

# *American* **FARMLAND®**

*By Tarter Gate Since 1945*



## ***ROTARY CUTTER***

### **OPERATION AND ASSEMBLY MANUAL**



## **NOTE**

BECAUSE AMERICAN FARMLAND MAINTAINS AN ONGOING PROGRAM OF PRODUCT IMPROVEMENT, WE RESERVE THE RIGHT TO MAKE IMPROVEMENTS IN DESIGN OR CHANGES IN SPECIFICATIONS WITHOUT INCURRING ANY OBLIGATION TO INSTALL THEM ON UNITS PREVIOUSLY SOLD. BECAUSE OF THE POSSIBILITY THAT SOME PHOTOGRAPHS IN THIS MANUAL WERE TAKEN OF PROTOTYPE MODELS, PRODUCTION MODELS MAY VARY IN SOME DETAIL. IN ADDITION, SOME PHOTOGRAPHS MAY SHOW SHIELDS REMOVED FOR PURPOSES OF CLARITY. **NEVER OPERATE** THIS IMPLEMENT WITHOUT ALL SHIELDS IN PLACE.

## **OWNER RESPONSIBILITY**

It is the Retail Customer and/or Operator's responsibility to read the Operator's Manual, to operate, lubricate, maintain and store the product in accordance with all instructions and safety procedures. Failure of the operator to read the Operator's Manual is a misuse of this equipment. It is the Retail Customer and/or Operator's responsibility to inspect the product and to have any part(s) repaired or replaced when continued operation would cause damage or excessive wear to other parts or cause a safety hazard.

## **AN IMPORTANT WORD ON SAFETY**

The manufacturers of American Farmland equipment have made every effort to design and manufacture products that are effective and that can be used easily and safely. However, as with all power equipment, particularly power equipment designed to cut, operator attention to safe operation is necessary at all times. Failure to read and follow manufacturer provided instructions could result in accidental injury or death.

## **PRACTICE BEFORE ACTUAL USE CAN HELP AVOID ACCIDENTS**

Many accidents happen because operators undertake working tasks before they have become familiar with new equipment or before they have received adequate training. Please take the time to read through this manual and to become familiar with your American Farmland equipment before using it on an actual job. This manual should be required reading of anyone owning, borrowing or renting this equipment. The importance of reading it and following its directions should be stressed to anyone using American Farmland equipment. If you are the owner of any American Farmland equipment rented or used by a non-owner, you are responsible to provide training in the safe operation of this equipment. Refer rental or other users to this manual and demonstrate the correct techniques for safe operation.

Following directions given in this manual, practice attaching and un-attaching the equipment and use the equipment for practice in an unobstructed, open area. Make sure you know how to stop and start the equipment safely before undertaking an actual working task.

## **DAYLIGHT OPERATION ONLY**

Safe operation of American Farmland equipment depends on operator perception and the ability to react to changing terrain and conditions. For this reason we do not recommend using American Farmland equipment after dark unless there is adequate artificial lighting to allow the operator full control.

## **IMPAIRED USERS ARE IN DANGER**

Use of alcohol or drugs, prescription or non-prescription, can result in operator impairment and should always be avoided. Elderly users or those with physical handicaps should take extra caution before using American Farmland implements. Under no circumstances should American Farmland equipment be operated by those under the age of 18.

## **PERSONAL PROTECTION ADVISED**

Protect the eyes, head, feet and hands by using safety glasses, shoes and gloves. Adequate ear protection is also strongly recommended during use of or maintenance performed on American Farmland implements. Care should be taken to avoid being caught by moving parts of American Farmland equipment. For this reason, caution should be observed by those with anything that could be caught in moving blades or other parts of the apparatus including clothing or hair.

# **SAFETY**

## **HEARING LOSS**

Long term exposure to loud noises, such as those you might receive while mowing a pasture or large lawn, can contribute to hearing loss. This damage can be permanent although the results of prolonged high decibel exposure vary by individual. For this reason, hearing protection is recommended when using American Farmland or any motorized equipment producing levels of sound measured 80 db or greater. Operating equipment safely requires the full attention of the operator. Do not wear radio or music headphones while operating machine.

