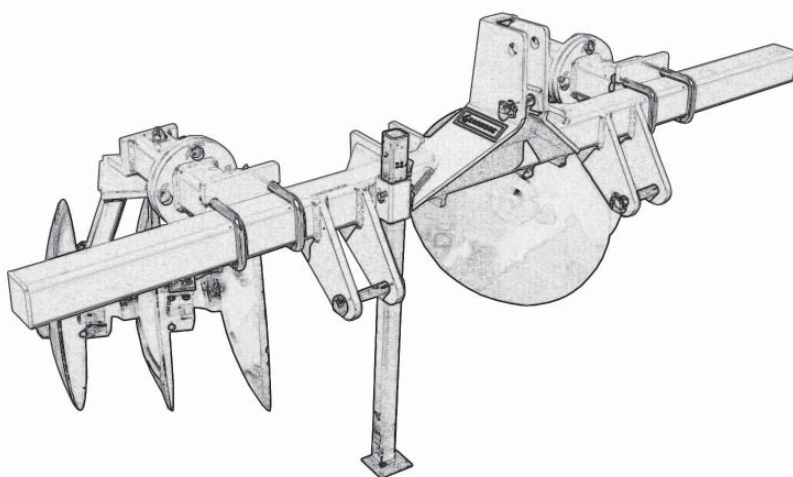


GEARMORE INC.

RIDGER & RIDGER BLOCKER SERIES



**ASSEMBLY, OPERATION,
& PARTS MANUAL**
**FOR MODELS BE222-3, BE222-3B,
BE422-4, & BE422-4B**

August 2015

TABLE OF CONTENTS

SECTION	DESCRIPTION	PAGE
1	Introduction	1
1.1	Operator's Responsibility	1
1.2	Serial Number.....	1
2	Safety.....	2 - 3
2.1	General Safety	3
3	Adjustment & Assembly	4
3.1	Adjustment.....	4
3.2	Scraper Assembly	
4	Maintenance	5
5	Trouble Shooting.....	6
6	Parts	7 - 11
6.1	Main Frame.....	7
6.2	Gang Frame Assembly	8
6.3	Gang Assembly	9-10
6.4	Blocker Assembly.....	11
7	Limited Warranty.....	12

1 INTRODUCTION

Congratulations on your choice of a ridger/ridger blocker. This equipment is manufactured to precise specifications using the best quality parts and materials available. With proper care and maintenance, this piece of equipment should last for many years. Before operating this machine, thoroughly read and become familiar with this manual.

Your Disc Ridger/Blocker was assembled at the factory with the blades set in a straight position for shipping purposes. Because of varying soil conditions, desired cutting depth, and tractor speed, adjustments will need to be made to obtain the desired results. Before using this Ridger, check all nuts and bolts to make sure everything is tightened.

1.1 OPERATOR'S RESPONSIBILITY

Safe, efficient and trouble free operation of your equipment requires that you and anyone else who will be operating or maintaining the machine, read and understand the Safety, Operation, Maintenance and Troubleshooting information contained within the Operator's Manual.

It is the responsibility of the user/purchaser to lubricate and maintain this product according to the recommendations of the manufacturer. The user is responsible for inspecting the machine, and for having parts repaired or replaced when continued use of the product would cause damage or excessive wear to other parts. All fasteners should be checked and tightened periodically and as necessary. When supporting the frame of the machine, use stands that are capable of handling the weight of the assembly. Insure that the supports are on a clean, dry surface. It is the user's responsibility to deliver this product to the dealer when repairs that are covered by the standard warranty need to be made.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Gearmore dealer if you need assistance, information or additional copies of the manuals.

OPERATOR ORIENTATION - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the driver's seat and facing in the direction of travel.

1.2 SERIAL NUMBER

Always give your dealer the serial number of your equipment when ordering parts or requesting service or other information.

PURCHASED FROM: _____

DATE OF PURCHASE: _____

MODEL NUMBER: _____

SERIAL NUMBER: _____

2 SAFETY

SAFETY ALERT SYMBOL

This Safety Alert symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



The Safety Alert symbol identifies important safety messages on the machine and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

3 Big Reasons

Accidents Disable and Kill

Accidents Cost

Accidents Can Be Avoided

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines:

SI NO LEE INGLES, PIDA AYUDA A AIGUIEN QUE SI LO LEA PARA QUE LE TRADUZCA LAS MIDIDAS DE SEGURIDAD.

