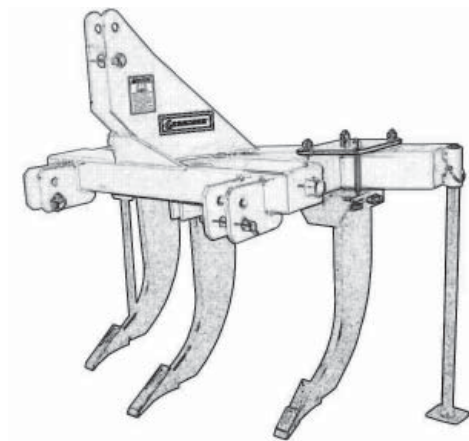




V-RIPPER



**Operation, Service
& Parts Manual For
Model VR3/334/534
Category II, 3-Point**

October 2015

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1 INTRODUCTION

Congratulations on your purchase of a Gearmore V-Ripper.

Safe, efficient and trouble free operation of your V-Ripper 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.

This manual covers the V-Rippers models VR3, 334, & 534. Differences are explained where appropriate. Use the Table of Contents as a guide to locate required information.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your Gearmore dealer or distributor 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.

1.1 SERIAL NUMBER

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

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 V-Ripper 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 V-Ripper. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the V-Ripper 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 V-Ripper.

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.

- V-Ripper 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.

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



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

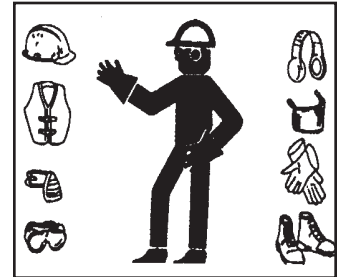


3. Have a fire extinguisher available for use should the need arise and know how to use it.



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. **NEVER** allow children to operate tractor and V-Ripper or other power equipment.

6. **DO NOT** allow riders.



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

8. Lower V-Ripper to the ground, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting and 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 V-Ripper.

2.2 EQUIPMENT SAFETY GUIDELINES

Safety of the operator and bystanders is one of the main concerns in designing and developing a machine. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury or death, study the following precautions and insist those working with you, or for you, follow them.

- In order to provide a better view, certain photographs or illustrations in this manual may show an assembly with a safety shield removed. However, equipment should **never** be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace the shield prior to use.
- Replace any safety sign or instruction sign that is not readable or is missing. Location of such safety signs is indicated in this manual.
- **NEVER** use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- **Under no circumstances should young children be allowed to work with this equipment. Do not allow persons to operate or assemble this unit until they have read this manual and have developed a thorough understanding of the safety precautions and of how it works.** Review the safety instructions with all users annually.

- This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible, properly trained and physically able person familiar with farm machinery and trained in this equipment's operations. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.
- Use a tractor equipped with a Roll Over Protective Structure (ROPS) and a seat belt.
- **NEVER** exceed the limits of a piece of machinery. If its ability to do a job, or to do so safely, is in question - **DON'T TRY IT.**
- 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.

In addition to the design and configuration of this implement, including Safety Signs and Safety 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 the machine. Refer also to Safety Messages and operation instruction in each of the appropriate sections of the tractor and machine manuals. Pay close attention to the Safety Signs affixed to the tractor and the machine.

Think SAFETY! Work SAFELY!

2.3 SAFETY TRAINING

Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be wiped out by a single careless act of an operator or bystander.

In addition to the 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 this equipment.

It has been said, "***The best safety feature is an informed, careful operator.***" We ask you to be that kind of an operator. It is the operator's responsibility to read and understand ALL Safety and Operating instructions in the manual and to follow these. Accidents can be avoided.



Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. If this machine is used by any person other than yourself, or is loaned or rented, it is the machine owner's responsibility to make certain that the operator, prior to operating:

- a. Reads and understands the operator's manuals.
- b. Is instructed in safe and proper use.

Know your controls and how to stop tractor, engine and machine quickly in an emergency. Read this manual and the one provided with your tractor.

Train all new personnel and review instructions frequently with existing workers. Be certain only a properly trained and physically able person will operate the machinery. 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. If the elderly are assisting with farm work, their physical limitations need to be recognized and accommodated.