## **SURVEY THE AREA**

Nearly any loose object can become a missile if propelled by steel blades turning at more than 500 rotations per minute. That's why we recommend walking over the area to be mowed to remove any obstacles such as cables, ropes, stones or branches that could pose a hazard.

Watch for low hanging limbs which can dismount the driver. Falling from the tractor could result in the mowing deck passing over the operator with moving cutting blades.

## **ROLLOVER DANGERS**

Your cutter should be equipped with an approved Rollover Protection System. A system is composed of a roll bar or cage and a seatbelt to keep you securely in the seat in the event of a turnover accident. Not wearing your seat belt defeats the system and can result in spinal injury or death.

## **SAFETY SHIELDS**

Do not operate American Farmland equipment unless all safety shields are in place. Check periodically to make sure that safety shields are in place and have not been damaged. Safety signs are important, particularly for those not familiar with American Farmland equipment. If signs have come loose or have been removed, see to it that they are replaced and are clearly visible.

## **CUTTER SAFETY**

Always operate your tractor or power unit according to its manufacturer's operating instructions and observe all safety recommendations. Make sure your tractor or power unit has been regularly serviced and is in good operating condition before attaching or using any American Farmland equipment. Check to make sure the RPM provided by your tractor or power unit's PTO is the correct 540 RPM required by the American Farmland Rotary Cutter. Do not vary from this or any specifications relating to either your tractor or power unit or those set forth in this manual regarding American Farmland equipment.

# ***SAFETY***

## **MAKE SAFETY YOUR MOST IMPORTANT CONCERN**

When mowing high grass, make two or more passes, cutting at the highest possible level first. Then, after checking the mowing area for obstacles such as rocks, limbs, stumps or cables, cut again at a lower height.

Keep others clear of the cutter and the area being mowed by a distance of 300' or more.

Do not change or alter American Farmland equipment in any way. Changes to the design or operation could result in injury or death and may alter the function or life of the equipment.

The American Farmland Rotary Cutter was not designed to carry loads of any kind. There is no safe place for people to stand. Standing on the mowing deck is dangerous and could result in injury or loss of life. Standing on the mowing deck may also damage it.

Use rear wheel weights, front tractor weight and/or tire ballast to improve stability. Use care and proceed slowly when transporting or operating on hills, ditches or rough terrain. Avoid sudden stops, particularly on sloping ground.

## **TRANSPORTING BY HIGHWAY**

Transporting a rotary cutter attached to a tractor or other power unit on public highways can prove hazardous to the operator and to others. Check to make sure your state and local government allows equipment such as tractors or other farm equipment on public highways. Pay particular attention to requirements for safety signs, lights or signals.

Make sure equipment is secure before transporting. Check all pins and connections to make sure they are secure.

Use extreme caution and travel at low speeds when transporting your equipment.

Do not transport or operate when under the influence of alcohol, drugs or medications. Check with physician about prescription or over-the-counter medications.

Obey all traffic safety laws.

Do not allow passengers on your tractor or associated equipment.

# ***OPERATING INSTRUCTIONS***

## **BEFORE OPERATING YOUR ROTARY CUTTER**

Make sure that your tractor's lift control will prevent the PTO shaft from contacting the front edge of the cutter when it is at full lift. If the PTO shaft makes contact it can damage the unit and create a potential hazard. The PTO shaft and lift control can be adjusted on most tractors and power units. Refer to your tractor or power unit's operating manual.

## **IMPORTANT READING ABOUT POWER TAKE-OFF (PTO) OPERATION**

Power is supplied to American Farmland equipment through your tractor or power unit's PTO. Use of the PTO should be referred to in your tractor or power unit's operating manual. Refer to it before using the PTO with American Farmland or any 3-point equipment.

Make sure the tractor master shield is in good condition and fastened securely. This shield covers the PTO stub shaft and is an important part of the safety systems designed for your protection. New shields are available from your American Farmland dealer so replace any that are damaged or missing.

Do not leave the tractor or power unit seat until all power equipment has been disengaged and the engine has come to a complete stop. Do not attempt to remove foreign objects from a mowing deck until it has been disengaged and the tractor or power unit engine has come to a total stop. Keep hands and feet away from mowing deck area.

