# Operator's Manual & Parts Drawings

# Reel Mower





500 Venture Drive Orrville Oh 44667 www.ventrac.com



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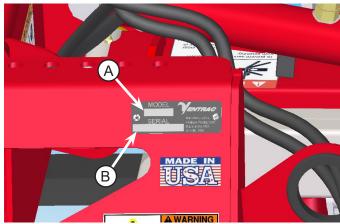
A downloadable parts manual is also available.

# To the Owner Contact Information and Product Identification

If you need to contact an authorized Ventrac dealer for information on servicing your product, always provide the product model and serial numbers.

Please fill in the following information for future reference. See the picture(s) below to find the location of the identification numbers. Record them in the spaces provided.

Date of Purchase:	
Dealer:	
Dealer Phone Number: Dealer Fax Number:	
Model # (A):	A
Serial # (B):	-A
Affix Part/Serial Number label here.	MODEL VENTO



Venture Products Inc. reserves the right to make changes in design or specifications without obligation to make like changes on previously manufactured products.

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### INTRODUCTION



Venture Products Inc. is pleased to provide you with your new Ventrac reel mower! We hope that Ventrac equipment will provide you with a ONE Tractor Solution.

### **Product Description**

The Ventrac MR740 reel mower is designed to be the ultimate trim and surround mower. The MR740 features a 74" (188 cm) cutting width and variable speed hydraulics. The 3 reel heads are identical and easy to change. Bypass valves enable/disable each reel motor individually.

### Why Do I Need an Operator's Manual?

This manual has been created to help you gain the important knowledge of what is needed to safely operate, maintain, and service your machine. It is divided into sections for convenient reference of the appropriate section.

You must read and understand the operator's manual for each piece of Ventrac equipment you own. Reading the operator's manual will help you become familiar with each specific piece of equipment. Understanding the operator's manual will help you, as well as others, avoid personal injury and/or damage to the equipment. Keep this manual with the machine at all times. The manual should remain with the machine even if it is sold. If this manual becomes damaged or unreadable, it should be replaced immediately. Contact your local Ventrac dealer for a replacement.

When using a Ventrac attachment, be sure to read and follow the safety and operating instructions of both the power unit and the attachment being used to ensure the safest operation possible.

The information in this manual provides the operator with the safest procedures to operate the machine while getting the maximum use out of the unit. Failure to follow the safety precautions listed in this manual may result in personal injury and/or damage to the equipment.

### INTRODUCTION

### **Using Your Manual**

Throughout this manual, you will encounter special messages and symbols that identify potential safety concerns to help you as well as others avoid personal injury or damage to the equipment.

### SYMBOL DEFINITIONS



### **ATTENTION**

This symbol identifies potential health and safety hazards. It marks safety precautions. Your safety and the safety of others is involved.

There are three signal words that describe the level of safety concern: Danger, Warning, and Caution. Safety should always be the #1 priority when working on or operating equipment. Accidents are more likely to occur when proper operating procedures are not followed or inexperienced operators are involved. Note: Right-Hand and Left-Hand orientations may be referred to at different places throughout this manual. Right-Hand and Left-Hand is determined as if sitting on the power unit seat facing forward.

### SIGNAL WORD DEFINITIONS

### **A** DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme cases.

### **A WARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

### **A** CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury and/or property damage. It may also be used to alert against unsafe practices.

### **Manual Glossary**

**Power Unit** A Ventrac tractor or other Ventrac engine powered device that may be operated by itself or

with an attachment or accessory.

**Attachment** A piece of Ventrac equipment that requires a Power Unit for operation.

**Accessory** A device that attaches to a Power Unit or Attachment to extend its capabilities.

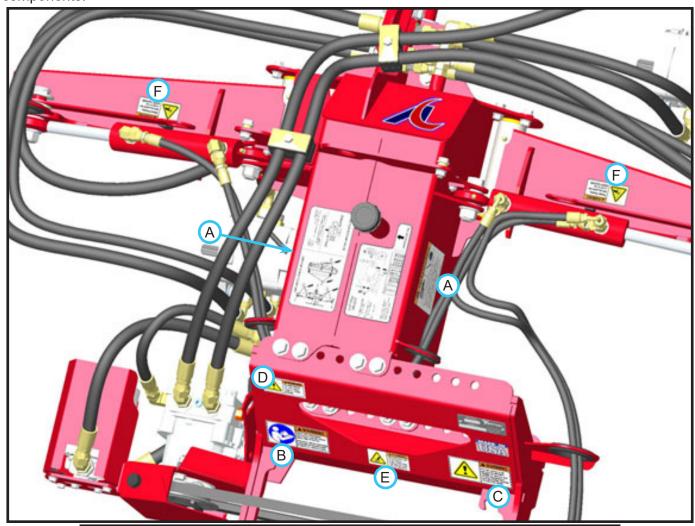
**Machine** Describes any "Attachment" or "Accessory" that is used in conjunction with a power unit.

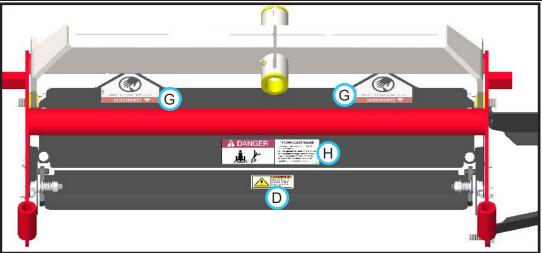
### **SAFETY**

### **Safety Decals**

The following safety decals must be maintained on your MR740 reel mower.

Keep all safety decals legible. Remove all grease, dirt, and debris from safety decals and instructional labels. If any decals are faded, illegible, or missing, contact your dealer promptly for replacements. When new components are installed, be sure that current safety decals are affixed to the replacement components.







# **A WARNING**



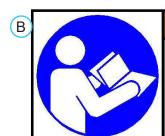


### **HIGH-PRESSURE FLUID HAZARD**

To prevent serious injury or death:

- · Relieve pressure on system before repairing or adjusting or disconnecting.
- Wear proper hand and eye protection when searching for leaks. Use wood or cardboard instead of hands.
- Keep all components in good repair

00.0103



### **A WARNING**

Read and understand operator's manual before using this machine.

Failure to follow operating Instructions could result in death or serious injury.



# **A WARNING**

For the safety of all personnel, DO NOT modify or remove any of this equipment's guards, safety devices or warning labels.



### **WARNING**

Avoid Injury. Do not reach over or under guards.



### **AWARNING**

Moving parts can cause injury. Keep hands, feet and objects clear during operation.





### **A WARNING**

Pinch Points. Moving parts can crush or cut. **KEEP CLEAR!** 



### DANGER

**ROTATING BLADE HAZARD** KEEP HANDS AND FEET CLEAR







### THROWN OBJECT HAZARD

To prevent serious injury or death from thrown objects:

- . Do not operate with deflectors removed.
- . Do not point discharge toward people, animals or buildings when operating.
- · Use special care when operating in populated or congested areas.

00.0265

Decal	Description	Part Number	Quantity
А	Warning, High Pressure Fluid Hazard	00.0103	2
В	Warning, Read Owner's Manual	00.0217	1
С	Warning, General Safety	00.0220	1
D	Warning, Do Not Reach	00.0219	4
Е	Warning, Moving Parts	00.0216	1
F	Warning, Pinch Point	00.0218	2
G	Danger, Keep Hands and Feet Away	00.0123	6
Н	Danger, Thrown Object Hazard	00.0265	3





### **Training Required**

- The owner of this machine is solely responsible for properly training the operators.
- The owner/operator is solely responsible for the operation of this
  machine and prevention of accidents or injuries occurring to him/herself, other people, or property.
- Do not allow operation or service by children or untrained personnel.
   Local regulations may restrict the age of the operator.
- Before operating this machine, read the operator's manual and understand its contents.
- If the operator of the machine cannot understand this manual, then it is the responsibility of this machine's owner to fully explain the material within this manual to the operator.
- Learn and understand the use of all controls.
- Know how to stop the power unit and all attachments quickly in the event of an emergency.

### **Personal Protective Equipment Requirements**

It is the responsibility of the owner to be sure that the operators use the proper personal protective equipment while operating the machine. Required personal protective equipment includes, but is not limited to, the following list.



- Wear a certified ear protection device to prevent loss of hearing.
- Prevent eye injury by wearing safety glasses while operating the machine.
- Closed toe shoes must be worn at all times.
- Long pants must be worn at all times.
- When operating in dusty conditions, it is recommended that a dust mask be worn.

### **Operation Safety**

- Inspect machine before operation. Repair or replace any damaged, worn, or missing parts. Be sure guards and shields are in proper working condition and are secured in place. Make all necessary adjustments before operating machine.
- Some pictures in this manual may show shields or covers opened or removed in order to clearly illustrate any instructions. Under no circumstance should the machine be operated without these devices in place.
- Alterations or modifications to this machine can reduce safety and could cause damage to the machine.
   Do not alter safety devices or operate with shields or covers removed.
- Before each use, verify that all controls function properly and inspect all safety devices. Do not operate if controls or safety devices are not in proper working condition.
- Check parking brake function before operating. Repair or adjust parking brake if necessary.
- Observe and follow all safety decals.
- All controls are to be operated from the operator's station only.
- Always wear a seat belt if the machine has a roll cage/bar installed and in upright position.
- Ensure the attachment or accessory is locked or fastened securely to the power unit before operating.
- Ensure that all bystanders are clear of the power unit and attachment before operating. Stop machine if someone enters your work area.
- Always be alert to what is happening around you, but do not lose focus on the task you are performing. Always look in the direction the machine is moving.
- Look behind and down before backing up to be sure of a clear path.
- If you hit an object, stop and inspect the machine. Make all necessary repairs before operating machine again.
- Stop operation immediately at any sign of equipment failure. An unusual noise can be a warning of equipment failure or a sign that maintenance is required. Make all necessary repairs before operating machine again.





