DR® TRIMMER/MOWERTM

SAFETY & OPERATING INSTRUCTIONS GEAR-DRIVEN POWER TAKE-OFF SYSTEM™





↑ WARNING!

READ AND UNDERSTAND THIS MANUAL AND ALL INSTRUCTIONS BEFORE OPERATING THE DR TRIMMER/MOWER WITH GEAR-DRIVEN POWER TAKE-OFF SYSTEM™



And congratulations on your purchase of a new add-on accessory for your DR TRIMMER/MOWER!

We have done our utmost to ensure that your DR and all Country Home Products, Inc. accessories will be one of the most trouble-free and satisfying pieces of equipment you have ever owned. Please let us know of any questions you may have. We want to answer them as quickly as possible. When you do call, please have your order number handy. For technical assistance, please call Toll-Free 1-800-DR-OWNER(376-9637) and one of our Technical Support Representatives will be happy to help you. We also hope to hear from you on how much you like your new helper.

And, please tell your friends about your new DR TRIMMER/MOWER Gear-Driven Power Take-Off System! Having DR Owners spread the word about our products and our way of doing business is the best advertising we can have, and the best way to help us provide even better service in the years to come.

Thanks once again!

Im Parent

for all of us at Country Home Products, Inc.

SALES MANAGER

COPYRIGHT

©2006 Country Home Products, Inc. All rights reserved.



Country Home Products, Inc. Meigs Road P.O. Box 25 Vergennes, VT 05491

Toll-free phone: 1-800-DR-OWNER (376-9637)

Fax: 1-802-877-1213

Web site: www.dr-owner.com E-mail: info@chp.com

Table of Contents

CHAPTER 1	1
INTRODUCING THE DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM	1
Conventions used in this manual	
CHAPTER 2	2
SAFETY CONSIDERATIONS	2
Preparing to Use the DR Gear-Driven Power Take-Off System	
Safety Information Labels	2
Protecting Yourself	
Operating the Machine Safely	3
Additional Information and Potential Changes	4
	_
CHAPTER 3	
INSTALLING YOUR DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM	
DR Gear-Driven Power Take-Off System	
Installing the Transmission	
Before Installing the Accessories	
Installing and Removing the Edger	
Installing and Removing the Aerator or Cultivator	10
CHAPTER 4	12
USING YOUR DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM AND ACCESSORI	ES12
Edger Use	13
Cultivator Use	13
Aerator Use	14
CHAPTER 5	15
TROUBLESHOOTING AND WARRANTY	
Troubleshooting Table	13
CHAPTER 6	16
PARTS LIST & ASSEMBLY DIAGRAM	16
Parts List – Gear-Driven Power Take-off System	
Gear-Driven Power Take-off System	
Daily Checklist for the DR Gear-Driven Power Take-Off System	18

INTRODUCING THE DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM

This manual will help you set up and safely operate your new DR Gear-Driven Power Take-Off System. Careful adherence to the safety and operating instructions in this manual will ensure many years of productive use.

Please let us know of any questions you may have. We want to answer them as quickly as possible. When you do call, please have your order number handy. For technical assistance, please call Toll-Free 1-800-DR-OWNER(376-9637) and one of our Technical Support Representatives will be happy to help you.

Conventions used in this manual



THE EXCLAMATION POINT WITHIN A TRIANGLE ALERTS YOU TO ESSENTIAL OPERATING, SAFETY, AND MAINTENANCE (SERVICING) INSTRUCTIONS.

A CAUTION!

THIS INDICATES A HAZARDOUS SITUATION, WHICH, IF NOT AVOIDED, COULD RESULT IN MINOR OR MODERATE INJURY.

↑ NOTICE!

THIS INFORMATION IS IMPORTANT IN THE PROPER USE OF YOUR MACHINE. FAILURE TO FOLLOW THIS INSTRUCTION COULD RESULT IN DAMAGE TO YOUR MACHINE OR PROPERTY.

Tip: This is a helpful hint to guide you in getting the most out of your DR Gear-Driven Power Take-Off System.

Tools Needed: This indicates you will need a special tool to perform a maintenance function on your machine.

Note: This information may be helpful to you.

If you are ever unsure about an action you are about to take, don't do it. Contact Country Home Products' toll-free support at 1-800-DR-OWNER (376-9637) for help or information.