If your tractor does not have a PTO (power take off) it will need to be equipped with a PTO clutch, available where you purchased your American Farmland equipment. Adding a PTO clutch may alter the length of the PTO drive shaft. Make certain that a safety guard covers the entire shaft. Replace the PTO shaft sleeve periodically as or when worn.

## **OPERATING INSTRUCTIONS**

The American Farmland rotary cutter is not designed for mowing suburban lawns and will not provide the smooth cut associated with lawn mowers. It is designed to cut pasture or rough grass and weeds up to 1" in diameter. Do not attempt to cut material larger than 1" as serious damage to blades, the mowing deck or your tractor or power unit could occur. Such use may void your warranty.

Always disengage PTO (power take off or 3-point hitch) before starting tractor or power unit motor.

Do not operate the cutter in reverse unless necessary. First, look carefully behind the cutter. Be very careful when you back the tractor with the PTO engaged. Material can be discharged from the front of the cutter. This increases risk of injury to the operator from thrown objects.

Keep at least 25% of the total weight of tractor and equipment on the front wheels. Don't guess at weights. Use a truck scale to weigh tractor, ballast wheels, front end loader and rear attachments separately. Once the weight of each component is known, carefully calculate how much front end weight it will take to offset the weight of the rear equipment so that at least 25% of that weight is distributed to the front wheels. Tip-over could result without adequate attention to these limits.

# OPERATING INSTRUCTIONS

## **ADJUSTING THE CUTTING HEIGHT**

Set your mower to the highest position that will allow the desired cutting height in order to reduce the possibility for damage due to blades striking the ground or unseen objects. Mowing at a higher setting produces less stress on the entire deck and is recommended. Mowing often will produce better results than mowing less frequently at lower blade settings.

*Follow the steps below to adjust height:*

1. Raise mower off the ground.
2. Block in position.
3. Remove 5/8" adjusting bracket bolt.
4. Loosen A-frame tail wheel attachment bolts.
5. Move the A-frame tail wheel up or down to desired cutting height.
6. Re-install 5/8" bolt and tighten to secure in position.

*In tall or damp grass:*

Allowing the front edge of the blade to strike the grass at a lower level than the rear edge of the blade will provide greater cutting efficiency when mowing high or damp grass. This approach will maximize power at slow speeds.

*For finer cutting:*

Finer cutting can be achieved by reversing this setting, allowing the front edge of the blade to strike higher than the back edge. Although a finer cut is the result, this approach will require more horsepower than other settings.

## **USING YOUR ROTARY CUTTER**

1. Read and follow the information on safety discussed in this manual.
2. Check all oil levels and grease all fittings before each use.
3. Lower deck only after tractor is running. Engage the PTO only at an idle speed. Once PTO is engaged and operating, slowly increase the throttle speed to 540 RPM. Maintain this speed throughout operation.
4. Starting in a low gear, proceed to mow. Speed should be determined by gear selection and not by throttle speed. Changing throttle speed can affect the RPM of the PTO shaft. Reduce speed by operating in a lower gear if the sounds and signs of stalling appear. Cutting height may have to be raised if stalling still occurs at slow ground speeds. You must maintain 540 RPM on the PTO shaft for safe and proper operation.
5. Putting your deck away clogged with damp grass is an invitation to rust despite the careful attention to a quality finish that is given to all American Farmland products. Cleaning and drying your rotary cutter after use will ensure longer life. Inspect for damaged or worn parts or safety signs and replace before the next use. Store in a dry, sheltered area.

# ***OPERATING INSTRUCTIONS***

## **DRIVING THE TRACTOR AND CUTTER**

Start off driving at a slow speed and gradually increase your speed while maintaining complete control of the tractor and cutter. Moving slowly at first will also prevent the tractor from rearing up and loss of steering control. The tractor should never be operated at speeds that cannot be safely handled or which will prevent the operator from stopping quickly during an emergency.

If the power steering or engine ceases operating, stop the tractor immediately as the tractor will be difficult to control. Perform turns with the tractor and cutter at slow speeds to determine how the tractor with an attached cutter handles a turn. Determine the safe speed to maintain proper control of the tractor when making turns. When turning with a towed implement, the overall working length of the unit is increased.