2.4 SAFETY SIGNS

1. Keep safety signs clean and legible at all times.
2. Replace safety signs that are missing or have become illegible.
3. Replaced parts that displayed a safety sign should also display the current sign.
4. Safety signs are available from your authorized dealer or from Gearmore.

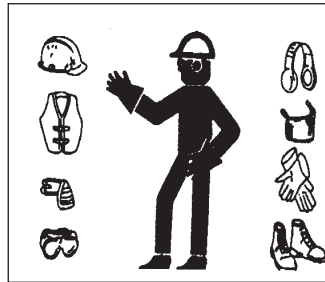
How To Install Safety Signs:

- Be sure that the installation area is clean and dry.
- Be sure temperature is above 50° F (10° C).
- Determine exact position before you remove the backing paper.
- Remove the smallest portion of the split backing paper.
- Align the sign over the specified area and carefully press the small portion with the exposed sticky backing in place.
- Slowly peel back the remaining paper and carefully smooth the remaining portion of the sign in place.
- Small air pockets can be pierced with a pin and smoothed out using the piece of sign backing paper.

2.5 PREPARATION

1. Never operate the tractor and machine until you have read and completely understand this manual, the Tractor Operator's Manual and each of the Safety Messages found on the safety signs on the tractor and machine.


2. Personal protection equipment, including hard hat, safety glasses, safety shoes and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal or moving the implement. **DO NOT** allow long hair, loose fitting clothing or jewelry to be around equipment.



3. **PROLONGED EXPOSURE TO LOUD NOISE MAY CAUSE PERMANENT HEARING LOSS!**

Tractors with or without equipment attached can often be noisy enough to cause permanent, partial hearing loss. We recommend that you wear hearing protection on a full-time basis if the noise in the Operator's position exceeds 80db. Noise over 85db on a long-term basis can cause severe hearing loss. Noise over 90db adjacent to the Operator over a long-term basis may cause permanent, total hearing loss. **NOTE:** Hearing loss from loud noise (from tractors, chain saws, radios, and other such sources close to the ear) is cumulative over a lifetime without hope of natural recovery.



4. Operate the machine only with a tractor equipped with an approved Roll-Over Protective Structure (ROPS). Always wear your seat belt. Serious injury or even death could result from falling off the tractor --- particularly during a turn-over when the operator could be pinned under the ROPS or the tractor.
- 
5. Clear working area of stones, branches or hidden obstacles that might be hooked or snagged, causing injury or damage.
 6. Keep implement away from overhead power lines. Electrocution can occur without direct contact with an overhead power line.
 7. Operate only in daylight or good artificial light.
 8. Be sure machine is properly mounted, adjusted and in good operating condition.
 9. Before starting, give the machine a "once over" for any loose bolts, worn parts, cracks, leaks, and make necessary repairs. Always follow maintenance instructions.
 10. Ensure that all safety shielding and safety signs are properly installed and in good condition.
 11. Use caution when operating the tractor on uneven terrain.
 12. Move wheels or tires to their widest position for maximum stability.
 13. Decrease speed when making turns.
 14. Use front and rear wheel weights as required.

2.6 OPERATING SAFETY

Please remember it is important that you read and heed the safety signs on the tractor and machine. Clean or replace all safety signs if they cannot be clearly read and understood. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.

All things with moving parts are potentially hazardous. There is no substitute for a cautious, safe-minded operator who recognizes potential hazards and follows reasonable safety practices. The manufacturer has designed these V-Rippers to be used with all its safety equipment properly attached to minimize the chance of accidents. Study this manual to make sure you have all safety equipment attached.

Practice raising and lowering the machine when learning to operate the V-Ripper. Become familiar with controls before operating.

If a safety shield or guard is removed for any reason, it must be replaced before the machine is again operated.

Do not operate near the edge of drop-offs or banks.

Do not operate at an angle on steep slopes. Drive up or down but not across. **Always lift machine before turning at ends of field.**

Make allowances for increased length and weight of tractor during operation and moving.