SAFETY CONSIDERATIONS

Taking the time to read and observe all safety instructions will ensure many years of productive use from your DR Gear-Driven Power Take-Off System and help you avoid injury. Please take a few moments to read the following guidelines for safely operating your new machine.

Preparing to Use the DR Gear-Driven Power Take-Off System

 Read these Safety & Operating Instructions before you use the DR Gear-Driven Power Take-Off System. Become familiar with the operation and service recommendations to ensure the best performance from your new accessory.

Safety Information Labels

Consult the Safety Considerations chapter in your DR TRIMMER/MOWER *Safety & Operating Instructions* manual for more information about using and ordering safety information labels. Replace damaged or missing safety labels immediately.

Protecting Yourself

- Always wear protective goggles while using the DR Gear-Driven Power Take-Off System to protect your eyes from possible thrown objects. Goggles are provided with your DR TRIMMER/MOWER.
- Do not, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the DR Gear-Driven Power Take-Off System. Modifications to your accessory could cause personal injuries and will void your warranty.
- Wear shoes with non-slip treads when using your DR TRIMMER/MOWER and DR Gear-Driven Power Take-Off System. Do not use the machine while barefoot or wearing open sandals.
- Wear long pants while using your DR TRIMMER/MOWER and DR Gear-Driven Power Take-Off System.
- Avoid wearing loose clothing or jewelry, which might be caught on the mower's moving parts.
- Use earmuffs or earplugs to protect your hearing.
- Always keep safety guards in place and in working order.
- Always check the alignment of moving parts and for damaged or worn parts

Operating the Machine Safely

↑ WARNING!

THE ITEMS LISTED IN THIS SECTION WILL HELP YOU KEEP YOUR DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM OPERATING SMOOTHLY AND, MOST IMPORTANTLY, PREVENT INJURY TO YOURSELF OR OTHERS. PLEASE REVIEW THEM CAREFULLY BEFORE STARTING YOUR MACHINE.

- To be safe, do not operate the machine near children or pets, and never allow children to operate the machine. Keep at least 50 feet clear of bystanders and always turn the machine off when someone approaches.
- Never allow people who are unfamiliar with these instructions to use the machine.
- The DR Gear-Driven Power Take-Off System uses rotating blades, which could cause serious injury if handled while the machine is running. Keep your hands and feet clear of the blade area and do not attempt to adjust blades while the machine is running.
- ALWAYS shut off the engine and remove the spark plug wire before adjusting the machine. If you have to stop to remove grass or debris from the underside of the frame, always disconnect the spark plug wire first.
- The exhaust area on the engine becomes very hot with use. Allow the engine to cool before doing maintenance or making adjustments.
- The DR Gear-Driven Power Take-Off System heats up during operation. Touching it could cause serious burns. Typical surface temperatures can range between 110 and 180 degrees Fahrenheit. Wait until the trimmer and the DR Gear-Driven Power Take-Off System are cool before performing any maintenance procedures. Typically, this can take 15–30 minutes depending on the outdoor temperature and conditions of use.
- When operating over uneven terrain and slopes, use EXTREME CAUTION to ensure solid and firm footing.
- Use extra caution when using the DR Gear-Driven Power Take-Off System in wet or slippery conditions.
- Check the area you will be working in for sticks, stones, gravel, roots, and bits of debris. Remove any obstructions before starting to operate equipment. Failure to do this could cause personal injury or property damage from thrown objects.
- Turn off the engine whenever you are not operating the machine. Never leave the engine running when refueling, changing attachments, checking, cleaning or working on the machine.
- Use the machine only in daylight or good artificial light.
- Don't hurry or take things for granted while using the DR Gear-Driven Power Take-Off System.
- Do not operate the machine when under the influence of alcohol or medication.
- Watch for traffic when using the DR Gear-Driven Power Take-Off System near roadways.

- Always make certain nuts and bolts are tight to assure a safe working condition.
- Use only manufacturer-recommended replacement parts and accessories.

Note: No list of warnings and cautions can be all-inclusive. The operator must apply common sense and operate the DR Gear-Driven Power Take-Off System in a safe manner.

Additional Information and Potential Changes

Country Home Products, Inc. reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser. The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your machine.