Allow additional clearance for the cutter when turning. To avoid overturns, drive the tractor with care and at safe speeds, especially when operating over rough ground, crossing ditches or slopes, and turning corners.

Tractor wheel tread spacing should be increased when working on inclines or rough ground to reduce the possibility of tipping.

Use extreme caution when operating on steep slopes. Keep the tractor in a low gear when going downhill. DO NOT coast or free-wheel downhill.

## **PREVENTIVE MAINTENANCE FOR LONG LIFE OF YOUR AMERICAN FARMLAND EQUIPMENT**

1. Before each use check to make sure all safety features are installed and working properly.
2. Check oil levels before each use and maintain level.
3. Check wheels, wheel forks and PTO shaft joints and service every 6 hours of operation.  
Use only Type II grease.
4. Keep blades sharp. Use only American Farmland replacement blades to ensure balance.  
When replacing blades also replace blade bolts.
5. Check all hardware to ensure a tight and secure fit. Replace any parts showing excessive wear.



# ***OPERATING INSTRUCTIONS***

## **REMOVE PAINT BEFORE WELDING OR HEATING**

Avoid potentially toxic fumes and dust.

Hazardous fumes can be generated when paint is heated by welding, soldering, or using a torch.

Remove paint before heating:

- Remove paint a minimum of 100 mm (4 in.) from area to be affected by heating. If paint cannot be removed, wear an approved respirator before heating or welding.
- If you sand or grind paint, avoid breathing the dust. Wear an approved respirator.
- If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

Do not use a chlorinated solvent in areas where welding will take place.

Do all work in an area that is well ventilated to carry toxic fumes and dust away.

Dispose of paint and solvent properly.

Stored attachments such as dual wheels, cage wheels, and loaders can fall and cause serious injury or death.

Securely store attachments and implements to prevent falling. Keep playing children and bystanders away from storage area.

## **WHEN YOUR AMERICAN FARMLAND EQUIPMENT IS NOT IN USE**

Store your American Farmland equipment in a clean dry area during periods when the equipment will not be in use. Always make sure the brakes are set in a full, locked position. Disengage the PTO and remove the ignition keys. Greasing all fittings is recommended before long periods of storage. Covering your equipment with tarping will prevent the build up of dust and may help to prevent moisture accumulation.

## ***PREVENTIVE MAINTENANCE AND SAFETY***

What follow are some commonsense practices suggested to make caring for your American Farmland equipment as safe as possible. Please note and pay attention to other safety precautions offered elsewhere in this manual.

Work in adequately ventilated area. Never operate tractor indoors. Carbon monoxide poisoning could result.

Only American Farmland parts and accessories have been designed to fit and work properly with American Farmland equipment. Do not substitute parts made by other manufacturers. Use of unauthorized parts may result in injury or death and may void the warranty.

Never use equipment that is compromised in any way. Inspect the entire American Farmland implement before using. Look for loose or broken parts, safety shields or missing bolts or cables. If the equipment is damaged or needs repair wait until repairs have been completed before using.

Keep a fire extinguisher and first aid kit on hand in the area where maintenance is to be performed.

Before working on rotary cutter: Stop the tractor. Make sure the brakes are in a full, locked position. Disengage the PTO before shutting-off engine. After engine has stopped, remove the ignition keys.

Wait until moving parts have stopped to reduce the danger of being caught in working gears or belts before touching or attempting to work on the cutter.

Block tractor and equipment securely to prevent movement in any direction before performing maintenance operations.

Make sure all safety shields and signs are installed before placing unit back in service.

Be sure all tools are removed from the area after completing maintenance. Be particularly watchful of tools that may be under the mowing deck.

Use genuine American Farmland parts when replacement parts are needed for periodic maintenance.