Remove all sticks, stones, roots and wires from working area before starting. Take care not to contact overhead obstructions during operation.

Never operate controls from the ground. Operate only from the operators seat to prevent unexpected movement that can lead to crushing between frame members.

Start operation at a slower comfortable speed; increase tractor speed slowly.

Keep machine away from overhead power lines. Electrocution can occur without direct contact with an overhead power line.

Never carry, lift or move people on machine. Do not use machine as a work platform.

Always use two people to handle heavy, unwieldy components during assembly, installation, removal or moving.

Never place any part of your body where it would be in danger if movement should occur during assembly, installation, operation, maintaining, repairing, removal or moving.

Do not walk or work under a raised machine or attachment unless it is securely blocked or held in position. Do not depend on the tractor hydraulic system to hold the machine or attachment in place.

Never use alcoholic beverages or drugs, which can hinder alertness or coordination, while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.

Do not allow riders on the machine or tractor at any time. There is no safe place for any riders.

Do not go under raised machine. Keep others away.

Add sufficient amount of weight to front end of tractor to prevent wheels from coming off the ground when starting suddenly with a load.

Always remove the key when leaving the tractor unattended.

Never allow machine to be left in the "up" position when unattended.

Before you operate the machine, check over all pins, bolts and connections to be sure all are securely in place. Replace any damaged or worn parts immediately.

Review safety instructions annually.

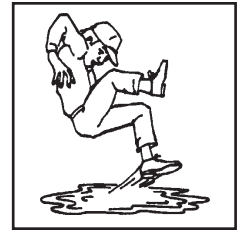
2.7 TRANSPORT SAFETY

1. Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
2. The use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
3. At all times, when driving the tractor and equipment on the road or highway under 20 mph (32 kph) use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem. Do not exceed 20 mph (32 kph). Reduce speed on rough roads and surfaces.
4. Keep tractor in gear to provide engine braking when going downhill. Do not coast.
5. Plan your route to avoid heavy traffic.
6. Keep brake pedals latched together at all times.
7. Do not drink and drive.
8. Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Watch for traffic when operating near or crossing roadways.
9. Turn into curves or go up or down hills only at a low speed and at a gradual steering angle. Make certain that at least 20% of the tractor's weight is on the front wheels to maintain safe steering. Slow down on rough or uneven surfaces.
10. Never allow riders on either tractor or machine. Riders may obstruct the operator's view. They could also be struck by foreign objects or thrown from the machine.



2.8 MAINTENANCE SAFETY

1. Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
2. Follow good shop practices.
 - Keep service area clean and dry.
 - Be sure electrical outlets and tools are properly grounded.
 - Use adequate light for the job at hand.
3. Make sure there is plenty of ventilation. Never operate the engine in a closed building. The exhaust fumes may cause asphyxiation.
4. Before working on this machine, shut off the engine, set the brakes and remove the ignition key.
5. Never work under equipment unless it is blocked securely.
6. Use personal protection devices such as eye, hand and hearing protectors, when performing any service or maintenance work.
7. Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts **must** be used to restore your equipment to original specifications. The manufacturer will not be responsible for injuries or damages caused by use of unapproved parts and/or accessories.
8. A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment
9. Periodically tighten all bolts, nuts and screws and check that all cotter pins are properly installed to ensure unit is in a safe condition.
10. When completing a maintenance or service function, make sure all safety shields and devices are installed before placing unit in service.



2.9 STORAGE SAFETY

1. Store the unit in an area away from human activity.
2. Do not permit children to play on or around the stored machine.
3. Store the unit in a dry, level area, out of the weather when it is not in use. This helps prevent rusting of the machines and other components.
4. Support the frame with planks or blocks if required.

NOTE: Machines should be cleaned immediately after each use for easier cleaning.

SAFETY RECAP

The manufacturer follows the general Safety Standards specified by the American Society of Agricultural Engineers (ASAE) and the Occupational Safety and Health Administration (OSHA). Anyone who will be operating and/or maintaining the V-Ripper must read and clearly understand ALL Safety, Operating and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Annually review this information before the season start-up.