### Operation Safety (continued)

- If equipped with a high/low range feature, never shift between high and low range while on a slope. Always move the machine to level ground and engage the parking brake before shifting range.
- Do not leave machine unattended while it is running.
- · Always park the machine on level ground.
- Always shut off engine when connecting attachment drive belt to the power unit.
- Never leave the operator's station without lowering the attachment to the ground, setting the parking brake, shutting off the engine, and removing the ignition key. Make sure all moving parts have come to a complete stop before dismounting.
- Never leave equipment unattended without lowering the attachment to the ground, setting the parking brake, shutting off the engine, and removing the ignition key.
- Only operate in well-lit conditions.
- Do not operate when there is a risk of lightning.
- Never direct the discharge of any attachment in the direction of people, buildings, animals, vehicles, or other objects of value.
- Never discharge material against a wall or obstruction. Material may ricochet back towards the operator.
- Use extra caution when approaching blind corners, shrubs, trees, or other objects that may obscure vision.
- Do not run the engine in a building without adequate ventilation.
- Do not touch the engine or the muffler while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speed may increase the hazard of personal injury.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, excessive grease, and other flammable materials.

### **Preventing Accidents**



- Clear working area of objects that might be hit or thrown from machine.
- · Keep people and pets out of working area.
- Know the work area well before operation. Do not operate where traction or stability is questionable.
- Reduce speed when you are operating over rough ground.
- Equipment can cause serious injury and/or death when improperly used.

Before operating, know and understand the operation and safety of the power unit and the attachment being used.

- Do not operate machine if you are not in good physical and mental health, if you will be distracted by personal devices, or are under the influence of any substance which might impair decision, dexterity, or judgment.
- Children are attracted to machine activity. Be aware of children and do not allow them in the working area. Turn off the machine if a child enters the work area.

### Keep Riders Off

- Only allow the operator on the power unit. Keep riders off.
- Never allow riders on any attachment or accessory.







### **Operating On Slopes**

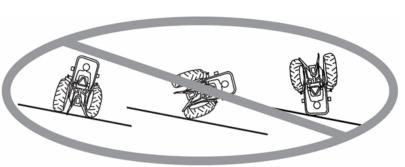
- Slopes can cause loss-of-control and tip-over accidents, which can result in severe injury or death. Be familiar with the emergency parking brake, along with the power unit controls and their functions.
- If power unit is equipped with a fold down roll bar, it must be locked in the upright position when operating on any slope.
- Use low range (if equipped) when operating on slopes greater than 15 degrees.
- Do not stop or start suddenly when operating on slopes.
- Never shift between high and low range while on a slope. Always move the power unit to level ground and engage the parking brake before shifting range or placing the power unit in neutral.
- Variables such as wet surface and loose ground will reduce the degree of safety. Do not drive where
  machine could lose traction or tip over.
- Keep alert for hidden hazards in the terrain.
- Stay away from drop-offs, ditches, and embankments.
- Sharp turns should be avoided when operating on slopes.
- Pulling loads on hills decreases safety. It is the responsibility of the owner/operator to determine loads that can safely be controlled on slopes.
- Transport machine with attachment lowered or close to the ground to improve stability.
- While operating on slopes, drive in an up and down direction when possible. If turning is necessary while driving across slopes, reduce speed and turn slowly in the downhill direction.
- Assure a sufficient supply of fuel for continuous operation. A minimum of one-half tank of fuel is recommended.

### **Roadway Safety**

- Operate with safety lights when operating on or near roadways.
- Obey all state and local laws concerning operation on roadways.
- Slow down and be careful of traffic when operating near or crossing roadways. Stop before crossing roads or sidewalks. Use care when approaching areas or objects that may obscure vision.
- If there is doubt of safety conditions, discontinue machine operation until a time when operation can be performed safely.
- When operating near or on roadways, have a Slow Moving Vehicle Emblem clearly displayed.

### **Truck Or Trailer Transport**

- Use care when loading or unloading machine into a truck or trailer.
- Use full width ramps for loading machine into a truck or trailer.
- The parking brake is not sufficient to lock the machine during transport. Always secure the power unit and/or attachment to the transporting vehicle securely using straps, chains, cable, or ropes. Both front and rear straps should be directed down and outward from the machine.
- Shut off fuel supply to power unit during transport on truck or trailer.
- If equipped, turn the battery disconnect switch to the Off position to shut off electrical power.







### Maintenance

- Keep all safety decals legible. Remove all grease dirt, and debris from safety decals and instructional labels.
- If any decals are faded, illegible, or missing, contact your dealer promptly for replacements.
- When new components are installed, be sure that current safety decals are affixed to the replacement components.
- If any component requires replacement, use only original Ventrac replacement parts.
- Always turn the battery disconnect to the Off position or disconnect the battery before performing any
  repairs. Disconnect the negative terminal first and the positive terminal last. Reconnect the positive
  terminal first and the negative terminal last.
- Keep all bolts, nuts, screws, and other fasteners properly tightened.
- Always lower the attachment to the ground, engage parking brake, shut off engine, and remove the
  ignition key. Make sure all moving parts have come to a complete stop before cleaning, inspection,
  adjusting or repairing.
- If the power unit, attachment, or accessory requires repairs or adjustments not instructed in the operator's manual, the power unit, attachment, or accessory must be taken to an authorized Ventrac dealer for service.
- Never perform maintenance on the power unit and/or attachment if someone is in the operator's station.
- Always use protective glasses when handling the battery.
- Check all fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- To reduce the hazard of fire, keep the battery compartment, engine, and muffler areas free of grass, leaves, and excessive grease.
- Do not touch the engine, the muffler, or other exhaust components while the engine is running or immediately after stopping the engine. These areas may be hot enough to cause a burn.
- Allow the engine to cool before storing and do not store near an open flame.
- Do not change the engine governor settings or over-speed the engine. Operating engine at excessive speed may increase the hazard of personal injury.
- Springs may contain stored energy. Use caution when disengaging or removing springs and/or spring loaded components.
- An obstruction or blockage in a drive system or moving/rotating parts may cause a buildup of stored energy. When the obstruction or blockage is removed, the drive system or moving/rotating parts may move suddenly. Do not attempt to remove an obstruction or blockage with your hands. Keep hands, feet, and clothing away from all power-driven parts.
- Dispose of all fluids in accordance with local laws.

### **Fuel Safety**



- To avoid personal injury or property damage, use extreme care in handling gasoline. Gasoline is extremely flammable and the vapors are explosive.
- Do not refuel machine while smoking or at a location near flames or sparks.
- Always refuel the machine outdoors.
- Do not store machine or fuel container indoors where fumes or fuel can reach an open flame, spark, or pilot light.
- Only store fuel in an approved container. Keep out of reach of children.
- Never fill containers inside a vehicle or on a truck or trailer bed with a plastic liner. Always place containers on the ground away from your vehicle before filling.
- Remove machine from the truck or trailer and refuel it on the ground. If this is not possible, refuel the machine using a portable container, rather than from a fuel dispenser nozzle.
- Never remove fuel cap or add fuel with the engine running. Allow engine to cool before refueling.
- Never remove fuel cap while on a slope. Only remove when parked on a level surface.
- Replace all fuel tank and container caps securely.





### **Fuel Safety (continued)**

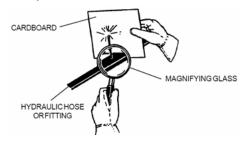
- Do not overfill fuel tank. Only fill to bottom of fuel neck, do not fill fuel neck full. Overfilling of fuel tank could result in engine flooding, fuel leakage from the tank, and/or damage to the emissions control system.
- If fuel is spilled, do not attempt to start the engine. Move the power unit away from the fuel spill and avoid creating any source of ignition until fuel vapors have dissipated.
- If the fuel tank must be drained, it should be drained outdoors into an approved container.
- Dispose of all fluids in accordance with local laws.
- Check all fuel lines for tightness and wear on a regular basis. Tighten or repair them as needed.
- The fuel system is equipped with a shut-off valve. Shut off the fuel when transporting the machine to and from the job, when parking the machine indoors, or when servicing the fuel system.

### **Hydraulic Safety**

- Make sure all hydraulic connections are tight and all hydraulic hoses and tubes are in good condition.
   Repair any leaks and replace any damaged or deteriorated hoses or tubes before starting the machine.
- Hydraulic leaks can occur under high pressure. Hydraulic leaks require special care and attention.
- Use a piece of cardboard and a magnifying glass to locate suspected hydraulic leaks.



Keep body and hands away from pinhole leaks or nozzles that eject high pressure hydraulic fluid. Hydraulic fluid escaping under high pressure can penetrate the skin causing serious injury, leading to severe complications and/or secondary infections if left untreated. If hydraulic fluid is injected into the skin, seek immediate medical attention no matter how minor the injury appears.



