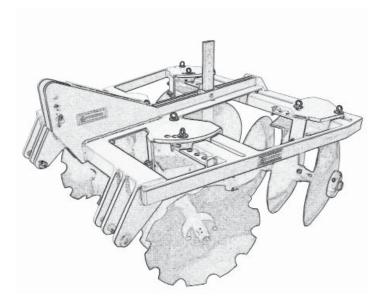


# TANDEM DISC NARROW ROW NON-REVERSIBLE



ASSEMBLY, OPERATION,
& PARTS MANUAL
FOR MODELS GV SERIES

August 2015

Form: GVTandemDisc.indd

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### 1 INTRODUCTION

Congratulations on your choice of a Tandem Disc. 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 GV Series Disc was assembled at the factory with the gangs set in a straight position for shipping purposes. Because of varying soil conditions, desired cutting depth, and tractor speed, gang adjustment must be made for even and uniform discing. Before using this disc, 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 Trouble-shooting 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.

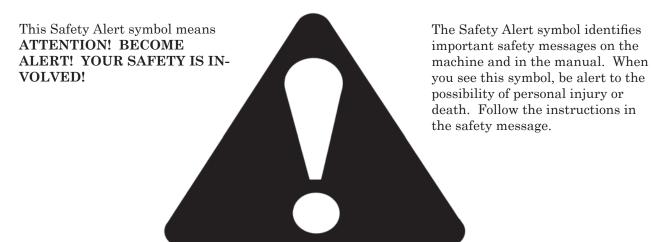
### 1.2 SERIAL NUMBER

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



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!

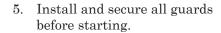
- 1. Read and understand the Operator's Manual and all safety signs before operating, maintaining or adjusting the machine.
- 2. Have a first-aid kit available for use should the need arise and know how to use it.



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



- 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 GV Disc permits more or less angle to be set to the front and rear gangs. Each gang is individually adjustable. The more angle set to the gangs, the greater soil breaking will occur, with increased penetration. A smoother and more leveling type of operation will occur if less angle is set to the gangs. To adjust the cutting angle on the gangs, remove the lynch pin from the adjusting pin, pull the adjusting pin out, slide the gang backward or forward to obtain the desired cutting angle, and then replace the adjusting pin and lynch pin.

The entire disc can be adjusted front and rear by using the top link on the tractor's 3-point hitch. This will allow more pressure to be put on the front gangs so they will cut deeper, or on the rear gangs so they will cut deeper. Ideally, the best results will be attained if an equal amount of pressure is put on both gangs. The disc should also be adjusted laterally so that the outer disc blade of the right hand gangs and the left hand gangs cut at the same depth. This is done by adjusting and leveling the lift arms on the tractor hitch.

Your GV Disc is also equipped with a 1" x 3" shank and foot piece mounted in the center of the disc. The foot piece will accept most common types of cultivating sweeps. The shank, with the desired sweep mounted on it, will cut in the center behind the front gangs. Under normal conditions, a distance of 14" to 16" between the rear inside blades will create level soil in the center of the disc. The shank can be adjusted up or down by removing the pin, placing the shank at the desired depth, and replacing the pin through the shank. If ridging or leaving a furrow occurs, changing the speed of the tractor or changing the rear gang angle should correct the problem. If the problem persists, the rear gangs may need to be repositioned.

Improper adjustments can cause discing problems. If problems should occur after following instructions in the manual, check the Trouble Shooting chart for more 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.
- Regularly check all pins and lynch pins to make sure they are in place.
- Check scraper blades and replace as needed.
- If bearing dirt shields are used, check and replace as needed.
- GV Discs are equipped with non-greasable sealed ball bearings.
- Regularly check bearings and make sure gang turns freely.
- Replace bearing if needed.
- Store Disc out of weather.

### **OPTIONAL SPOOL EXTENSION**

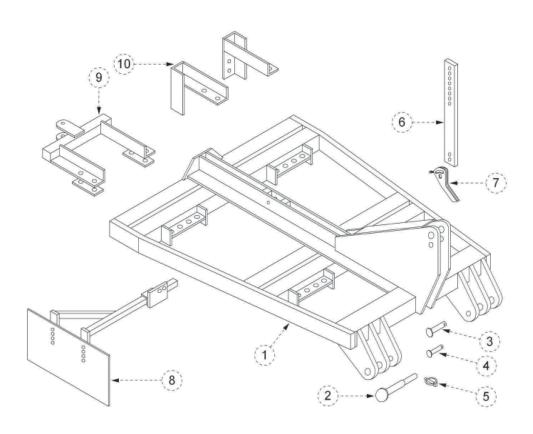
All GV Discs are equipped with an end washer and nut washer, which will accommodate an extension spool. Extension spools are designed to fit either side of a gang and blades will mount on spool for either side of gang.