Make these periodic reviews of SAFETY and OPERATION a standard practice for all of your equipment. We feel that an untrained operator is unqualified to operate this machine.

Think SAFETY! Work SAFELY!

2.10 PREPARATION CHECKLIST

- Assembly Completed
- All fasteners torqued to specifications given in Torque Chart (see page 21)
- All decals in place and readable
- All guards in place and in good operating order
- Overall condition good (paint, welds, etc.)
- Operator's Manual has been read and understood
- Operator has been instructed on the safe and proper use of the implement

Prior to use, it is recommended that the following mechanical items be checked:

A. Daily Operation Checks:

1. Check all nuts, bolts and other fasteners. Tighten to their specified torque level.
2. Clean the unit of dirt and trash to minimize rusting and wear.
3. Replace any decals that are worn or damaged.

3 OPERATION



OPERATING SAFETY

1. Read Operator's Manual.
2. Lower machine to the ground, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting and repairing.
3. Do not carry people on machine or frame.
4. Add sufficient weight to front end of tractor to prevent wheels from coming off the ground when starting suddenly with a load.
5. Stay away from overhead power lines. Electrocutation can occur without direct contact.
6. Use caution when operating the tractor on uneven terrain. Decrease speed when making turns. Use front and rear wheel weights as required.
7. Use only with a unit with ROPS and a seat belt.
8. Never allow machine to be left in the "up" position when unattended.
9. Always remove the key when leaving the tractor unattended.
10. Review safety instructions.

3.1 ATTACHMENT TO TRACTOR

The implement should be placed on level ground. Place the tractor 3-point lift arm control in "position control" (non-floating) for attaching and detaching the rear mounted machine. "Draft control" or "position control" can be used while operating. Attach the top link to the top hitch mount and adjust so that the frame will be level in the operating position. Back the tractor until the ends of the lift arms can be attached to the bottom clevis pins on the implement. **Never stand between tractor and implement when backing up to implement.** Secure the lift arms to the clevis pins. Slowly move implement throughout the lift cycle of the tractor watching for interference between implement and tractor. Adjust top link, if necessary to provide additional clearance.

To detach from tractor, lower the implement to the ground with 3-point lift arm control in position control. Remove top link from top hitch mount, disconnect hitch arms from bottom clevis pins and pull tractor away from machine.

3.2 ASSEMBLY

With normal maintenance you should receive years of use out of the V-Ripper.

Before operation:

1. Inspect unit to make sure all bolts that hold the shank wing brackets are tight.
2. The shank retainer bolt and the shank shear bolt should not be overtightened. They only need to be tightened enough so that the special nyloc locknut will not back off. Overtightening will cause the mounting plate to squeeze the shank not allowing the shear bolt to shear properly.
3. When ripping, do not turn with the shanks in the ground. Doing so will cause damage to the shanks and frame.
4. Stay off slopes too steep for safe operation.
5. Tractors having draft control on their 3-point should be adjusted so that the ripper operates properly when tough ground conditions arise. Review the tractor's operation manual for correct settings.
6. Do not permit others to ride on implement or tractor.
7. Only replace shear bolts with grade 2 bolts. Using a higher grade bolt will only cause damage to the ripper or tractor.
8. Check to make sure that shanks have proper clearance between shank point and tractor tires. Damage to tires will not be covered under warranty.
9. When tractor is stopped, set brakes securely and use park lock if available.

3.3 FIELD OPERATION



OPERATING SAFETY

1. Read Operator's Manual.
2. Lower V-Ripper to the ground, stop engine, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting and repairing.
3. Do not carry people on machine or frame.
4. Add weight to front of tractor to prevent wheels from coming off the ground.
5. Stay away from overhead power lines. Electrocutation can occur without direct contact.
6. Use caution when operating on uneven terrain. Decrease speed when making turns.
7. Use only with a unit with ROPS and a seat belt.
8. Never allow machine to be left in the "up" position when unattended.
9. Give complete undivided attention to the job at hand.
10. Do not go under raised implement. Keep others away.

Each operator should review this section of the manual at the start of the season and as often as required to be familiar with the machine.



CAUTION!