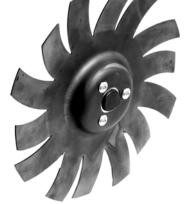
INSTALLING YOUR DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM

This chapter outlines a few simple steps you will need to follow to install your new DR Gear-Driven Power Take-Off System. Once you have completed this installation, you can attach and use your new accessories in minutes. It may be helpful to familiarize yourself with the components of the DR Gear-Driven Power Take-Off System by reviewing the pictures below before beginning the steps outlined in this chapter.

DR Gear-Driven Power Take-Off System

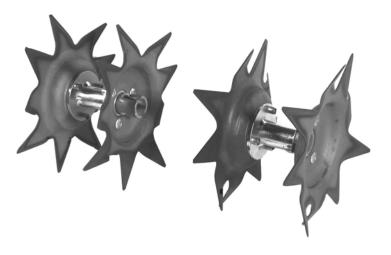


Shaft Extension – included but not attached.

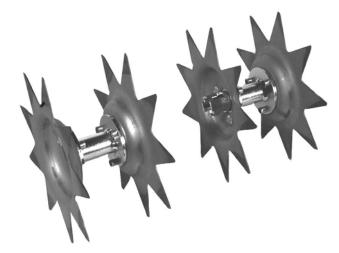


Gear-Driven PTO Unit

Edger







Aerator

Installing the Transmission

↑ WARNING!

BEFORE PERFORMING ANY MAINTENANCE PROCEDURE, STOP THE ENGINE AND DISCONNECT THE SPARK PLUG WIRE.

↑ WARNING!

THE TRANSMISSION IS HOT DURING AND AFTER USE. TYPICAL SURFACE TEMPERATURES RANGE BETWEEN 110 AND 180° FAHRENHEIT. DO NOT TOUCH THE TRANSMISSION UNTIL A COOL DOWN PERIOD OF 15-30 MINUTES HAS PASSED. COOL DOWN TIME CAN VARY DEPENDING ON THE OUTDOOR TEMPERATURE AND OPERATING CONDITIONS.

Tools Needed:

- Head-Locking Tool that came with your trimmer or a #3 Phillips head screwdriver with at least a 6" shank.
- Adjustable wrench
- 5/8" open-end wrench
- Pliers (Optional)

Note: The following steps are based on the trimmer's left and right as if you were standing at the operating position behind the trimmer's handles.

1. Remove the Mow-Ball[™] assembly used for mowing. See the DR® Trimmer/ Mower[™] Safety & Operating Instructions for step-by-step instructions (*Figure 2*)

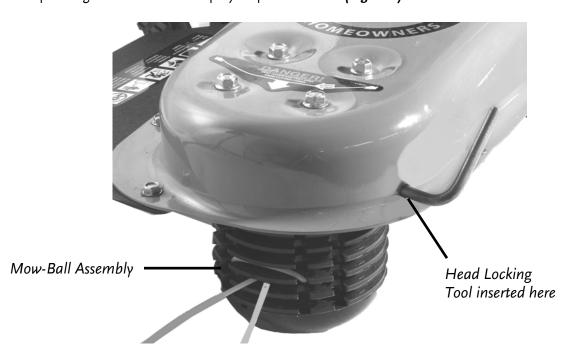
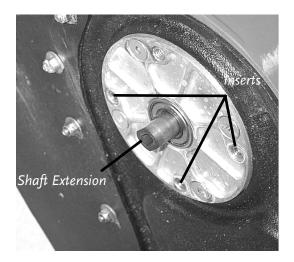
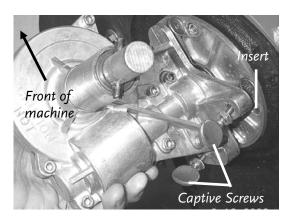


Figure 2



2. Hold the bearing shaft to prevent it from turning using a screwdriver or the head-locking tool (*Figure 2*). Install and tighten the shaft extension (*Figure 3*) with adjustable wrench or 5/8" wrench until snug. Do not over tighten.

Figure 3



3. Rotate the transmission to align its shaft with the slotted hole in the shaft extension (*Figure 4*), sliding the transmission up against the lower bearing plate and rotating it to align the three captive fasteners with their respective inserts (*Figure 4*).

Figure 4

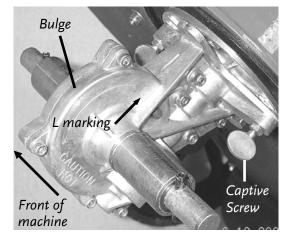


Figure 5

4. Install the transmission with the transmission's L marking on the trimmer's left side (*Figure 5*).

A NOTICE!