- Hydraulic system may contain stored energy. Before performing maintenance or repairs on the hydraulic system, remove attachments, engage parking brake, disengage weight transfer system (if equipped), shut off engine, and remove ignition key. To relieve pressure on the auxiliary hydraulic system, shut off the power unit engine and move the hydraulic control lever left and right before disconnecting the auxiliary hydraulic quick couplers.
- Dispose of all fluids in accordance with local laws.

### **SAFETY**



### **MR740 Safety Procedures**



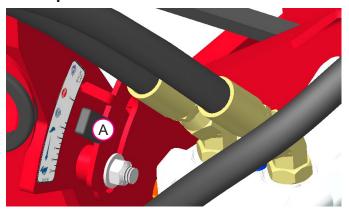
### **Cutting Unit Safety**

- Contact with the reel, bed knife, or other sharp objects may result in personal injury.
   Keep hands and feet away.
- Never perform adjustments or maintenance to the cutting units with the engine running.
- Rotation of one reel may cause the other reels to rotate.
- When removing a cutting unit blockage, hydraulic pressure or tension in the steel cutter reel may cause the reel blades to rotate. Never use your hands or feet to remove a blockage.
- When not mowing, always shut off the PTO to stop the reels.
- Never raise the reels with the PTO engaged.



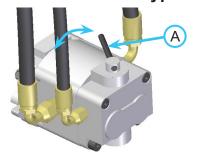
### **OPERATIONAL CONTROLS**

### **Reel Speed Control Lever**



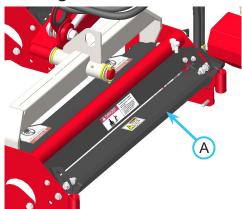
The position of the reel speed control lever (A) determines the reel speed. To determine the correct operating position, refer to the reel speed section of Adjustments, or the back lapping section of Service.

### **Hydraulic Drive Motor Bypass Lever**



Each hydraulic drive motor is equipped with a bypass valve for disabling the motor during inspection or blade adjustment, or while back lapping the other cutting units. To engage the motor, rotate the bypass lever (A) towards the front to reach the run position. To disengage the motor, rotate the bypass lever towards the rear to reach the stop position.

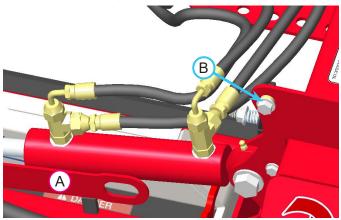
### Reel Discharge Deflector Shield



The reel discharge deflector shields (A) can be adjusted for optimal clipping discharge. Rotate the deflector shield downward to reduce or close the

discharge. Rotate the deflector shield upward to increase or open the discharge.

### **Lift Arm Transport Lock**



The lift arms for the left and right cutting units are equipped with lift arm locking links (A) and locking pins (B) for locking the lift arms in the raised position. This is useful during transport and storage of the reel mower. Refer to "transport of reel mower" in the general machine operation section for instructions on the use of the lift arm locking links.

### S.D.L.A. Controls\*

Primary S.D.L.A. Control Lever: Pull the lever to the left to raise the power unit front hitch and reel mower. Push the lever to the right to lower the power unit front hitch and reel mower. The control lever must be in the 'float' (detent) position during operation of the reel mower.

**Secondary S.D.L.A. Control Lever:** Pull the lever to the left to raise the left and right cutting unit lift arms. Push the lever to the right to lower the cutting unit lift arms. The control lever must be in the 'float' (detent) position during operation of the reel mower.

NOTE: Power units that are not equipped with an auxiliary float, require the installation of float kit for the auxiliary spool. Contact your authorized Ventrac dealer for the correct float kit for your power unit.

<sup>\*</sup> Refer to power unit operator's manual for operation of power unit controls.

### **GENERAL OPERATION**

### **Daily Inspection**

### **A WARNING**

Always set the parking brake, shut off the power unit engine, remove the ignition key, and ensure all moving parts have stopped before checking mower deck or blade condition, or attempting any repair or adjustment.

- 1. Park power unit and reel mower on a level surface, with the engine shut off, and all fluids cold.
- 2. Perform a visual inspection of the power unit and reel mower. Look for loose or missing hardware, damaged components, or signs of wear.
- 3. Inspect hydraulic hoses, hydraulic fittings, and fuel lines to ensure tight, leak free connections.
- 4. Refer to the power unit operator's manual. Check the power unit's engine oil, hydraulic oil, cooling system, tire pressure, and fuel level. Add fluid or service system as required.
- 5. Check reel mower hydraulic oil level. Refer to "service hydraulic system" section of this manual.
- Inspect the reel mower cutting edges. Reel blades should be free of nicks and bends. The bed knife should be sharp and securely fastened. Service as required.
- Check blade adjustment of the reel to the bed knife. Refer to blade adjustment later in this section. If back lapping is required, refer to "back lapping" in the service section.
- 8. Test the power unit's operator safety interlock system.\*

### **Attaching**

- Drive the power unit slowly forward into the hitch arms of the reel mower. Align the lift arms of the power unit with the reel mower hitch arms by raising or lowering the front hitch and complete the engagement.
- 2. Once completely engaged, close the front hitch locking lever\*.
- 3. Engage the parking brake\* and shut off the engine.
- 4. Place the attachment belt over the outside groove of the PTO drive pulley on the power unit. Ensure the belt is properly seated in each pulley.
- 5. Engage the PTO spring tension lever\*.
- 6. Wipe hose ends clean, and connect to the power unit's hydraulic quick couplers.
- Engage the weight transfer system\*.
   NOTE: Full engagement of the weight transfer

is recommended for most mowing applications. Adjust the amount of weight transfer as required.

### **Detaching**

- 1. Park the power unit on a level surface and set the parking brake.\*
- 2. Disengage the weight transfer system\*.
- 3. Lower the reel mower to the ground and place the primary S.D.L.A. control lever\* in the float position.
- Lower the left and right reels to the ground and place the secondary S.D.L.A. control lever\* in the float position to ensure all reels are sitting on the ground.
- 5. Shut off power unit engine.
- 6. Disconnect the hydraulic hoses from the power unit and position on the reel mower where the couplers will be free of contamination.
- 7. Release the PTO spring tension lever\*.
- 8. Remove the attachment belt from the PTO drive pulley of the power unit.
- 9. Open the front hitch locking lever.\*
- 10. Restart the power unit and slowly back away from the reel mower. A side to side movement of the steering wheel may aid disengagement.

### **Mowing and Operating Procedure**

Perform daily inspection and confirm the reel speed and cutting heights are set properly. Set the power unit's weight transfer system to the desired setting. With the power unit engine running between 2,000 and 3,000 RPM, engage the PTO switch. Adjust the throttle to the desired engine rpm. (If a good cut can be maintained and there is sufficient power, a reduced engine speed will result in improved fuel economy and reduction in wear and tear on the equipment.)

Lower the cutting units to the ground and place the power unit's primary and secondary S.D.L.A. control levers in the float position by pushing them to the right until the detent engages. The levers will stay in this position until intentionally removed.

Begin forward motion in the desired path of mowing. Avoid obstacles, removing debris as necessary. Mowing in a back and forth manner will create a striping pattern in the grass. The full length roller behind each cutting unit rolls the grass in the direction of travel.

Lift the cutting units when the edge of the mowing area is reached. Turn the power unit and mower around and align for the next pass.

<sup>\*</sup> Refer to power unit operator's manual for operation of power unit controls.

### **GENERAL OPERATION**

### **Transport of Reel Mower**

Transport the reel mower with the power unit front hitch fully raised and the left and right lift arms fully raised. This will aid in protecting cutting units from contact with obstructions during transport. Damage to the cutting units may result if transported improperly. The lift arm locking links can be used to lock the lift arms in the raised position during transport. If the power unit is shut off with the lift arm locking links engaged, the lift arms will remain in the raised position. This may be desired during transport, especially on a trailer or truck, or when in storage.

To engage the lift arm locking links:

- 1. Park the power unit on a level surface and fully raise the left and right cutting units.
- 2. Set the parking brake\* and shut off the engine.
- 3. At the front of the MR740, place the lift arm locking links over the locking pins.
- 4. Return to the power unit seat, start the engine, and lower the left and right cutting units until the locking links stop the motion of the cutting unit lift arms.

To disengage the lift arm locking links:

- 1. Park the power unit on a level surface and fully raise the left and right cutting units.
- 2. Set the parking brake\* and shut off the engine.
- 3. At the front of the MR740, remove the lift arm locking links from the locking pins.
- 4. The lift arms are now ready for operation.

### **Cutting Height Adjustment**

### **A WARNING**

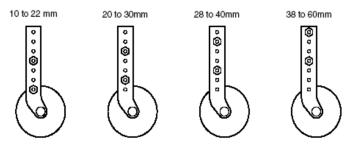
Always set the parking brake, shut off the power unit engine, remove the ignition key, and ensure all moving parts have stopped before checking mower deck or blade condition, or attempting any repair or adjustment.

The cutting height is controlled by the position of the front and rear rollers. The front roller has 4 positions for coarse adjustment. The rear roller controls the fine adjustment.