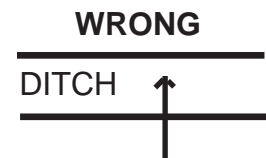
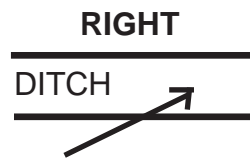
Be careful when working with machines, as the edges are sharp. Wear gloves when working around machines.

1. After initial adjustments have been made and tractor is hooked up to Machine, you are ready to start.
2. Lower machine to ground and start moving forward. Your travel speed will be determined by soil conditions. You may find you want more or less angle on the machine to do the job.
3. When turning, always lift implement up out of ground.

4. Do not travel backwards. The machine is designed for traveling forward only. Damage to the machine may occur.

Recommended procedure for corners or tight places is:

- a. Lift unit up
 - b. Back up into corner or other tight areas
 - c. Lower machine to ground and proceed going forward
5. Do not cross a ditch at a 90° angle (straight on). Damage to the machine and/or tractor may occur while crossing at a 90° angle. Always cross a ditch on a diagonal.



CAUTION!

Damage to the machine can occur if it is not lifted out of the ground before turning. DO NOT make turns with the shanks in the ground. Doing this will cause damage to the shanks and frame.

3.4 TRANSPORTING



TRANSPORT SAFETY

1. Make sure you are in compliance with all local regulations regarding transporting equipment on public roads and highways including lights, reflectors and the SMV.
2. Maximum transport speed for implement is 20 mph (32 kph). **DO NOT EXCEED**. Never travel at a speed which does not allow adequate control of steering and stopping. Reduce speed on rough roads and surfaces.
3. Do not allow anyone to ride on the implement or tractor during transport.
4. Sudden braking can cause a towed implement to swerve and upset.
5. **DO NOT** tow a load that is more than double the weight of the tractor.

When transporting the machine, review and follow these instructions:

1. Be sure all bystanders are clear of the machine.
2. A safety chain will help control towed implement should it separate from the tractor. **DO NOT** use safety chain for towing.
3. Be sure you have installed extra weights on the tractor if required.
4. Clean the SMV emblem, lights and reflectors and be sure they are working. Comply with all local regulations.
5. Carry implement low when moving or transporting.
6. Stay away from overhead power lines. Electrocution can occur without direct contact.
7. Be sure your machine can clearly be seen by overtaking and oncoming traffic.
8. Do not allow riders.
9. Always use hazard flashers on the tractor when transporting unless prohibited by law.

3.5 STORAGE



STORAGE SAFETY

1. Store the unit in an area away from human activity.
2. Do not permit children to play on or around the stored machine.
3. Store the unit in a dry, level area. Support the frame with planks if required.

After the season's use, the machine should be thoroughly inspected and prepared for storage. Repair or replace any worn or damaged components to prevent any unnecessary down time at the start of next season. To insure a long, trouble free life, this procedure should be followed when preparing the unit for storage:

1. Clear the area of bystanders, especially small children.
2. Thoroughly wash the machine using a pressure washer to remove all dirt, mud, debris and residue.
3. Inspect the implement for damage or entangled material. Repair or replace damaged parts. Remove all entangled material.
4. Touch up all paint nicks and scratches to prevent rusting. Spray the cutting edges with a rust inhibitor or paint to prevent rust.
5. Select an area that is dry, level, free of debris and away from human activity.
6. Inspect all nuts for tightness. Torque loose nuts to correct torque value.
7. If the machine cannot be placed inside, cover with a waterproof tarpaulin and tie securely in place.
8. Replace any decals that are worn or damaged.
10. Do not allow children to play on or around the stored implement.

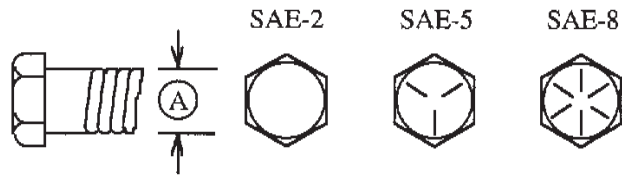
4 TORQUE SPECIFICATIONS

CHECKING BOLT TORQUE

The tables shown below give correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt torque chart as a guide. Replace hardware with the same strength bolt.