# **5 TROUBLE SHOOTING**

TROUBLE SHOOTING CHART				
PROBLEM	POSSIBLE REMEDY			
Rear gang leaving ridge in center	<ul> <li>Space rear gangs proper distance apart (14" - 16").</li> <li>Decrease angles in rear gang and/or increase angle in front gang.</li> <li>Decrease the operating depth of rear gangs and/or increase the depth of the front gangs.</li> </ul>			
Bedding on each side of disc	<ul> <li>Increase angles on rear gang and/or increase depth of rear gangs.</li> <li>Decrease angle of front gang and/or decrease depth of front gang.</li> <li>Space rear gangs proper distance (14" - 16")</li> </ul>			
Disc will not penetrate	Increase angle on all gangs equally.			
Disc moves from side to side	<ul> <li>Make sure gangs are equal distance from center of frame</li> <li>Correct gang angle settings</li> </ul>			
Furrow left directly behind tractor	<ul> <li>Increase angle of gangs to increase depth of cut.</li> <li>Increase tractor horsepower or decrease width of cut.</li> </ul>			
Bending front outside disc blade and/or gang bolt	Lift Disc off ground before turning			
Bearing failure	<ul> <li>Check gang bolt. If bent, straighten or replace as needed.</li> <li>Tighten nut on gang bolt if needed.</li> </ul>			
Gang bolt bending	<ul><li>Check nut on gang bolt, tighten if needed.</li><li>Check spacer spool, replace if needed.</li></ul>			

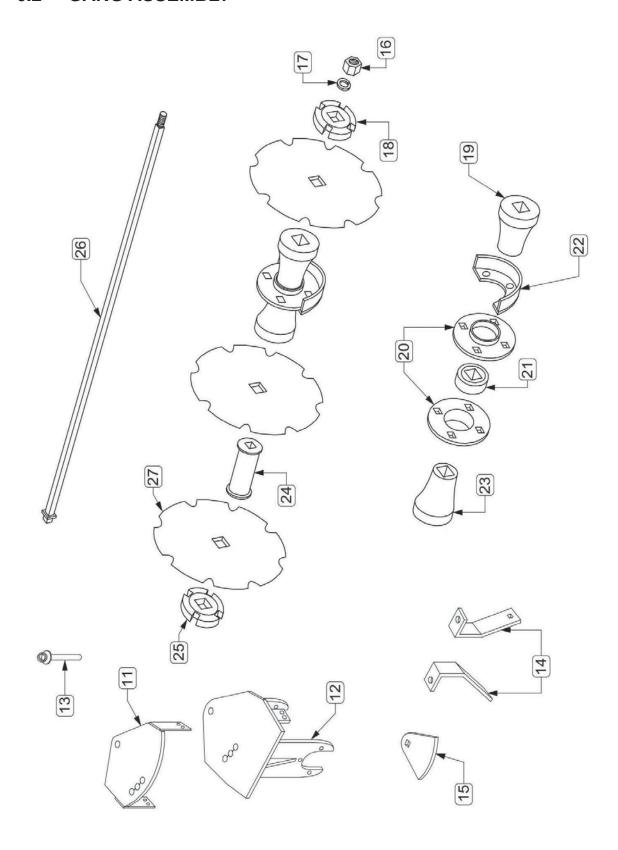
# 6 PARTS ASSEMBLY

# 6.1 MAIN FRAME ASSEMBLY



REF NO.	QTY.	PART NO.	DESCRIPTION
1		185086	Main Frame - 8 Blade
1		185087	Main Frame - 10 & 12 Blade
1		185088	Main Frame - 16 Blade
2		185081	Pull Pin - Cat. I
2		185085	Pull Pin - Cat. I & II
3		185003	Top Link Pin - Cat. II
4		185002	Top Link Pin - Cat. I
5		DKLP91	7/16" Lynch Pin
6		185083	Shank - 1" x 3"
7		185084	Foot Piece
8		185096	Dirt Shield Fender - Pair (Optional)
9		185107	Rear Hitch (Optional)
10		185095	Tool Bar Attachment (Optional)

# 6.2 GANG ASSEMBLY



# 6.2 GANG ASSEMBLY (CONTINUED)

REF NO.	QTY.	PART NO.	DESCRIPTION
11		185100	Hanger Plate
			(Specify - Front or rear, left or right)
12		185092	2 Blade Gang Frame
12		185093	3 Blade Gang Frame
12		185094	4 Blade Gang Frame
13		185037	Gang Adjusting & Pivot Pin
14		WO6041L	Scraper Mount Arm - Left
14		WO6041R	Scraper Mount Arm - Right
15		WO6042	Scraper Blade
16		WO6033	Axle Nut - 1 1/2"
17		WL24	Lock Washer 1 1/2"
18		185053	Axle Nut Washer
19		185052	Half Spool - Concave
20		20001824	100 mm Flange, pair
21		WO6028	1 1/2" Square Bore Bearing
22		185056	Dirt Shield - 1 1/2" (Optional)
23		185051	Half Spool - Convex
24		WO6029	Full Spool - 1 1/2"
25		185054	Axle Washer
26		185048A	2 Blade Axle - 1 1/2"
26		185049A	3 Blade Axle - 1 1/2"
26		185049	4 Blade Axle - 1 1/2"
27		Please Call	Disc Blades
			- 24" x 4.5 mm
			- 24" x 6 mm

# GERRMORE INC.

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 warranties 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.