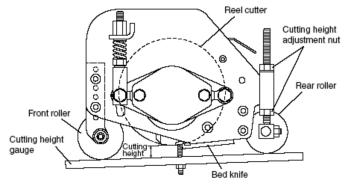
### **A** CAUTION

Before performing any procedure to the cutting units, always make sure they are securely supported, and work in a manner that does not compromise safety.

\* Refer to power unit operator's manual for operation of power unit controls.



- 1. Determine the required cutting height. Mount the front roller at the appropriate height range.
- 2. Adjust the rear roller by loosening the cutting height adjustment nut.
- Using a cutting height gauge, set the cutting height to the desired level.



4. Tighten the cutting height adjustment nut.

### Reel Speed

### **A WARNING**

Always set the parking brake, shut off the power unit engine, remove the ignition key, and ensure all moving parts have stopped before checking mower deck or blade condition, or attempting any repair or adjustment.

In order to achieve a consistent, high quality cut, it is very important that the reel speed be matched to the

height of the cut and ground Reel Speed Selection Chart 6mph speed. The table below is provided as a starting point for the appropriate reel speed. Different ground speed, type of grass, and conditions may require adjustment to reach the correct reel speed for the application.

1. Determine the reel speed control lever position from the chart. Loosen the retaining nut

'	/ 10kph	'
Height	Of Cut	Position
Inches	mm	FOSITION
2 1/4	57	4
2 1/8	54	4
2	51	4
1 7/8	48	4
1 3/4	44	4
1 5/8	41	4
1 1/2	38	5
1 3/8	35	5
1 1/4	32	5
1 1/8	29	5
1	25	6
7/8	22	6
3/4	19	8
5/8	16	8
1/2	13	9
3/8	10	9

### **GENERAL OPERATION**

for the reel speed control lever.

2. Rotate reel speed control lever to the desired position and tighten the retaining nut.

NOTE: Selecting a reel speed that is too slow for the application may result in visible clip marks. Adjust the reel speed as required.

### Blade Adjustment of Reel to Bed Knife

### **A WARNING**

Always set the parking brake, shut off the power unit engine, remove the ignition key, and ensure all moving parts have stopped before checking mower deck or blade condition, or attempting any repair or adjustment.

### **A** DANGER

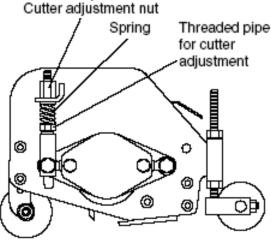




Never make an adjustment with the engine running. Contact with the reel, bed knife, or other sharp objects may result in personal injury.

The reel is adjusted properly when, upon inserting 2 pieces of newspaper between the blade and the bed knife, both pieces of newspaper are cut. If both pieces are not cut, or if contact is present, the reel must be adjusted by following these procedures.

- Set the reel's hydraulic drive motor bypass lever to the stop position so the reel can be turned manually.
- To adjust the reel blades to the bed knife, move the cutter adjustment nut so that the blade edges of the reel are adjusted evenly to the bed knife. Adjust both sides evenly.



Then adjust the nut, raising the reel away from

- the bed knife, until the blades will cut 2 newspaper pages. NOTE: The blade contact pressure increases when the cutter adjustment nut is loosened and decreases when the cutter adjustment nut is tightened.
- 3. If the blades do not cut after adjustment, perform lapping on the blades. Refer to back lapping in the service section of this manual.
- 4. As the reel becomes smaller through wear, the spring tension becomes weaker. Loosen the threaded pipe from cutter adjustment and adjust the spring tension. Adjust both sides evenly.

### **Discharge Deflector Shield Adjustment**

### **A** WARNING

Always set the parking brake, shut off the power unit engine, remove the ignition key, and ensure all moving parts have stopped before checking mower deck or blade condition, or attempting any repair or adjustment.

The reel discharge deflector shields on the reel mower can be opened or closed to discharge clippings to the rear or the front of the cutting units.

To discharge to the front: Fully close the deflector shields. This will achieve a better appearance when cutting short amounts of grass.

To discharge to the rear: Open the deflector shields to best enable clippings to exit the cutting unit.

Opening the shields too far (particularly in dry conditions) may result in excessive build up of clippings in the radiator screen or power unit frame. Only open the deflectors to the extent that the conditions require.

### **Cutting Unit Offset**

The reel mower is equipped with an offset capability of 6 inches. The standard position is with the cutting units centered on the power unit. To offset the cutting units to the left, remove the 8 bolts that fasten the hitch frame to the reel mower main frame. Move the frame the desired amount and reinstall the bolts. NOTE: Offsetting may require the hydraulic fittings on the main frame and hydraulic pump be loosened, rotated, and retightened to ensure the hydraulic hoses have adequate clearance to moving components.

### **A WARNING**

Always set the parking brake, shut off power unit engine, remove the ignition key, and ensure all moving parts have come to a complete stop before inspecting components or attempting any repair or adjustment.



### **Attention**

If any component requires replacement, use only original Ventrac replacement parts.

### **Back Lapping**

### **A** DANGER





Never make an adjustment with the engine running. Contact with the reel, bed knife, or other sharp objects may result in personal injury.

The reel blades and bed knife of each cutting unit should be kept in good condition. Sharp blades will increase the efficiency and improve the quality of the cut. Each blade and bed knife should be inspected prior to back lapping to locate sections that do not cut well, or if the blade or bed knife is worn or damaged to the point that regrinding or replacement is required.

Each cutting unit is equipped with a bypass valve on the drive motor. These bypass valves enable each cutting unit to be back lapped individually.

- 1. Clean the cutting units.
- 2. Park on a level surface. Engage the parking brake, lower the reel mower to the ground, shut off the power unit engine, and remove the ignition key.
- 3. Check the entire width of the reel cutter blade to locate sections that do not cut well.
- 4. Only back lap one reel at a time. For the other two reels, turn the hydraulic motor bypass lever to the stop position.
- 5. Apply polishing agent with a brush to those locations that cut newspaper well. Do not apply the polishing agent to those locations that do not cut newspaper well. The polishing agent should be a mixture of lapping powder (#150 or #200) and oil, mixed in a 1:3 or 1:4 ratio.
- 6. Adjust the reel cutter to the bed knife the appro-

- priate amount for back lapping. (Refer to blade adjustment to bed knife section for instructions.)
- 7. Adjust the reel speed control lever to the back lap position so the reels will operate in reverse.
- Return to the power unit seat, start the engine, and engage the PTO. Rotate the blades at a reel speed of approximately 200 rpm. After several minutes, stop the PTO, shut off the engine, and inspect the reel blades and bed knife.
- 9. Adjust reel cutter to bed knife as required. Apply additional polishing agent. Back lap until a sharp, uniform cutting edge is achieved.
- 10. After back lapping is completed, thoroughly clean the polishing compound from the reel blades and bed knife. Apply a thin coating of oil to the sharpened edges of the blades and bed knife.
- 11. Return the reel speed control lever to the desired position for mowing. Activate all hydraulic drive motors by turning the hydraulic drive motor bypass lever to the run position.

### **Reel Grinding**

Drive Adapter: part number 07.02074

### **Bed Knife Grinding**

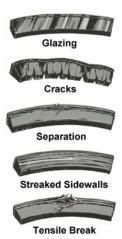
Top Angle = 3.5° Front Angle = 13°

in w

### **Drive Belt Inspection/Replacement**

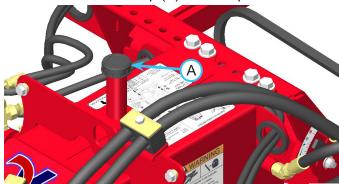
Inspecting the drive belt on the reel mower can prevent sudden belt failure by finding problems before they cause the belt to break.

Typical wear on the drive belt may result in the conditions shown in the diagram. If any of these conditions occur, the drive belt will require replacement.



### **Checking the Hydraulic Oil Level**

1. Remove the filler cap (A) on the top of the oil tank.



- 2. Wipe the attached dipstick with a clean towel and set the filler cap back in place without threading in.
- Remove the filler cap and check the oil level. the level must be between the two marks (A & B) on the dipstick.
- 4. If hydraulic oil level is below the bottom mark (B), add HydroTorq XL synthetic hydraulic oil or equivalent until the proper level is reached.

### 6. Remove the hydraulic oil filter.

- 7. Wipe the filter mounting surface with a clean cloth.
- 8. Apply a thin film of hydraulic oil to the gasket of the new filter.
- Install the new filter. NOTE: Turn filter clockwise until filter gasket makes contact with the mounting surface. Tighten 1/2 to 3/4 turn after gasket contact.
- 10. Refill the hydraulic oil tank to the correct level with Ventrac HydroTorq XL synthetic hydraulic oil.
- 11. After running the reel mower for several minutes, stop and check the hydraulic oil level. Add hydraulic oil if necessary.

### **Storage**

A

В

Preparing the Reel Mower for Storage

- 1. Clean the cutting units and the frame.
- Inspect for loose or missing hardware, damaged components, or signs of wear. Inspect hydraulic hoses and fittings to ensure tight, leak free connections. Repair or replace any damaged or worn components.
- 3. Apply grease to all grease points.
- 4. If the reel mower will be stored with the lift arms down, place a light coating of oil on the exposed cylinder rods.
- 5. Place a light coating of oil on the reel blades and bed knife of each cutting unit.
- 6. Wipe off all excess grease or oil.