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

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

If you have any questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer.

2.1 GENERAL SAFETY

YOU are responsible for the **SAFE** operation and maintenance of your machine. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the equipment be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be adhered to while operating the equipment.

Remember, **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- Machine owners must give operating instructions to operators or employees before allowing them to operate the machine, and at least annually there after per OSHA (Occupational Safety and Health Administration) regulation 1928.57.
- The most important safety feature on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand **ALL** Safety and Operating instructions in the manual and to follow these. Most accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- **DO NOT** modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- **Think SAFETY! Work SAFELY!**

1. Read and understand the Operator's Manual and all safety signs before operating, maintaining or adjusting the machine.



2. Have a first-aid kit available for use should the need arise and know how to use it.

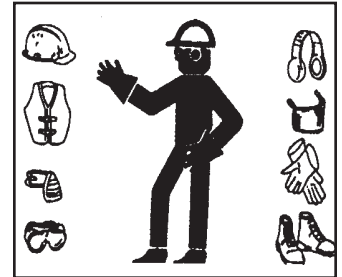


3. Have a fire extinguisher available for use should the need arise and know how to use it.



4. Wear appropriate protective gear. This list includes but is not limited to:

- A hard hat
- Protective shoes with slip resistant soles
- Protective goggles, glasses or face shield
- Heavy gloves
- Protective clothing



5. Install and secure all guards before starting.

6. **DO NOT** allow riders.

7. Wear suitable ear protection for prolonged exposure to excessive noise.



8. Place all controls in neutral, stop tractor engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, or repairing.

9. Clear the area of people, especially small children, before starting.

10. Review safety related items annually with all personnel who will be operating or maintaining the machine.

3 ADJUSTMENT & ASSEMBLY

3.1 ADJUSTMENT

The design of the Ridger/Blocker allows more or less angle to be set to each gang individually. It also allows each gang to be tilted in various positions. To change the angle and tilting position the Ridger must be connected to the tractor. To change angle, slightly loosen the 1" nut on the tilting mounting bracket, loosen and remove the two 3/4" bolts, turn gang to the desired position, replace the 3/4" bolts and tighten all nuts. To change tilt position, Ridger must be on the ground. Loosen all 4 of the 3/4" bolts, and remove. Slowly raise tractor lift arms, push gang to desired position, replace and tighten all bolts.

On ridgers with blockers, adjustments are the same as mentioned above. The blocker unit is equipped with a depth control cylinder for controlling the depth of the buckets. To adjust the cylinder once the depth has been determined, loosen the control plate bolt on the cylinder rod, slide the plate to the valve pin, and retighten the control plate bolt.

The Ridger should be adjusted laterally so that an equal amount of pressure is put on both gangs. This adjustment is obtained by adjusting the link arms on the tractor to the same length.

Improper adjustments can cause problems. If problems should occur after following instructions in the manual, check the Trouble Shooting chart for possible remedies.

3.2 SCRAPER ASSEMBLY

Scraper blades and mounts were assembled on the disc at the factory. Each scraper is individually mounted and adjusted. To adjust the scraper, loosen the nut on the mount arm, slide the scraper in or out until it is approximately 3/8" away from the disc blade and tighten nut.