## **ABOUT TARTER GATE MANUFACTURERS OF AMERICAN FARMLAND EQUIPMENT**

Tarter Gate was founded in 1945 by C.V. Tarter, who operated a small logging and lumber business in south central Kentucky. C.V. and family began making wooden farm gates that were so well made there was an immediate demand for them and the company's focus changed from lumber and logging to making farm equipment. Today, Tarter Gate is still operated by the Tarter family, now a third generation enterprise with major manufacturing and distribution facilities in Kentucky and Utah. Tarter Gate's branded products include:

- American Farmland® - Gates, corral panels, cattle handling and 3-point equipment
- Billy Goat Gruff® - Goat workers, grooming stands, kidding pens and feeders
- Equestrian World® - Corral panels, stalls, saddle racks, hay and grain feeders
- TerrainTough®/Hunter's Specialties® - ATV Equipment for game plots and gardens



**Equestrian  
World**® Equine Management  
& Sporting Products By  
Tarter Gate Since 1945



# **ROTARY CUTTER**

## **ASSEMBLY INSTRUCTIONS**

### **STEP 1**

Place the rotary cutter on the ground on a flat surface.



### **STEP 2**

Put blocks under each side of the rear mower deck. Make sure that rear tail wheel is off the ground.



### **STEP 3**

Use 1 1/4" wrench to loosen Category I lift pins.



### **STEP 4**

Use 15/16" wrench to loosen third arm connector bolt.



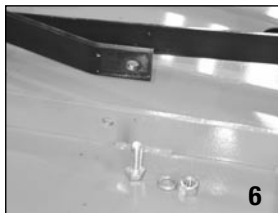
### **STEP 5**

Use 15/16" wrench to loosen rear tail-wheel adjustment strap.



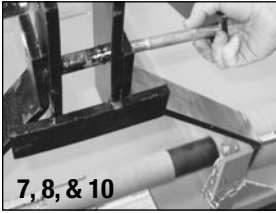
### **STEP 6**

Use 15/16" wrench to completely remove rear tail wheel attachment nuts and bolts.



# **ROTARY CUTTER ASSEMBLY**

## **INSTRUCTIONS** *CONTINUED...*



### **STEP 7**

Raise third arm assembly to upright position until rear strap bolt holes line up with rear tail wheel attachment bolts.



### **STEP 8**

Remove long connector bolt in third arm assembly.



### **STEP 9**

Insert bolts through rear tail wheel connector and third arm connector straps.  
Note: Place third arm bracing strap on inside of rear wheel strap.



### **STEP 10**

Re-insert 3rd arm connector bolt.



### **STEP 11**

Tighten all bolts and Category I pins.

### **STEP 12**

Remove PTO shaft from cutter by undoing chains.



### **STEP 13**

Remove shaft boot on PTO gearbox.

### **STEP 14**

Remove PTO shaft snap-ring.

# **ROTARY CUTTER ASSEMBLY**

## **INSTRUCTIONS** *CONTINUED...*

### **STEP 15**

Remove PTO shaft cover key and slide cover back.



### **STEP 16**

Remove PTO shear bolt from end of shaft.



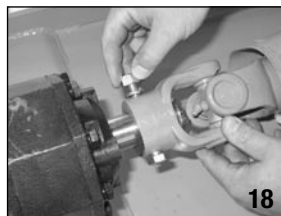
### **STEP 17**

Slide PTO shaft onto gearbox shaft and align shear bolt holes.



### **STEP 18**

Install and tighten PTO shaft shear bolt.



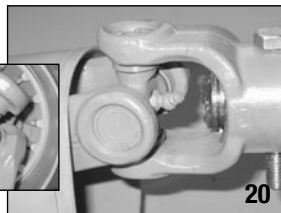
### **STEP 19**

Reinstall snap ring on end of PTO shaft.

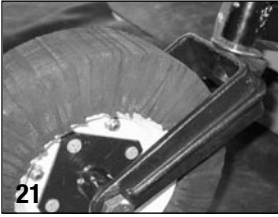


### **STEP 20**

Grease two fittings on PTO shaft (one on each end of shaft in universal joint).



## **ROTARY CUTTER ASSEMBLY** **INSTRUCTIONS** *CONTINUED...*



### **STEP 21**

Grease two fittings in rear tailwheel assembly.



### **STEP 22**

Reinstall PTO shaft cover.



### **STEP 23**

Remove both 1/2" fill plug and 1/8" level plug in back of gear box.

### **STEP 24**

Fill gearbox with 80W/90 or 85W/140 gear oil until level with 1/8" level plug.



### **STEP 25**

Replace both plugs.

### **STEP 26**

Your American Farmland Rotary Cutter is now ready to use.