Removing the Reel Mower from Storage

- 1. Inspect the drive belt and replace if necessary.
- Inspect the reel mower cutting edges. Reel blades should be free of nicks and bends. The bed knife should be sharp and securely fastened.
- 3. Check blade adjustment of the reel to the bed knife.

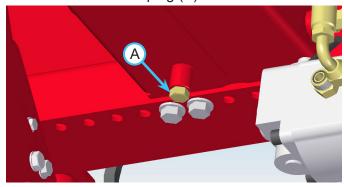
### Changing Hydraulic Oil & Filter

### **A** CAUTION

**ENVIRONMENTAL HAZARD!** 

Oil is hazardous to the environment. Dispose of oil in an approved container at a proper recycle center.

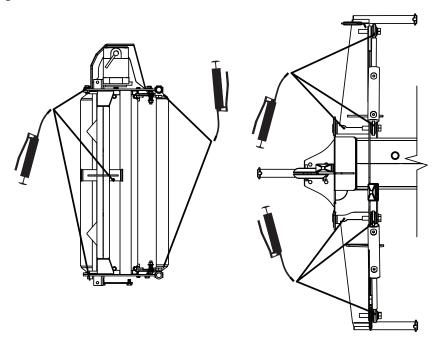
- 1. Clean the reel mower to remove possible contaminants.
- 2. Place a drain pan under the drain on the bottom of the oil tank.
- 3. Remove the drain plug (A) from the oil tank.



- After oil has drained from the tank, replace the drain plug and torque to 35 ft-lbs (47 Nm).
- 5. Place a drain pan under the filter area to capture any spilled oil.

### **Lubrication Locations**

Grease the reel mower in the locations shown in the following diagram using a lithium complex NGLI #2 grease. Wipe off any excess grease or oil.



### **Maintenance Schedule**

Maintenance Schedule	/*		A O' Pump A	ONE DE		4 - Hours	47 (00 Ho)	150 Hours	2 / 5 / 5 / 5 / 5 / 5 / 5 / 5 / 5 / 5 /	150 Ho. 145	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$ 100 HOW	25 00 HOV 14	1450 HOW	1500 HS	150 Hours	4 600 Hours	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	4 3 10 10 11	150 Holls	A 6 (00)	\$ 1020 H	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2 32 H	2 000 K	2 / July 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2 / 2
			_			ease		brica	tion:	See	Lub	ricati	on S	ectio	n		. 1									
Lift Arm Pivot	2	۸			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Cutting Unit Carrier Pivot	3	۸			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Rear Roller Bearing	6	1	**		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Front Roller Bearing	6	1	**		✓	<b>√</b>	<b>\</b>	✓	<b>\</b>	<b>\</b>	✓	<b>\</b>	<b>\</b>	<b>√</b>	✓	✓	<b>\</b>	✓	✓	✓	✓	<b>√</b>	✓	✓		
Cylinder End	4	٨			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
Motor Shaft Spline	3	%						✓				✓				✓				✓				✓		
	•	•		•	•			Ну	draul	ic Sy	/sten	1						•						•		
Check Hydraulic Oil Level				✓																						
Change Hydraulic Oil and Filter																										✓
									Insp	ectio	n															
Inspect for Loose, Missing, or Work Components.	'n			✓																						
Inspect Drive Belt, Pulleys, Blades and Hydraulic Hoses	s, Fitti	ings,		✓																						
Inspect Safety Decals				1																						
** Operation in severe conditions may requ	re mor	e freq	uent s	ervice	interv	als.																				
^ Grease Until Fresh Grease is visible																										
% Clean and relubricate with a thin film of g	rease																									

### **Maintenance Checklist**

Maintenance Checklist	/3		A Chum's A	/ Y	10 HO HO.	150 Julis 150 HOU	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	SE 100 X	2 / 2 / Z	4, 400 / 100	1450 HO. 14	158 /48 140 /48	2 00 FO	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	2/20/40/20/24 24/20/40/20/24	2 2 1 2 1 2 1 X	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	850 Hg/48	2 30 Hg.	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5 1/2/1/3	/ears of 2000 H.
Grease & Lubrication Section																							
Lift Arm Pivot	2	۸																					
Cutting Unit Carrier Pivot	3	۸																					
Rear Roller Bearing	6	1																					
Front Roller Bearing	6	1																					
Cylinder End	4	۸																					
Motor Shaft Spline	3	%																			Г		
							Ну	drau	lic S	yster	n												
Check Hydraulic Oil Level																							
Change Hydraulic Oil and Filte	r																						
								Insp	ectio	on													
Inspect for Loose, Missing, or \ Components.	Worn																						
Inspect Drive Belt, Pulleys, Bla and Hydraulic Hoses	des, Fitti	ngs,																					
Inspect Safety Decals																							
* Operation in severe conditions may r	equire more	e freq	uent s	service	inter	/als.																	
^ Grease Until Fresh Grease is visible																							
% Clean and relubricate with a thin film	of grease																						

### **SPECIFICATIONS**

### **Dimensions**

Overall Height
Ground Clearance, Transport Mode
Overall Length
Overall Width
Cutting Width
Cutting Width, Individual Reel
Weight
Reel Speed ........................... Variable, with back lap
Reel diameter............................. 7 inches (18 cm)
Blades per Reel
Cutting Height Range .......................0.39" - 2.36" (10mm - 60mm)
Coarse Adjustment
Fine Adjustment
Front Roller
Rear Roller
Hydraulic Oil............................ Ventrac HydroTorq XL
Hydraulic Oil Capacity
Hydraulic Oil Filtration...............................25 micron

### **Features**

Reel made from specially hardened steel.

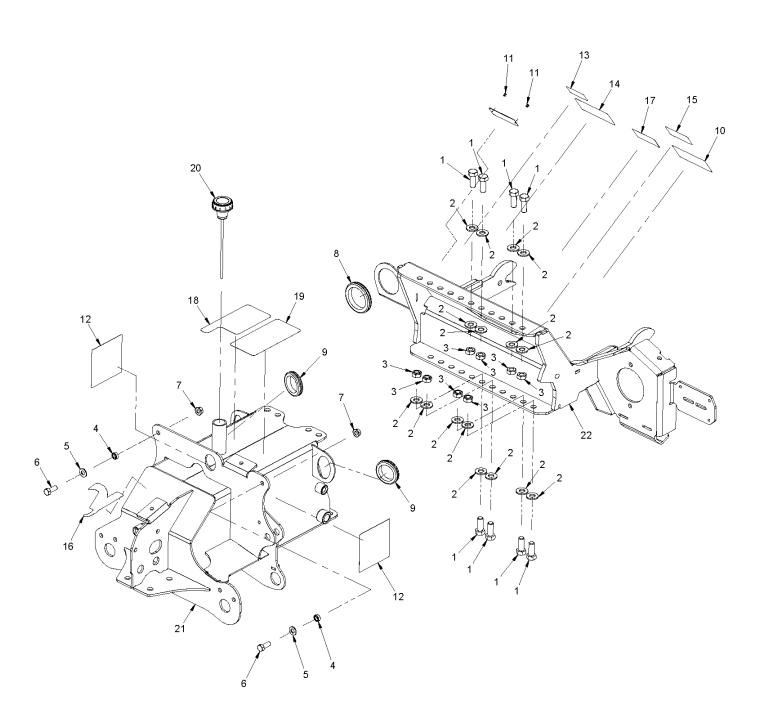
Bed knife made from tool grade steel for superior edge retention and life.

Final post-machining balanced for maximum bearing life.

Front and rear rollers for consistently accurate cut.

Simple, 2-point reel to bed knife adjustment that maintains a consistent setting.

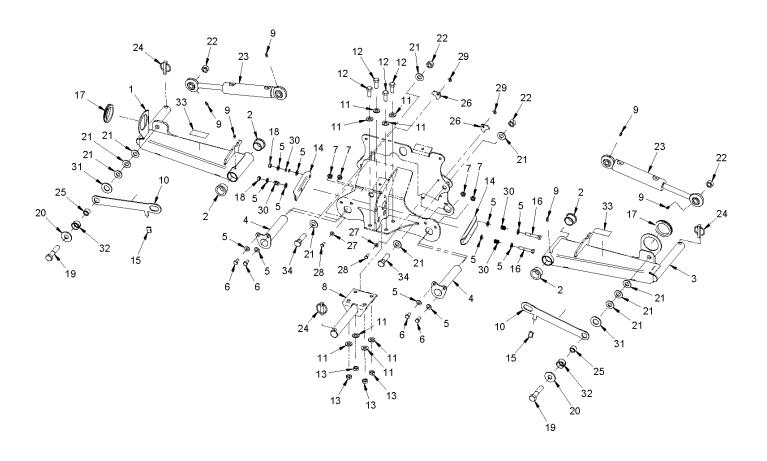
# ILLUSTRATED DRAWING Oil Tank Frame & Hitch Frame