THE BULGE ON THE TRANSMISSION MUST FACE TOWARD THE FRONT OF THE MACHINE FOR PROPER PERFORMANCE (FIGURE 5).

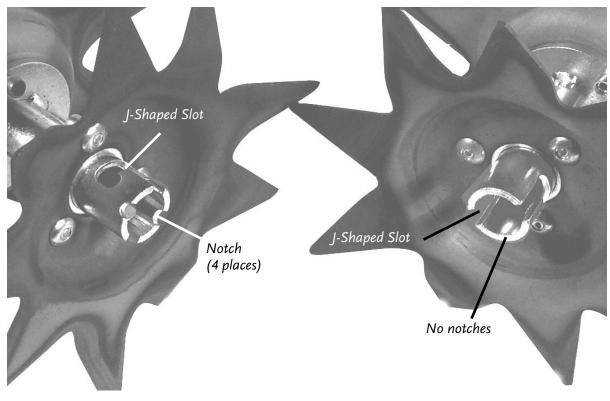
5. First, tighten each of the three captive thumbscrews finger tight. Then use a wrench or pliers to tighten each screw alternately.



DO NOT OVER TIGHTEN THE THUMBSCREWS OR DAMAGE MAY OCCUR.

Before Installing the Accessories

Each attachment has two slots in the axle that ends in a J feature. The shafts that install on the side of the transmission marked with an R have a semi-circular notch in the end of the shaft by the slot. The shafts that install on the side of the transmission marked with an L do not have this notch (*Figure 6*).



Right side attachment Left side attachment

Figure 6

↑ NOTICE!

THE ACCESSORIES HAVE CAPS ON THE OUTSIDE ENDS: A RED CAP ON THE RIGHT AND A BLACK CAP ON THE LEFT. BE SURE TO INSTALL THE RED-CAPPED END ON THE RIGHT SIDE OF THE TRANSMISSION AND THE BLACK-CAPPED END ON THE LEFT SIDE OF THE TRANSMISSION. INSTALLING THE ACCESSORY INCORRECTLY CAN CAUSE THE ATTACHMENT TO COME OFF DURING OPERATION.

↑ WARNING!

BEFORE PERFORMING ANY MAINTENANCE PROCEDURE, STOP THE ENGINE AND DISCONNECT THE SPARK PLUG WIRE.

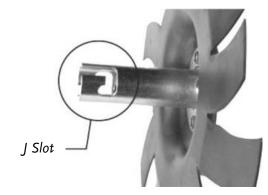


Figure 7

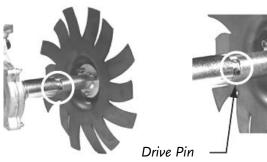


Figure 8

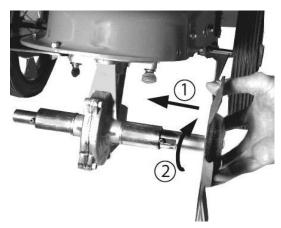


Figure 9

! WARNING!

THE TRANSMISSION IS HOT DURING AND AFTER USE. TYPICAL SURFACE TEMPERATURES RANGE BETWEEN 110 AND 180° FAHRENHEIT. DO NOT TOUCH THE TRANSMISSION UNTIL A COOL DOWN PERIOD OF 15-30 MINUTES HAS PASSED. COOL DOWN TIME CAN VARY DEPENDING ON THE OUTDOOR TEMPERATURE AND OPERATING CONDITIONS.

Using the edger accessory on your DR[®] TRIMMER/MOWER™, you can cut clean borders around trees, flowerbeds, walkways, shrubs, and gardens.

Note: The following steps are based on the Trimmer's left and right as if you were standing at an operating position behind the Trimmer's handles.

Install the Edger on the Trimmer's left by sliding the Edger's axle over the shaft of the transmission, rotating the Edger to align the J-slot in the axle (Figure 7) with the drive pin (Figure 8) and pushing the Edger axle toward the transmission (Figure 9).

Note: There is a spring that you will compress as you push the Edger onto the shaft until the drive pins bottom on the slot in the Edger axle. This will require a fair amount of force to overcome the spring tension.

 When the Edger axle is inserted completely, rotate the Edger clockwise until it reaches the end of the J-slot (Figure 9).