ENGLISH TORQUE SPECIFICATIONS

Bolt Diameter "A"	Bolt Torque *					
	SAE 2		SAE 5		SAE 8	
	N.m	(lb-ft)	N.m	(lb-ft)	N.m	(lb-ft)
¼"	8	(6)	12	(9)	17	(12)
⅝"	13	(10)	25	(19)	36	(27)
⅜"	27	(20)	45	(33)	63	(45)
⅞"	41	(30)	72	(53)	100	(75)
½"	61	(45)	110	(80)	155	(115)
⅝"	95	(70)	155	(115)	220	(165)
⅝"	128	(95)	215	(160)	305	(220)
¾"	225	(165)	390	(290)	540	(400)
⅞"	230	(170)	570	(420)	880	(650)
1"	345	(225)	850	(630)	1320	(970)

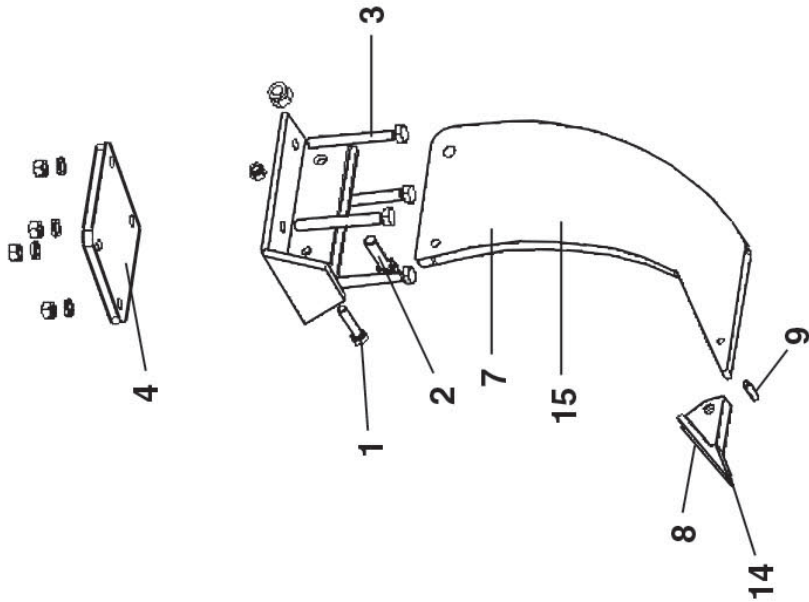
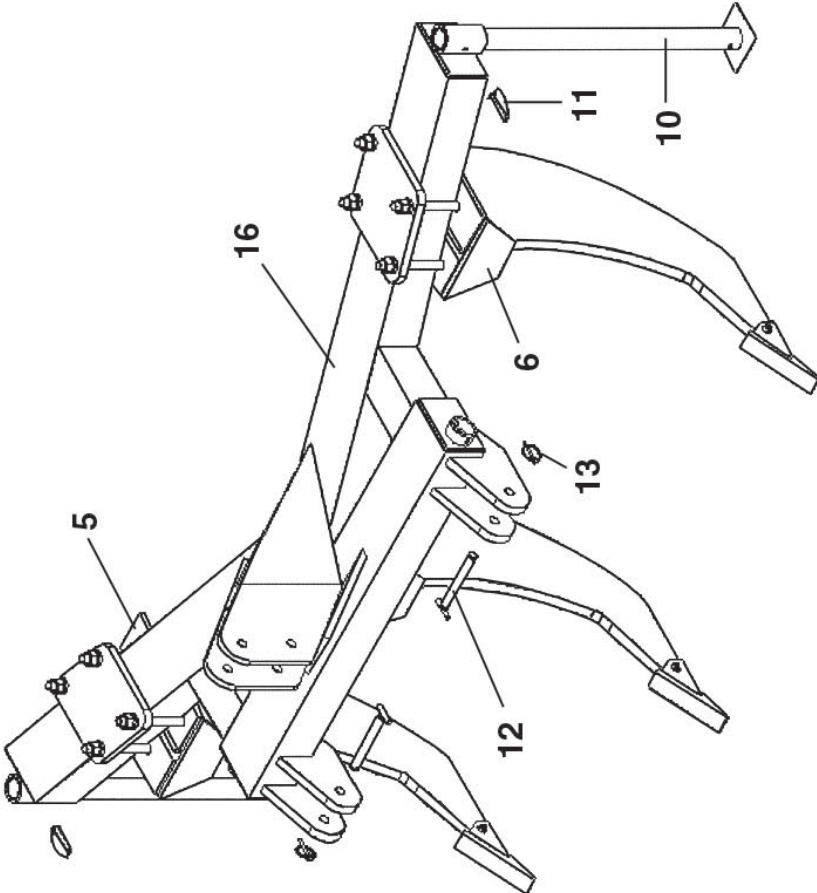