### Oil Tank Frame & Hitch Frame

REF.	PART NO.	DESCRIPTION	QTY.
2 3 4 5	95.08 99.A08 64.0602 95.06	BOLT, HEX 1/2-13 UNC X 1-1/4 WASHER, FLAT 1/2 SAE .LOCKNUT, 1/2-13 UNC RH BUSHING, 3/8 X 5/8 X .265 WASHER, FLAT 3/8 SAE BOLT, HEX 3/8-16 UNC X 1	16 8 2
7	. 99.SF06 . 05.0056 . 05.0079 . 00.0217 . 04.0007	NUT, HEX 3/8-16 UNC FLANGE GROMMET, 2-1/8ID,2-7/8OD,7/16T GROMMET, 1.6ID X 2.25OD X 7/16 THK DECAL, WARNING READ OWNERS MANUAL RIVET, POP DOME 1/8 X 1/8 S.S. DECAL, HAZARD - HIGH PRESSURE FLUID	2 1 2 1
14	00.0220 00.0219 00.0192 00.0216 00.0264	. DECAL, MADE IN USA DECAL, GENERAL SAFETY . DECAL, WARNING DO NOT REACH . DECAL, V-DECAL DIE CUT BLUE . DECAL, WARNING MOVING PARTS . DECAL, CUTTING HEIGHT ADJ	1 1 1 1
20	. 23.0127	. DECAL, MAINTENANCE MR. . DIP STICK, ASM 6-3/4" . FRAME, OIL TANK MR740 . FRAME, HITCH MR740	1

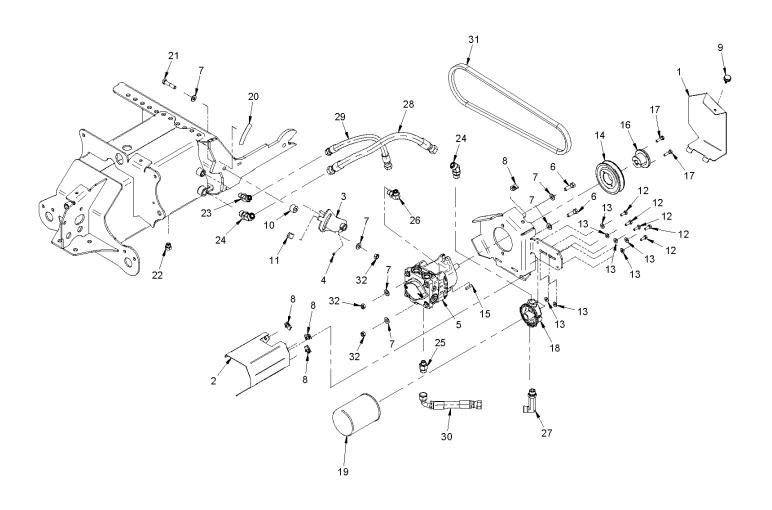
### ILLUSTRATED DRAWING Lift Arms & Front Reel Mount



### **Lift Arms & Front Reel Mount**

REF.	PART NO.	DESCRIPTION	QTY.
2	. 85.B0060	FRAME, RIGHT LIFT ARMBUSHING, 1-1/4 ID X 1-1/2 OD 1FRAME, LEFT LIFT ARMPIN, LIFT ARM PIVOTWASHER, FLAT 3/8 SAEBOLT, HEX 3/8-16 UNC X 3/4.	4 1 2 12
8	. 64.1388	NUT, HEX 3/8-16 UNC FLANGE MOUNT, FRONT PIN REEL MR740 GREASE FTG, 1/4 SAE ST LINK, REEL LIFT ARM LOCK WASHER, FLAT 1/2 SAE BOLT, HEX 1/2-13 UNC X 1-1/4	1 6 2
14 15 16 17	. 64.1390	LOCKNUT, 1/2-13 UNC RH  BRACKET, FRONT REEL LEVELER  CAP, PLASTIC 1/8 X 1/2 X 7/8  BOLT, HEX 3/8-16 UNC X 2-1/4  GROMMET, 2-1/8ID,2-7/8OD,7/16T  LOCKNUT, 3/8-16 UNC RH	2 2 2
20	. 94.10	. BOLT, 5/8-11 UNC X 3. . WASHER, FLAT 5/8 USS . WASHER, FLAT 5/8 SAE . LOCKNUT, 5/8-11 UNC RH . CYLINDER, 1-1/2" X 5" . PIN, LYNCH 7/16 X 1-3/4	2 10 4 2
26	. 64.1397	BUSHING, .635 X 7/8 X 5/8 LONG. LIMITER, CYLINDER ROTATION WASHER, FLAT 1/4 SAE BOLT, HEX 1/4-20 UNC X 3/4" NUT, HEX 1/4-20 UNC FLANGE SPRING, COMP. 9/16 OD X 5/8	2 2 2
32	. 41.0095	WASHER, FLAT 7/8 SAE SPRING, COMP 1.08 ID X .84 LG DECAL, WARNING PINCH POINT BOLT, 5/8-11 UNC X 2-1/4.	2 2

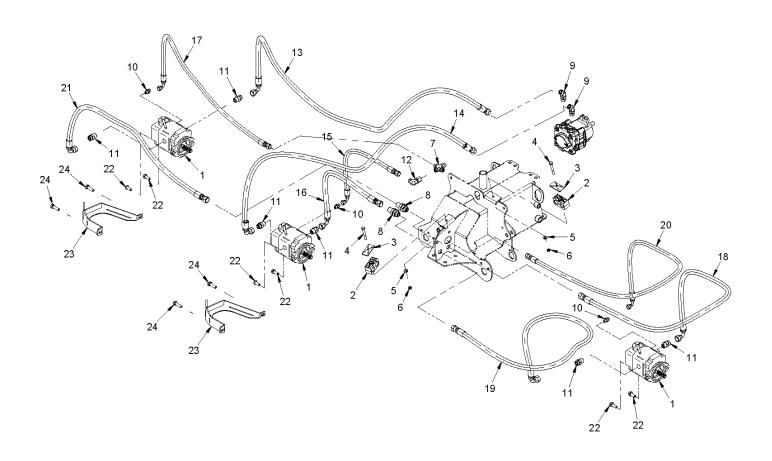
# ILLUSTRATED DRAWING Hydraulic Drive



### **Hydraulic Drive**

REF.	PART NO.	DESCRIPTION	QTY.
2	. 60.1020	. COVER, DRIVE PULLEY MR . COVER, OIL FILTER . LEVER, REEL SPEED CONTROL . SET SCREW, M6-1.0 X 10MM ZP . PUMP, HYD. HYDROGEAR . KIT, SEAL HYDROGEAR PUMP	1
7	95.06 99.E0046 47.0167 64.1389	. BOLT, 3/8-16 USS X 1-1/4. . WASHER, FLAT 3/8 SAE . NUT, "U" 1/4-20 EXTRUDED . KNOB, 1/4-20 X 1/1-4 DIA BLACK . BUSHING, 3/8 ID X 7/8 OD X .600L . CAP, PLASTIC 1/8 X 1/2 X 7/8	6 4 1
13	. 95.04	.BOLT, 1/4-20 USS X 3/4"WASHER, FLAT 1/4 SAE .PULLEY, 5.5" H-BUSHING .KEY, 5MM SQ X 1" .BUSHING, 15MM H-BUSHING .BOLT, 1/4-20 USS X 1"	7 1 1
19	. 21.0001	FILTER, HEAD 3/4" PORT SAE-8 FILTER, HYDRAULIC ZINGA AE25 DECAL, CUTTING SPEED INDICATOR. BOLT, 3/8-16 USS X 1-3/4 FITTING, PLUG 6MB FITTING, 45 ELBOW - 6MFF X 6MB	1 1 1
25	25.FF6400-08-06 25.FF6801-06-06 25.FF6801-LL-08-08 20.0264	FITTING, 45 ELBOW - 8MFF X 8MB FITTING, CONNECTOR 8MFF X 6MB FITTING, 90 - 6 MFF X 6 MB FITTING, 90 ELBOW XLONG 8MBX8MFF HOSE, 1/2 X 25" SAE 100R17 HOSE, ASM 3/8 X 17" SAE 100R17	1 1 1
31	. 81.B047	HOSE, ASM 1/2 X 6.75 SAE 100R17 BELT, B047 LOCKNUT, 3/8-16 USS RH.	1

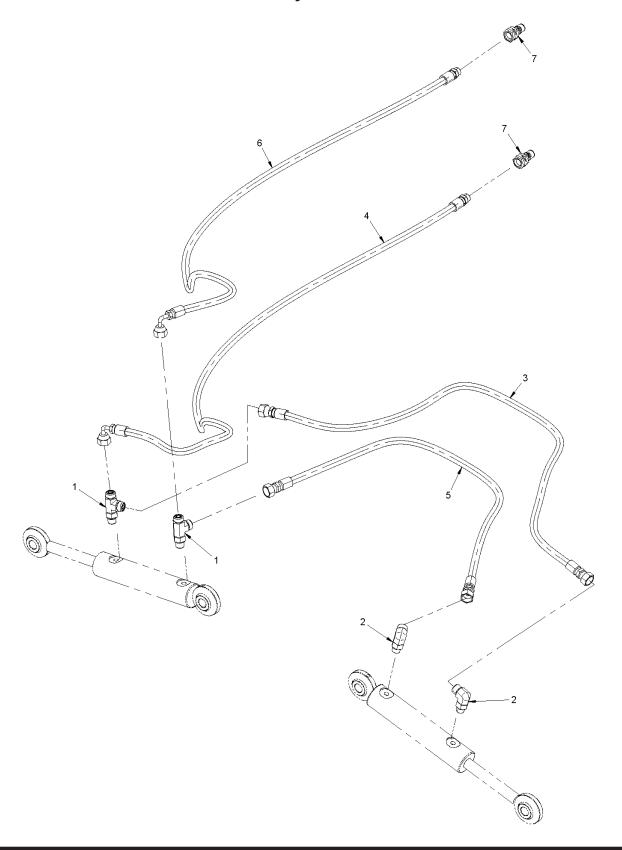
# ILLUSTRATED DRAWING Hydraulic Motors & Hoses