Note: When the Edger is released, it should lock into the end of the J-slot and should not turn in either direction. Check to see that the Edger is locked into place by trying to turn it both clockwise and counterclockwise.

 To remove the Edger, simply reverse the procedure by pushing the Edger in, twist counterclockwise and release.

Installing and Removing the Aerator or Cultivator

↑ WARNING!

BEFORE PERFORMING ANY MAINTENANCE PROCEDURE, STOP THE ENGINE AND DISCONNECT THE SPARK PLUG WIRE.

! WARNING!

THE TRANSMISSION IS HOT DURING AND AFTER USE. TYPICAL SURFACE TEMPERATURES RANGE BETWEEN 110 AND 180° FAHRENHEIT. DO NOT TOUCH THE TRANSMISSION UNTIL A COOL DOWN PERIOD OF 15-30 MINUTES HAS PASSED. COOL DOWN TIME CAN VARY DEPENDING ON THE OUTDOOR TEMPERATURE AND OPERATING CONDITIONS.

Your DR TRIMMER/MOWER Gear-Driven Power Take-Off System aerator attachment slices through the top layer of sod to help deliver water, air, and nutrients to the roots of your plants. The cultivator attachment is similar in appearance to the aerator with the exception of its alternating bent blades (see Figure 1 on Page 7). These blades allow the cultivator to churn weeds and dead material over into the soil as you move your machine. Use the cultivator to maintain garden beds you have previously prepared or tilled.

Note: The following steps are based on the trimmer's left and right as if you were standing at the operating position behind the trimmer's handles.

↑ NOTICE!

THE CULTIVATOR AND AERATOR HAVE CAPS ON THE OUTSIDE ENDS: A RED CAP ON THE RIGHT AND A BLACK CAP ON THE LEFT. BE SURE TO INSTALL THE RED-CAPPED END ON THE RIGHT SIDE OF THE TRANSMISSION AND THE BLACK-CAPPED END ON THE LEFT SIDE OF THE TRANSMISSION. INSTALLING THE ACCESSORY INCORRECTLY CAN CAUSE THE ATTACHMENT TO COME OFF DURING OPERATION. SEE *FIGURE* 6 ON PAGE 10 FOR A DESCRIPTION OF THE DIFFERENCES BETWEEN THE RIGHT & LEFT HAND ATTACHMENTS.

Tools Needed:

- 3/8" wrench
- 7/16" wrench
- Hammer
- 1. Remove a bolt and nut holding the main frame to the deck (*Figure* 10) using a 7/16" and a 3/8" wrench.

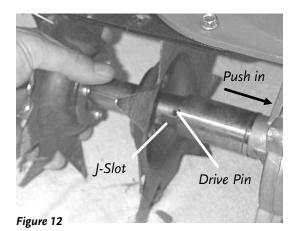
Note: Machines purchased after July 2002 may not need to perform these steps. Your machine may not have this bolt; if you don't have the bolt, continue with step 3.



Figure 10



Figure 11



€ Co

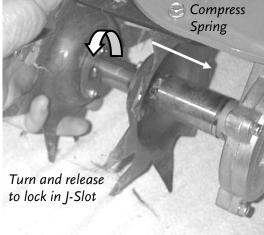


Figure 13

- 2. Replace the removed bolt with the supplied black plastic button (*Figure 11*). Simply push the button into the hole or gently tap in place with a hammer.
- 3. Install the aerator or cultivator on the trimmer's right by sliding the attachment's axle over the shaft of the transmission, rotating the attachment to align the slot in the axle with the drive pin and pushing the attachment axle toward the transmission (Figure 12).

Note: The right side attachments have a red cap and 2 semi-circular notches in the axle (see *Figure 6* on page 10). There is a spring that you will compress as you push the attachment onto the shaft until the drive pins bottom on the slot in the attachment's axle. This will require a fair amount of force to overcome the spring tension.

4. When the attachment axle is inserted completely, rotate the attachment clockwise until it reaches the end of the J-slot (*Figure 13*).

Note: When the attachment is released, it should lock into the end of the J-slot and should not turn in either direction. Check to see that the attachment is locked into place by trying to turn it both clockwise and counterclockwise.

5. To install the aerator or cultivator left axle, repeat the instructions above.

Note: The attachment's left axle has a black cap and does not have a semi-circular notch at the end of the axle near the J-slot (see Figure 6 on page 10).