4 MAINTENANCE

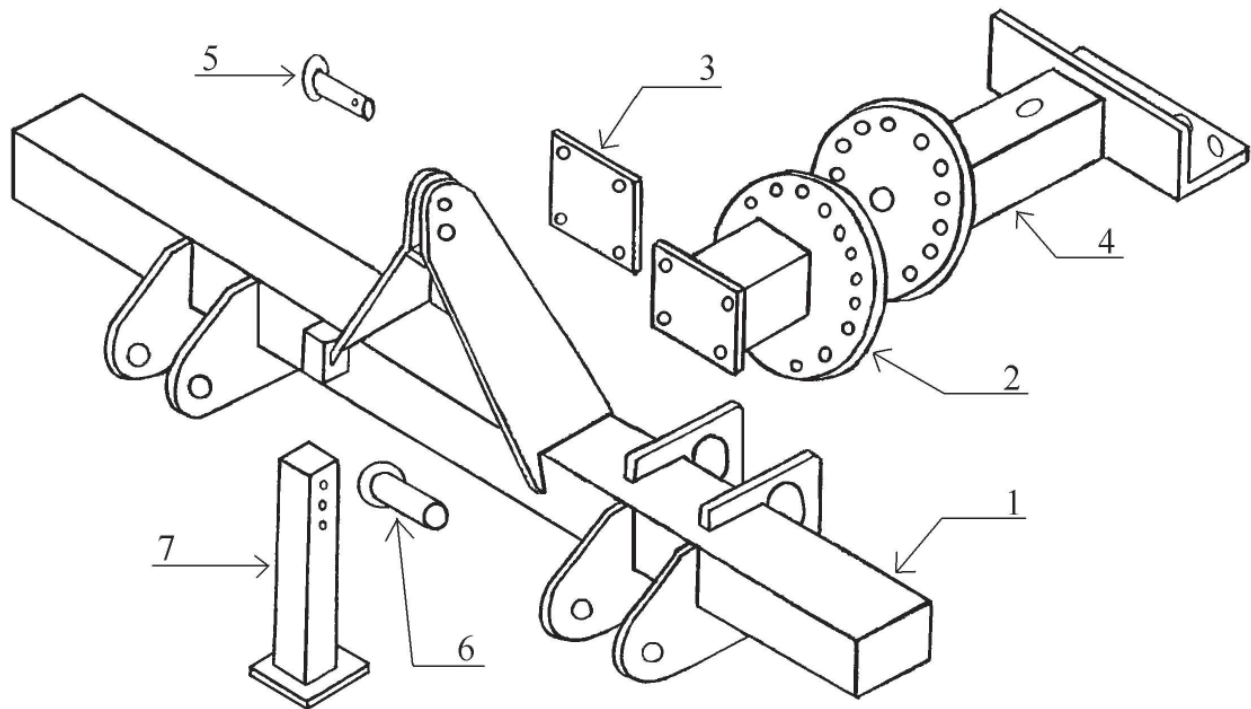
- Regularly check all nuts and bolts and make sure they are tight.
- Check scraper blades and replace as needed.
- Check bearing guards and replace as needed.
- Regularly check bearings and make sure gang turns freely.
- Replace bearing if needed.
- Grease bearings *at least once each season or every 50 hours of operation.*
Use hand lubrication gun only.
- Lubricate bearings before storing.
- Store ridger out of weather.

5 TROUBLE SHOOTING

TROUBLE SHOOTING CHART	
PROBLEM	POSSIBLE REMEDY
One side penetrating deeper than the other	<ul style="list-style-type: none"> ● Adjust ridger laterally by adjusting lift arms on tractors.
Bedding outside of ridger	<ul style="list-style-type: none"> ● Increase angles on gangs or increase tractor speed
Ridger will not penetrate	<ul style="list-style-type: none"> ● Increase angle and/or tilt on gangs
Ridger moves from side to side	<ul style="list-style-type: none"> ● Make sure gangs are equal distance from center of frame ● Correct gang angle and tilt setting
Bearing failure	<ul style="list-style-type: none"> ● Check gang bolt, if bent straighten or replace as needed ● Tighten nut on gang bolt if needed ● Bearing not receiving grease, clean or replace zerker as needed
Gang bolt bending	<ul style="list-style-type: none"> ● Check nut on gang bolt, tighten if needed ● Check spacer spool, replace if needed ● Lift machine off ground before turning