### **Hydraulic Motors & Hoses**

REF.	PART NO.	DESCRIPTION	QTY.
2	. 44.0248	. MOTOR, HYD. EATON REEL . CLAMP, HYD HOSE 21.3MM ID BLACK . COVER PLATE, 3D GROUP . BOLT, HEX 5/16-18 UNC X 2-1/2" . WASHER, FLAT 5/16 SAE . LOCKNUT, 5/16-18 UNC RH	2 2 2
8	. 25.FF2700-08-08LN	FITTING, CROSS 6MB X 6 MFF FITTING, BULKHEAD 1/2 W/LOCKNUT FITTING, 45 ELBOW - 8MFF X 8MB FITTING, ADAPTER 1/4 X 1/4 FITTING, ADAPTER 1/2 X 1/2 FITTING, 90 ELBOW 6MFF X 6FFS	2 2 3 6
14 15 16 17	20.0268 20.0271 20.0272 20.0270	HOSE, ASM 1/2 X 90.5" SAE 100R17 HOSE, ASM 1/2 X 59.5 SAE 100R17 HOSE, ASM 3/8 X 22.5" SAE 100R17 HOSE, ASM 1/2 X 22.5" SAE 100R17 HOSE, ASM 3/8 X 57" SAE 100R17 HOSE, ASM 1/2 X 53.5" 100R17	1 1 1
20	. 20.0270	HOSE, ASM 1/2 X 53.5" SAE 100R17 HOSE, ASM 3/8 X 57" SAE 100R17 HOSE, ASM 1/2 X 53.5" 100R17 BOLT, M10 X 1.5 X 25MM FLANGE. GUARD, REEL MOTOR BOLT, M10 X 1.5 X 35 MM	1 6 2

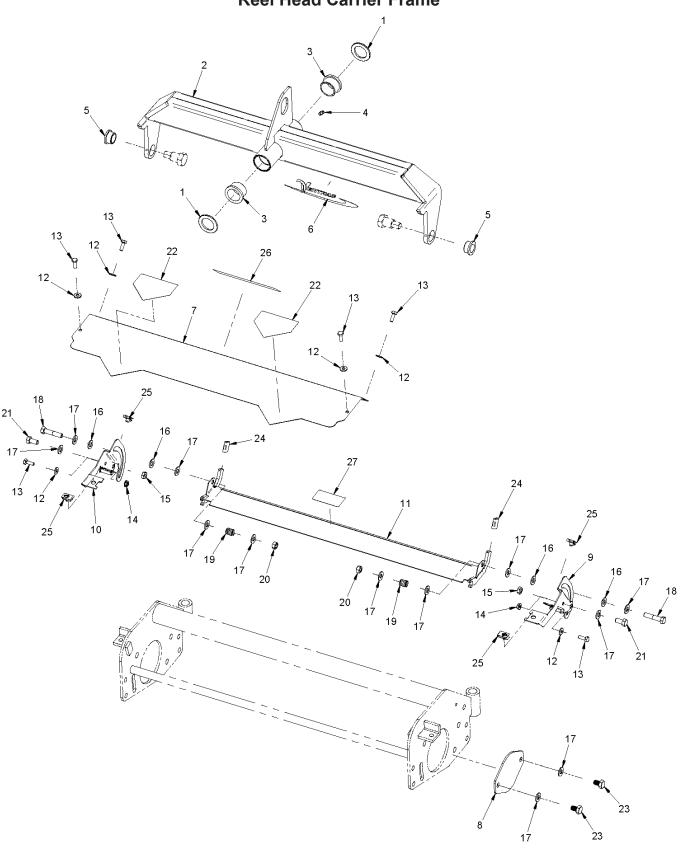
# ILLUSTRATED DRAWING Lift Arm Hydraulic Hoses



### Lift Arm Hydraulic Hoses

REF.	PART NO.	DESCRIPTION	QTY.
2	. 25.FF6801-06-06 . 20.0263 . 20.0261 . 20.0262	FITTING, M TEE 6MB X 6MFF X 6MFF FITTING, 90 - 6 MFF X 6 MB HOSE, ASM 1/4 X 42" SAE 100R17 HOSE, ASM 1/4 X 56" SAE 100R17 HOSE, ASM 1/4 X 32" SAE 100R17 HOSE, ASM 1/4 X 50" SAE 100R17	2 1 1
		COUPLER, HYD QUICK MALE ORB	

# **ILLUSTRATED DRAWING Reel Head Carrier Frame**

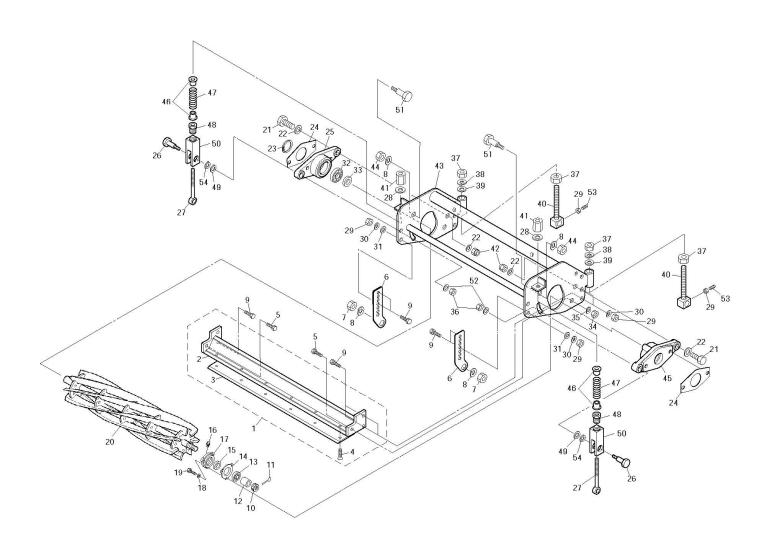


### **Reel Head Carrier Frame**

REF.	PART NO.	DESCRIPTION	QTY.*
2 3 4 5	. 62.1292 . 85.B0060 . 29.GF0001 . 85.B0086	WASHER, MACH 1-1/4 X 1-7/8 10 GA. FRAME, REEL HEAD CARRIER MR740 BUSHING, 1-1/4 ID X 1-1/2 OD 1 GREASE FTG, 1/4 SAE ST BUSHING, 26 MM OD X 20 MM ID X 15 MM L DECAL, VENTRAC ORBITAL	1 2 1 2
8 9 10 11	. 60.1025 . 64.1550 . 64.1551 . 60.1023	SHIELD, REEL TOP	1 1 1 
14 15 16 17	. 99.SF04 . 99.E0037 . 05.0083 . 95.06	BOLT, HEX 1/4-20 UNC X 3/4" NUT, HEX 1/4-20 UNC FLANGE NUT, JAM 3/8-16 USS WASHER, PVC .375ID X .875 X .0625. . WASHER, FLAT 3/8 SAE . BOLT, HEX 3/8-16 UNC X 1-3/4	2 2 4 12
20	. 99.A06. . 90.0606 . 00.0123 . 99.M0019	SPRING, COMP. 9/16 OD X 5/8. .LOCKNUT, 3/8-16 UNC RH BOLT, HEX 3/8-16 UNC X 3/4. DECAL, KEEP HANDS AND FEET AWAY BOLT, 8MM X 16MM X 1.5MM PITCH CAP, PLASTIC 1/8 X 1/2 X 7/8	2 2 2
26	00.0265	. NUT, "U" 1/4-20 EXTRUDED . DECAL, THROWN OBJECT HAZARD . DECAL, WARNING DO NOT REACH	1

<sup>\*</sup>Quantities listed are for 1 reel head carrier frame. The MR740 uses 3 reel head carrier frames.