USING YOUR DR GEAR-DRIVEN POWER TAKE-OFF SYSTEM AND ACCESSORIES

This chapter covers the procedures for operating your new DR TRIMMER/MOWER Gear-Driven Power Take-Off System and also discusses basic operation features.

! WARNING!

THE TRANSMISSION IS HOT DURING AND AFTER USE. TYPICAL SURFACE TEMPERATURES RANGE BETWEEN 110 AND 180° FAHRENHEIT. DO NOT TOUCH THE TRANSMISSION UNTIL A COOL DOWN PERIOD OF 15-30 MINUTES HAS PASSED. COOL DOWN TIME CAN VARY DEPENDING ON THE OUTDOOR TEMPERATURE AND OPERATING CONDITIONS.

Before using your trimmer's accessories, be prepared to resist the force the accessories create.

⚠ NOTICE!

THE EDGER, AERATOR, AND CULTIVATOR PULL THE TRIMMER FORWARD, AWAY FROM YOU. THE FORCE YOU EXPERIENCE VARIES DEPENDING ON THE HARDNESS OF THE SOIL AND THE NUMBER OF ROCKS YOU ENCOUNTER. TYPICALLY, YOU WILL NEED TO PULL BACKWARD AS THE MACHINE PULLS FORWARD. IF YOU RESIST THE PULL OF THE MACHINE, THE ATTACHMENTS OPERATE MORE EFFECTIVELY. IF YOU PROVIDE LITTLE RESISTANCE, THE ATTACHMENTS WILL OPERATE LESS EFFECTIVELY. YOU MAY WANT TO PULL THE MACHINE BACKWARD FOR OPTIMUM PERFORMANCE.

⚠ NOTICE!

WHEN USING THE DR TRIMMER/MOWER SELF-PROPELLED MODEL, DO NOT ENGAGE THE WHEEL DRIVE WHEN USING THE ATTACHMENT ACCESSORIES. YOU WILL NEED TO RESIST THE PULLING FORWARD ACTION OF THE ATTACHMENTS AS MENTIONED ABOVE, WHICH MAY RESULT IN DAMAGE TO THE SELF-PROPELLED DRIVE SYSTEM IF IT IS ENGAGED. THE PTO ATTACHMENTS WILL PULL THE MACHINE FORWARD WITHOUT ENGAGING THE DRIVE SYSTEM.

To operate the DR TRIMMER/MOWER with accessories attached:

- 1. Engage the Gear-Driven Power Take-Off System by pulling the bail bar of the machine back against the handle.
- 2. Disengage the Gear-Driven Power Take-Off System by releasing the bail bar.

Edger Use

The Edger is designed to cut a clean straight edge in sod and grass along sidewalks and driveways.

- 1. When transporting the DR TRIMMER/MOWER with the Edger attachment (see Figure 1) to the site where you wish to use it, be sure to push down on the handlebars to raise the Edger so that it does not scrape along the ground. If the Edger scrapes along the ground or is bumped, it may unlock from the PTO and rotate backwards. This may cause the Edger to fall off of the PTO. If the Edger is installed on the operator's right side, it may also unlock and loosen during use. The Edger must be installed on the operator's left side for proper functioning of the Edger (see Figure 8).
- 2. Align the Edger with the line of cut that you wish to make. If you are cutting beside a sidewalk, it is best to have most of the machine on the sidewalk and one tire on the grass.
- 3. When you are at the site where you wish to edge, start the DR TRIMMER/MOWER engine; then push down on the handlebars to lift the Edger off of the ground. Pull the bail bar back to engage the PTO and start the Edger rotating.
- 4. Hold back on the handlebars and slowly lower the Edger into the ground. The weight of the DR TRIMMER/MOWER will cause the Edger to cut into the sod and try to pull the machine forward as it cuts. Hold the DR TRIMMER/MOWER back so that the Edger cuts completely down into the sod and the hub of the Edger is on top of the ground.
- 5. Continue to hold back on the handlebars and slowly allow the Edger to work forward to cut new sod and grass. A back and forth motion, by letting the machine move slowly forward and then pulling it slowly back towards you, is sometimes more effective than trying to move steadily forward.
- 6. After you have completed your cut, you will need to pick up any sod that is cut off that you wish to discard or compost. It is best to pick up this sod right away so that it doesn't get packed back down into the cut you just made. A straight edged shovel or hoe is best for picking up the loose sod.

