MAKES NO WARRANTIES TO THOSE DEFINED AS "CONSUMERS" IN THE MAGNUSON-MOSS WARRANTY FEDERAL TRADE COMMISION IMPROVEMENTS ACT. THE FOREGOING EXCLUSION 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 BETSTCO FOR ANY GENERAL SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE SALE OR USE OF ANY PRODUCTS SOLD BY BETSTCO OR AN AGENT THEREOF, BETSTCO 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 VALUE-LEADER PRODUCTS, NO OTHER WARRANTY IS APPLICABLE, EITHE EXPRESSED OR IMPLIED, IN FACT BY LAW.

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

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

Betstco reserves the rights to make improvements in design or changes in specifacations at any time, without incurring any obligations to owners of the units previously sold.



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

ITEM: _____ **MODEL#** _____ **PURCHASE DATE:** ____/____/____

PURCHASED FROM: _____ **GIFT INV# ORDER#** _____

OWNER NAME: _____ **SERIAL #** _____

OWNER ADDRESS: _____

CITY: _____ **COUNTY:** _____ **ST:** _____ **ZIP:** _____

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 ST 375 LAKE OSWEGO OR 97035 OR THE CURRENT BBB LOCATION CLOSEST TO BETSTCO. 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 IS ALONE AM RESPONSIBLE FOR PROPER MAINTENANCE, CARE AND SAFE OPERATION OF THIS FARMER-HELPER 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 VALUE-LEADER PRODUCTS SHOULD HAVE READ OPERATIONS MANUALS AND SAFETY MANUALS.

OWNERS SIGNATURE: x _____ **DATE:** ____/____/____

YOU MUST SIGN THIS WARRANTY AND MAIL OR FAX A COPY TO BETSTCO, 83371 MELTON RD, CRESWELL OR, 97426. IF YOU PREFER YOU MAY COMPLETE YOUR REGISTRATION ONLINE AT WWW.VALUE-LEADER.COM. THIS WARRANTY IS NOT EFFECTIVE UNLESS PURCHASER COMPLETE REGISTRATION AND WARRANTY FOR WITHIN 30 DAYS OF PURCHASE OR SHIP DATE WHICHEVER IS LATER.

NOTE: WE MAY REFUSE WARRANTY OF ANY KIND UNLESS BETSTCO, RECEIVES A COMPLETED, LEGIBLE AND SIGNED WARRANTY REGISTRATION. IT IS THE RESPONSIBILITY OF THE PURCHASER TO ASSURE THAT REGISTRATION DOCUMENT IS RECEIVED BY



**1 YEAR EXTENDED WARRANTY & REGISTRATION
FARMER-HELPER IMPLEMENTS
BRANDED PRODUCTS
1 YEAR EXTENDED WARRANTY**

1 Year Extended Warranty amends to original Recorded Warranty Registration the time period of described coverage. Extended Warranty does not apply to consumable and Expendable Item as described in Product Warranty Registration.

This amendment does not affect any other part of recorded Warranty Registration or policy.

No one is authorized to alter, modify, or enlarge this Amendment to original recorded Warranty Registration

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

EXTENDED WARRANTY REGISTRATION

PRODUCT & MODEL # _____

SERIAL # _____

OWNER NAME : _____

BETSTCO 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 TRACTOR IMPLEMENT.***

OWNERS SIGNATURE: x _____

DATE: ____/____/____

FAX TO 1-541-895-2756

YOU MUST SIGN THIS WARRANTY AND MAIL OR FAX A COPY TO BETSTCO, 83371 MELTON RD, CRESWELL OR. IF YOU PREFER YOU MAY COMPLETE YOUR REGISTRATION ONLINE AT WWW.VALUE-LEADER.COM. THIS WARRANTY IS NOT EFFECTIVE UNLESS PURCHASER COMPLETE REGISTRATION AND WARRANTY FOR WITHIN 30 DAYS OF PURCHASE OR SHIP DATE WHICHEVER IS LATER.

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