### ILLUSTRATED DRAWING Reel Head



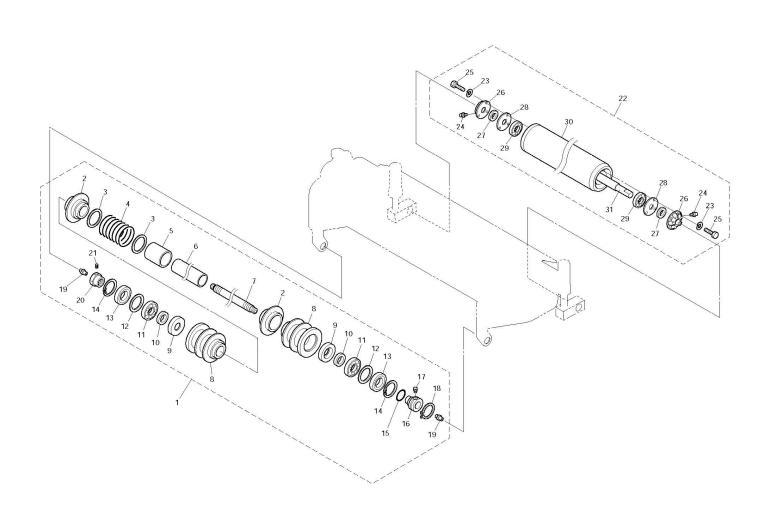
### Reel Head

REF.	PART NO.	DESCRIPTION	QTY.*
3	. 07.02003 . 07.02073 . 07.02004 . 07.02005	. MOUNT, BED KNIFE BASE . BED KNIFE, 85-662 . SCREW, FLAT HEAD M10 X 20. . BRACKET, ROLLER . NUT, 14 HIGH 20. . WASHER, 14S.	1
14 15 17 20	07.02008 07.02009 07.02010 07.02011	. BEARING, 630AZ . PACKING, SHAFT BEARING . SEAL, OIL MHSA25428 . COVER, HOUSING . CUTTER, REEL 660-7R . BOLT, SHAFT SUPPORT	1 1 1
23	07.02014 07.02015 07.02016 07.02017	. WASHER, 2.3SPCC METAL 1425 . RING, STOP RING R72 . PACKING, SHAFT BEARING . HOUSING, HYDRAULIC MOTOR B . BOLT, HOUSING. . BOLT, CUTTER ADJUSTING	1 2 1
29	. 07.02020 . 07.02021 . 07.02022 . 07.02023	. WASHER, 1C5191P METAL 1020 . NUT, 10 . BEARING, 6207Z . SEAL, OIL MHSA356012 . NUT, 10U P1.25 . NUT, 18 3P1.5	12 1 2
39 40 41 42	. 07.02026 . 07.02027 . 07.02028 . 07.02029	WASHER, 18S. WASHER, 2SPCC METAL 1828 SCREW, CUTTING HEIGHT ADJUST NUT, 10 RECEIVING BLADE ADJ P1 NUT, 14U P1.5 FRAME, REEL MOWER CUTTER	8 2 2
46	. 07.02032 . 07.02033 . 07.02034 . 07.02035	. HOUSING, REEL . RECEIVER, REEL SPRING SPRING, 5 COMPRESSION 2560 THREADED PIPE, CUTTER ADJUST . MOUNT, ADJUSTING SCREW BASE BOLT, FRAME	2 1 1
		WASHER, 2.3SPCC METAL 1025	

<sup>\*</sup>Quantities listed are for 1 cutting unit. The MR740 uses 3 cutting units.

Listed items are stocked. Check for availability of unlisted parts.

# ILLUSTRATED DRAWING Front & Rear Rollers



### **Front & Rear Rollers**

REF.	PART NO.	DESCRIPTION	QTY.*
2	. 07.02040	ROLLER, GROOVED ASSEMBLY ROLLER, 80 REEL WASHER, 1C5191P METAL 3547 SPRING, 5 COMPRESSION 5175 COLLAR, 35STKM 4049 ROLLER, 28 PIPE 34578	18 2 1
8	07.02046	. SHAFT, ROLLER 762 . HOUSING, GROOVED ROLLER 77 . HOUSING, SEAL . SEAL, OIL MHSA20358 . ROLLER, TAPERED 30204 JRP6 . COLLAR, 42STKM 473.25	2 2 2
14 15 16 17	. 07.02052 . 07.02053 . 07.02054 . 07.02055	. SEAL, OIL MHSA25478 . RING, STOP RING R47 . O-RING, P 20 . COLLAR, 17 3628.25 . STOP, DRUM COLLAR STOPPER . RING, STOP RING S36	2 1 1
20	07.02058 07.02059 07.02060 07.02061	. GREASE FITTING, M8 NUT, 20 REEL 27 . SET SCREW, 6 HOLLOW 8 . ROLLER, 764 ASSEMBLY . WASHER, 6S GREASE FITTING, REEL	1 1 6
26	. 07.02064	. BOLT, 6 REEL 12. . HOUSING, SEAL . SEAL, OIL MHSA 17308 . FIBER, 1 3665 . BEARING, 6203Z . ROLLER, 76.2 674	2 2 2
31	. 07.02069	. SHAFT, ROLLER 764	1

<sup>\*</sup>Quantities listed are for 1 cutting unit. The MR740 uses 3 cutting units.

### WARRANTY



### **LIMITED WARRANTY - VENTRAC COMMERCIAL EQUIPMENT**

Venture Products, Inc., (henceforth referred to as V.P.I.) warrants on the terms and conditions herein, that it will repair, replace, or adjust any part manufactured by Venture Products Inc., and found by Venture Products, Inc., to be defective in material and/or workmanship during the applicable warranty term.

All Ventrac commercial equipment purchased and registered on or after January 1, 2019 will carry a 2-year commercial warranty. The warranty period begins on the date of the original customer purchase:

Ventrac Commercial Equipment	Warranty Term
2100 SSV & Attachments	2-year
3000 Series Tractors & Attachments	2-year
4000 Series Tractors & Attachments	2-year

All Ventrac add-on kits and accessories such as: 3-point hitch, 12V front & rear power outlets, foot pedal, dual wheel kit, etc., will be covered under the above warranty periods provided they are installed by an Authorized Ventrac Dealer. This warranty may be transferred and will carry the remainder of the warranty starting from the original purchase/registration date with the dealership and/or V.P.I.

The engine warranty is covered by its respective engine manufacturer. Please refer to the engine manufacturer's warranty statement that is included in the owner's manual.

For warranty consideration on Ventrac commercial equipment, the equipment, including any defective part, must be returned to an Authorized Ventrac Dealer within the warranty period. The warranty shall extend to the cost to repair or replace (as determined by V.P.I.) the defective part. The expense of pickup and delivery of the equipment, the service call drive time or any transportation expense incurred for the warranty repair is the sole responsibility of the owner and is not covered under warranty by Ventrac and/or V.P.I. Ventrac and V.P.I.'s responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Ventrac equipment. Proof of purchase may be required by the dealer to substantiate any warranty claim. Only warranty work performed and submitted by an Authorized Ventrac Dealer may be eligible for warranty credit.

This warranty extends only to Ventrac commercial equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does NOT cover: (a) any defects, damage or deterioration due to normal use, wear and tear, or exposure; (b) normal maintenance services, such as cleaning, lubrication, oil change; (c) replacement of service items, such as oil, lubricants, spark plugs, belts, rubber hoses, bearings or other items subject to normal service replacement; (d) damage or defects arising out of, or relating to abuse, misuse, neglect, alteration, negligence or accident; (e) repair or replacement arising from operation of, or use of the equipment which is not in accordance with the operating instructions as specified in the operator's manual or other operational instructions provided by V.P.I.; (f) repair or replacement arising as a result of any operation from Ventrac equipment that has been altered or modified so as to, in the determination of V.P.I., adversely affect the operation, performance or durability of the equipment or that has altered, modified or affected the equipment so as to change the intended use of the product; (g) repair or replacement necessitated by the use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the equipment or other than as recommended in the operator's manual or other operational instructions provided by V.P.I.; (h) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the equipment; or (i) damage or defects due to or arising out of repair of the Ventrac equipment by a person or persons other than an authorized Ventrac service dealer or the installation of parts other than genuine Ventrac parts or Ventrac recommended parts.

The sole liability of V.P.I. with respect to this warranty shall be the repair and replacement as set forth herein. V.P.I. shall have no liability for any other cost, loss, or damage. In particular V.P.I shall have no liability or responsibility for: (i) expenses relating to gasoline, oil, or lubricants; (ii) loss, cost or expense relating to transportation or delivery of turf equipment from the location of the owner or the location where used by the owner to or from any Authorized Ventrac Dealer; (iii) travel time, overtime, after hours' time or other extraordinary repair charges or charge relating to repairs or replacements outside of

### WARRANTY



### **LIMITED WARRANTY - VENTRAC COMMERCIAL EQUIPMENT**

normal business hours at the place of business of an Authorized Ventrac Dealer; (iv) rental of like or similar replacement equipment during the period of any warranty repair or replacement work; (v) any telephone or telegram charges; (vi) loss or damage to person or property other than that covered by the terms of this warranty; (vii) any claims for lost revenue, lost profit or additional cost or expense incurred as a result of a claim of breach of warranty; or (viii) attorney's fees.

The remedies of the buyer set forth herein are exclusive and are in lieu of all other remedies. The liability of V.P.I., whether in contract, tort, under any warranty, or otherwise, shall not extend beyond its obligation as set forth herein. V.P.I. shall not be liable for cost of removal or installation nor shall V.P.I. be responsible for any direct, indirect, special or consequential damages of any nature. In no event shall V.P.I. be liable for any sum in excess of the price received for the goods for which a liability is claimed.

There are no representations or warranties which have been authorized to the buyer of the Ventrac commercial equipment other than set forth in this warranty. Any and all statements or representations made by any seller of this equipment, including those set forth in any sales literature or made orally by any sales representative, are superseded by the terms of this warranty. Any affirmation of fact or promise made by V.P.I. or any of its representatives to the buyer which relates to the goods that are the subject to this warranty shall not be regarded as part of the basis of the bargain and shall not be deemed to create any express warranty that such goods shall conform to the affirmation or promise.

No employee, distributor, or representative is authorized to change the foregoing warranties in any way or grant any other warranty on behalf of V.P.I.

Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion on limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

This warranty applies to all Ventrac commercial equipment sold by Venture Products Inc.