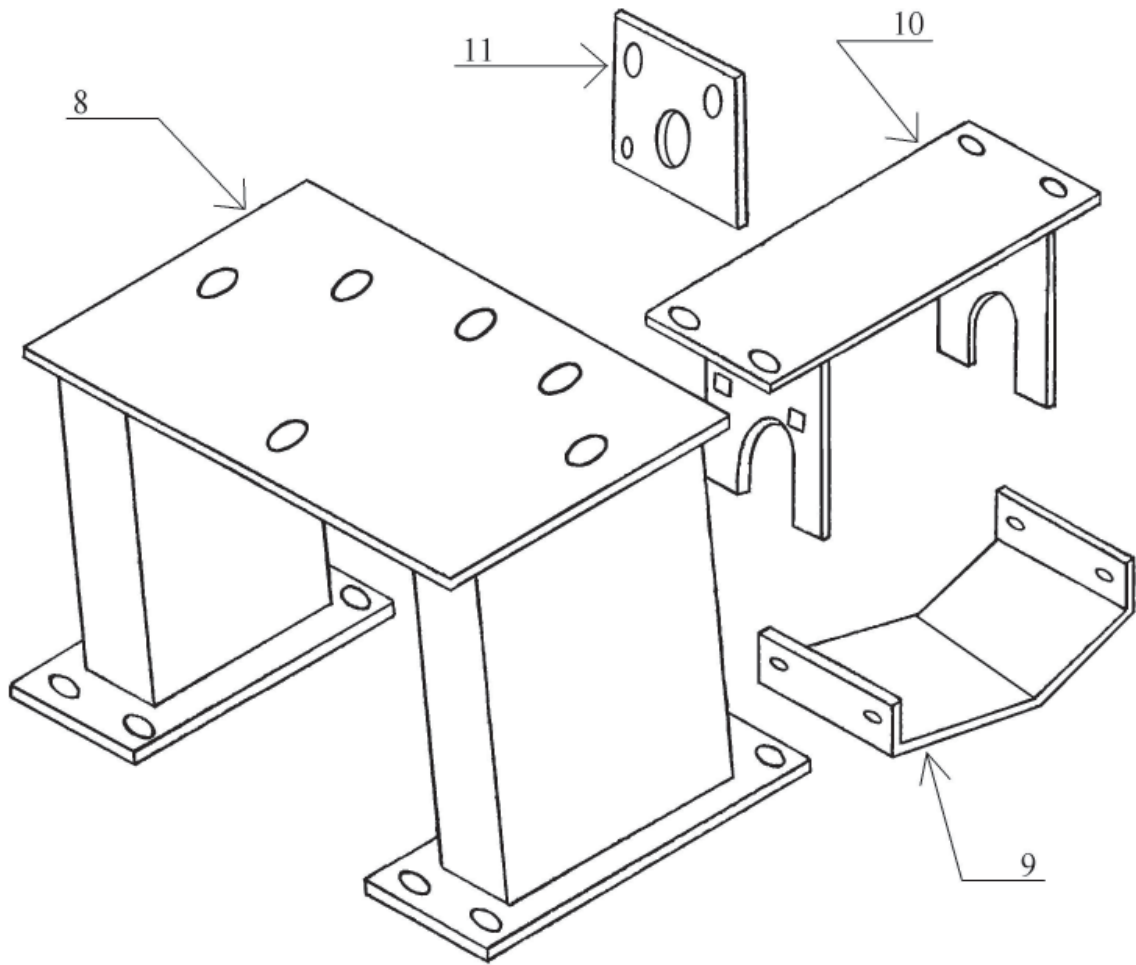
6 PARTS ASSEMBLY

6.1 MAIN FRAME



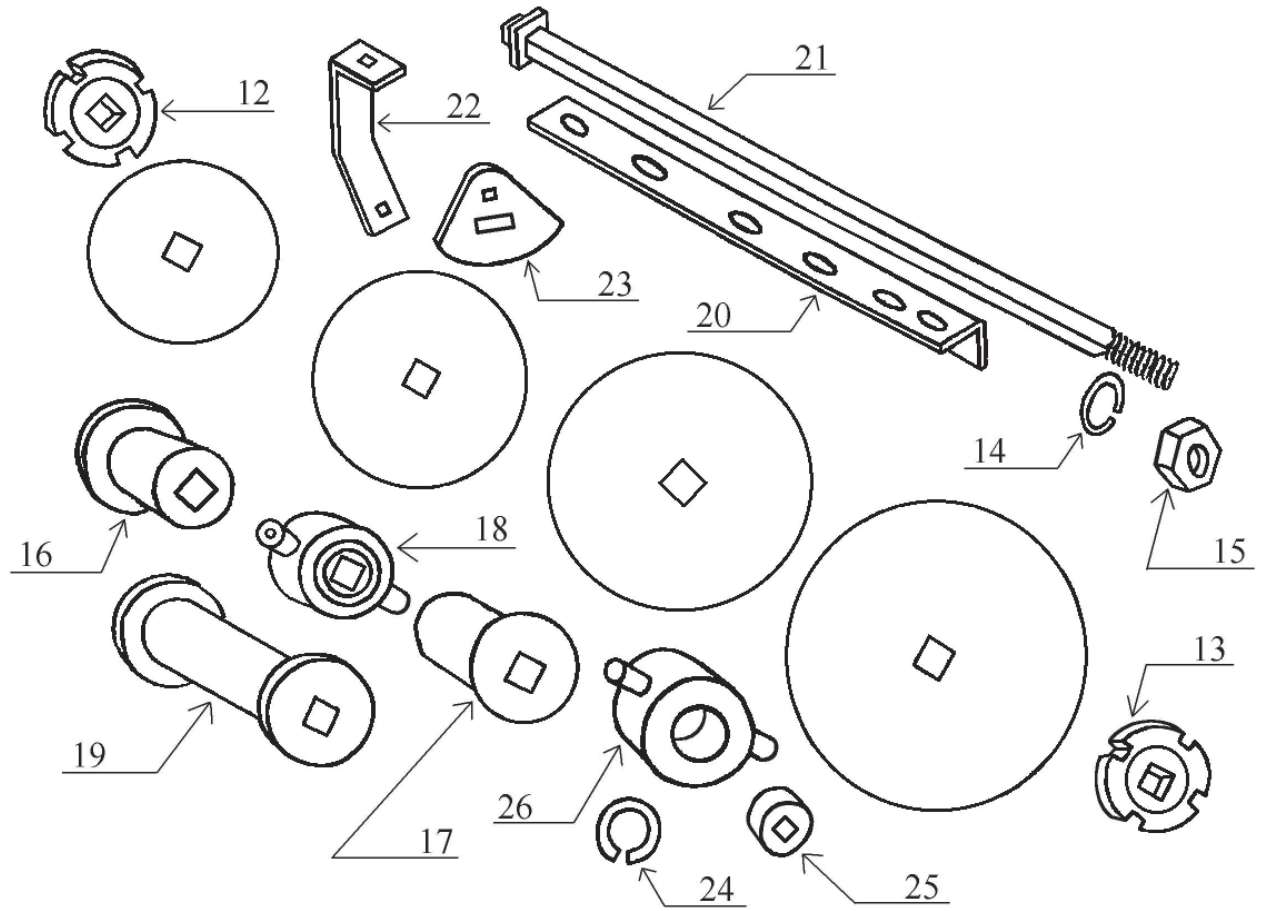
REF NO.	QTY.	PART NO.	DESCRIPTION
1	1	BE2201	3 Blade Main Frame
1	1	BE2201B	3 Blade Main Frame With Blocker
1	1	BE4202	4 Blade Main Frame
1	1	BE4202B	4 Blade Main Frame With Blocker
2	2	BE2203	3 Blade Main Mounting Bracket
2	2	BE2203	4 Blade Main Mounting Bracket
3	2	BE2205	Main Mounting Plates
4	2	BE2206	Tilting Mounting Brackets
5	1	185114	Top Mast Pin Cat. II
6	2	185115	Lower Pull Pin Cat. II
7	1	BE2207	Blocker Stand

6.2 GANG FRAME ASSEMBLY



REF NO.	QTY.	PART NO.	DESCRIPTION
8	1	BE2208	3 Blade Gang Frame, Right
8	1	BE2209	3 Blade Gang Frame, Left
8	1	BE2210	4 Blade Gang Frame, Right
8	1	BE4211	4 Blade Gang Frame, Left
9		WO6082	Bearing Dirt Shield
10		WO6081	Trunnion Mount
11		WO6072	Trunnion Retainer Bracket