Torque figures indicated above are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

* Torque value for bolts and capscrews are identified by their head markings.

5 MACHINE COMPONENTS

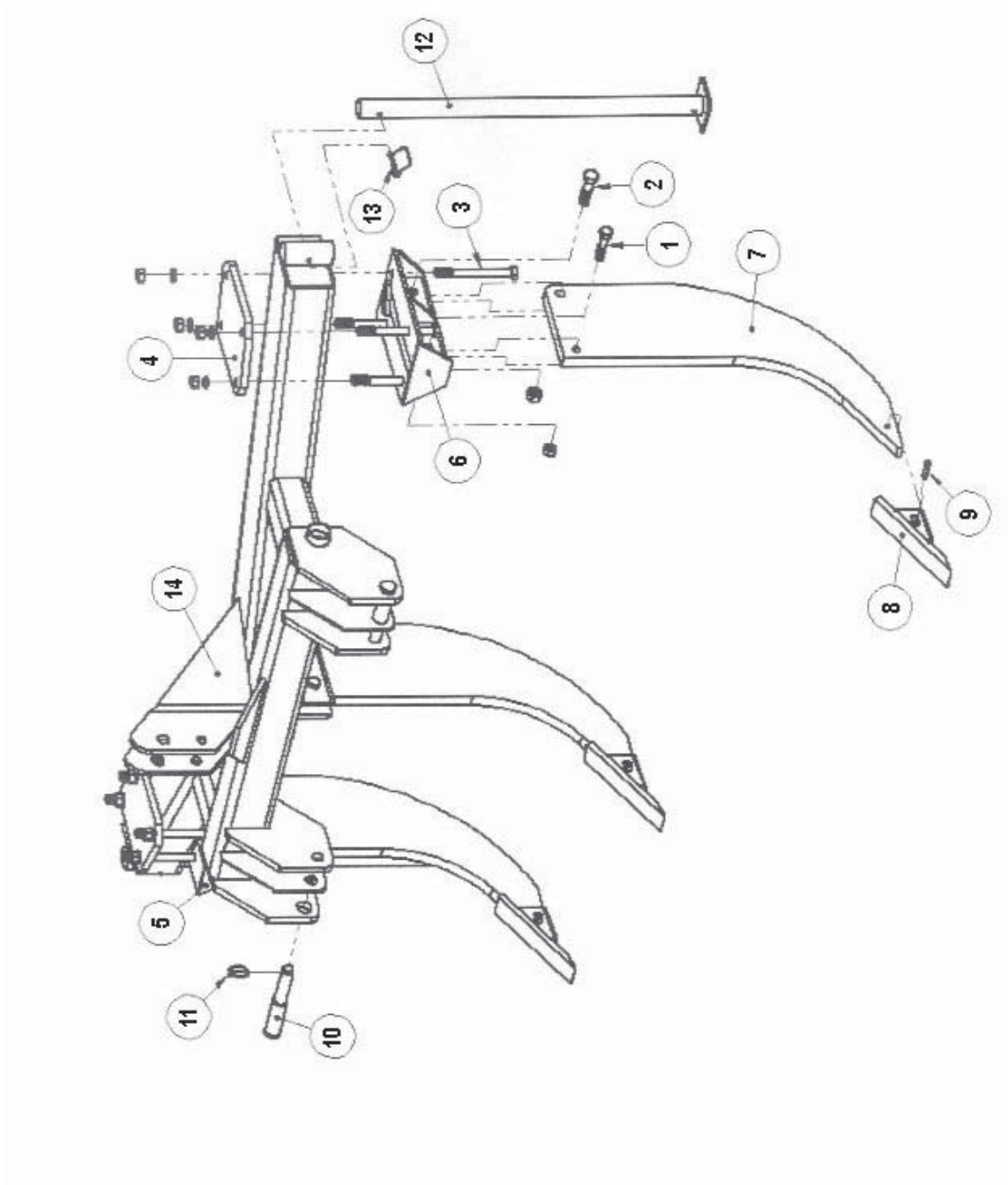
5.1 PARTS DIAGRAM VR3



5.2 PARTS LIST

<u>REF. #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1		VR8401	Bolt Assy $\frac{5}{8}$ x 3 $\frac{1}{2}$ grade 2
2		VR8402	Bolt Assy $\frac{7}{8}$ x 3 $\frac{1}{2}$ grade 5
3		VR8403	Bolt Assy $\frac{3}{4}$ x 7 grade 5
4		VR8404	Clamp Plate $\frac{3}{4}$ x 8
5		VR8405	Right Wing Bracket
6		VR8406	Left Wing Bracket
7		VR8407	1" x 27" Shank, Standard Plain
8		VR8408	Point 21F Standard
9		VR8409	Roll Pin $\frac{1}{2}$ " x 2"
10		VR8410	Parking Stand
11		VR8411	Click Pin PS
12		VR8412	Cat. 2 Hitch Pin
13		VR8413	Click Pinb
14		VR8408HF	Point, Hardfaced
15		VR8415	1" x 27" Hardfaced Shank
16		VR8420	Frame Only

5.3 PARTS DIAGRAM VR-334/534



5.4 PARTS LIST VR-334/534

<u>REF. #</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	3	VR14401	¾" x 3 ½" NC Gr. 2 Ringed Capscrew (w/nylock nut)
2	3	VR14402	⅞" x 3 ½" NC Gr. 5 Capscrew (w/nylock nut)
3	8	VR14403	¾" x 8" NC Gr. 8 Capscrew (w/nut and lockwasher)
4	2	VR14404	Clamp Plate ¾" x 8"
5	1	VR14405	Right Wing Assembly
6	1	VR14406	Left Wing Assembly
7	3	VR14407	1 ¼" x 33" Shank
8	3	VR14408	SS-4 Adams Point
9	3	VR14409	½" x 2" Roll Pin
10	2	VR14410	Cat. 2 & 3 Hitch Pin
11	2	VR14411	Lynch Pin
12	2	VR14412	Pipe Stand
13	2	VR14413	Stand Pin
	3	VR14414	Hardfaced 1 ¼" x 33" Shank (not shown)
	3	VR14415	Hardfaced SS-4 Adams Point (not shown)
14	1	VR14416	Frame Only
	1	VR14420	Complete Right Shank Assembly
	1	VR14421	Complete Left Shank Assembly
	1	VR14430	Set Weld-On Center Shank Brackets
	3	VR14440	Complete Shank w/Point & Roll Pin

PARTS INCLUDED WITH VR14420 & VR14421 COMPLETE SHANK ASSEMBLIES

1	1	VR14401	¾" x 3 ½" NC Gr. 2 Ringed Capscrew (w/nylock nut)
2	1	VR14402	⅞" x 3 ½" NC Gr. 5 Capscrew (w/nylock nut)
3	4	VR14403	¾" x 8" NC Gr. 8 Capscrew (w/nut and lockwasher)
4	1	VR14404	Clamp Plate ¾" x 8"
5 or 6	1	VR14405 or VR14406	Right or Left Wing Assembly
7	1	VR14407	1 ¼" x 33" Shank
8	1	VR14408	SS-4 Adams Point
9	1	VR14409	½" x 2" Roll Pin

6 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.

*To validate the warranty on this product, please log-in to our website - www.gearmore.com.
You will find "warranty registration" listed at the top of our homepage.*