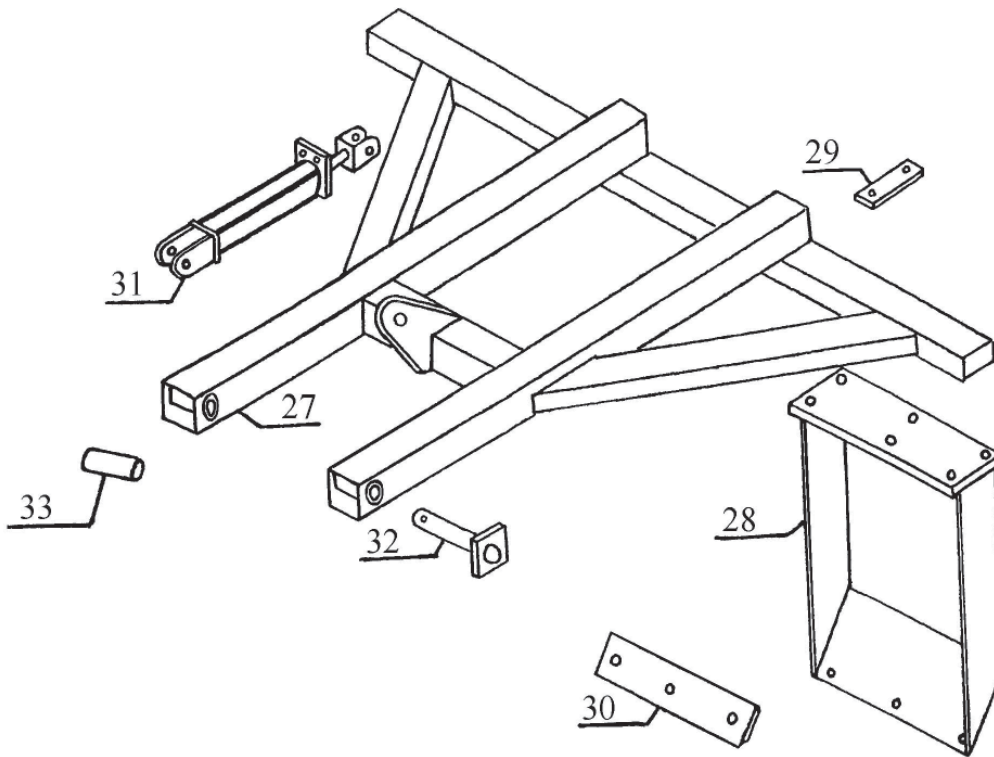
6.3 GANG ASSEMBLY



6.3 GANG ASSEMBLY (CONTINUED)

REF NO.	QTY.	PART NO.	DESCRIPTION
12	2	185054	Axle Washer - 1 1/2"
13	2	185053	Nut Washer - 1 1/2"
14	2	200005-24	Lock Washer - 1 1/2"
15	2	200007-24	Axle Nut - 1 1/2"
16		185052	Concave Half Spool - 1 1/2"
17		185051	Convex Half Spool - 1 1/2"
18		770013	Complete Bearing Housing
19		WO6029	Full Spool - 9" Sp
20		186029	2 Blade Scraper Bar - Left
20		186030	2 Blade Scraper Bar - Right
20		186031	3 Blade Scraper Bar - Left
20		186032	3 Blade Scraper Bar - Right
21		185049A	3 Blade Axle - 1 1/2"
21		185049	4 Blade Axle - 1 1/2"
22		WO6041-L	Scraper Mount Arm - Left
22		WO6041-R	Scraper Mount Arm - Right
23		WO6042	Scraper Blade
24		770016	Snap Ring
25		770017	Bearing - 1 1/2" Square Bore
26		770018	Bearing Housing
*		Please Call	22" x 4.5mm Smooth Blade - 3 & 4 Blade
*		Please Call	24" x 6mm Smooth Blade - 3 & 4 Blade
*		Please Call	26" x 6mm Smooth Blade - 3 & 4 Blade
*		Please Call	28" x 6mm Smooth Blade - 4 Blade Only

6.4 BLOCKER ASSEMBLY



REF NO.	QTY.	PART NO.	DESCRIPTION
27		BE2212	Blocker Frame - 3 Blade
27		BE4213	Blocker Frame - 4 Blade
28		BE2214	Blocker Bucket - 3 Blade
28		BE4215	Blocker Bucket - 4 Blade
29		BE2216	Bucket Bracket Plate
30		BE2217	Bucket Scraper Blade - 3 Blade
30		BE4218	Bucket Scraper Blade - 4 Blade
31		143024	Hydraulic Cylinder
32		BE2219	Blocker Frame Pin
33		BE3041	Blocker Frame Pin Bushing

7 LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.