Cultivator Use

The cultivator is designed to fluff up soil that has previously been tilled, such as a flower or vegetable garden, to churn in fertilizer, prepare the soil for planting, or remove weeds.

- 1. When transporting the DR TRIMMER/MOWER with the Cultivator attachment (see Figure 1) to the site where you wish to cultivate, be sure to push down on the handlebars to raise the Cultivator blades so that they do not scrape along the ground. If the blades bump or scrape along the ground, they can become unlocked and rotate off of the PTO.
- 2. When you are at the site you wish to cultivate, start the DR TRIMMER/MOWER engine. Hold back on the machine as you pull back on the bail bar to engage the PTO. As the Cultivator blades start to churn into the soil, they will try to pull the machine forward.
- 3. Continue to hold back on the handlebars and slowly allow the Cultivator to pull the machine forward to cultivate new soil. A back and forth motion, by letting the machine move slowly forward and then pulling it slowly back towards you, is sometimes more effective than trying to move steadily forward.
- 4. Some users prefer to continually pull the cultivator backward to maximize the work being done to churn the soil. We recommend trying both approaches and selecting the approach that works best for you.

Aerator Use

The Aerator is designed to cut grooves into the sod so that water and nutrients can penetrate the sod and get directly to the root system.

- 1. When transporting the DR TRIMMER/MOWER with the Aerator attachment (see Figure 1) to the site where you wish to aerate, be sure to push down on the handlebars to raise the Aerator blades so that they do not scrape along the ground. If the blades bump or scrape along the ground, they can become unlocked and rotate off of the PTO.
- 2. When you are at the site you wish to aerate, start the DR TRIMMER/MOWER engine. Hold back on the machine as you pull back on the bail bar to engage the PTO. As the Aerator blades start to churn into the soil, they will try to pull the machine forward.
- 3. Continue to hold back on the handlebars and slowly allow the Aerator to pull the machine forward to cut into new soil.
- 4. Continue to let the Aerator work around the yard, spacing your passes so that the Aerator grooves are approximately evenly spaced. Dividing your lawn into smaller sections and then working around each section until it is aerated is an effective way to make steady progress. Each area that is completed is then ready for application of fertilizer and water.

TROUBLESHOOTING AND WARRANTY

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, call Country Home Products, Inc. for support.

Troubleshooting Table



BEFORE PERFORMING ANY MAINTENANCE PROCEDURE, STOP THE ENGINE AND DISCONNECT THE SPARK PLUG WIRE.

↑ WARNING!

THE TRANSMISSION IS HOT DURING AND AFTER USE. TYPICAL SURFACE TEMPERATURES RANGE BETWEEN 110 AND 180° FAHRENHEIT. DO NOT TOUCH THE TRANSMISSION UNTIL A COOL DOWN PERIOD OF 15-30 MINUTES HAS PASSED. COOL DOWN TIME CAN VARY DEPENDING ON THE OUTDOOR TEMPERATURE AND OPERATING CONDITIONS.

Symptom	Possible Cause				
TINES WILL NOT TURN.	⇒ THE SHAFT EXTENSION IS MISSING. SEE PAGE 9, FIGURE 3.				
	⇒ THE TINES ARE IN BACKWARDS. SEE PAGE 10, FIGURE 6 .				
	⇒ THE TRIMMER BELT MAY NEED TO BE REPLACED. SEE THE DR TRIMMER/MOWER SAFETY & OPERATING INSTRUCTIONS MANUAL FOR MORE INFORMATION.				
	⇒ IF THE PROBLEM PERSISTS, CALL 1(800) DR- OWNER (376-9637) FOR ASSISTANCE.				
	⇒				
TINES FALL OFF.	⇒ THE PTO IS INSTALLED BACKWARDS. SEE PAGE 9 .				
	⇒ THE TINES ARE REVERSED. SEE PAGE 10, FIGURE 6 .				
	⇒ THE TINES ARE NOT LOCKED IN PLACE. SEE FIGURE 8 OR 13.				
	⇒ THE TINES ARE ROLLED ACROSS THE GROUND SURFACE WHILE NOT BEING DRIVEN.				
	⇒ IF THE PROBLEM PERSISTS, CALL 1(800) DR- OWNER (376-9637) FOR ASSISTANCE.				

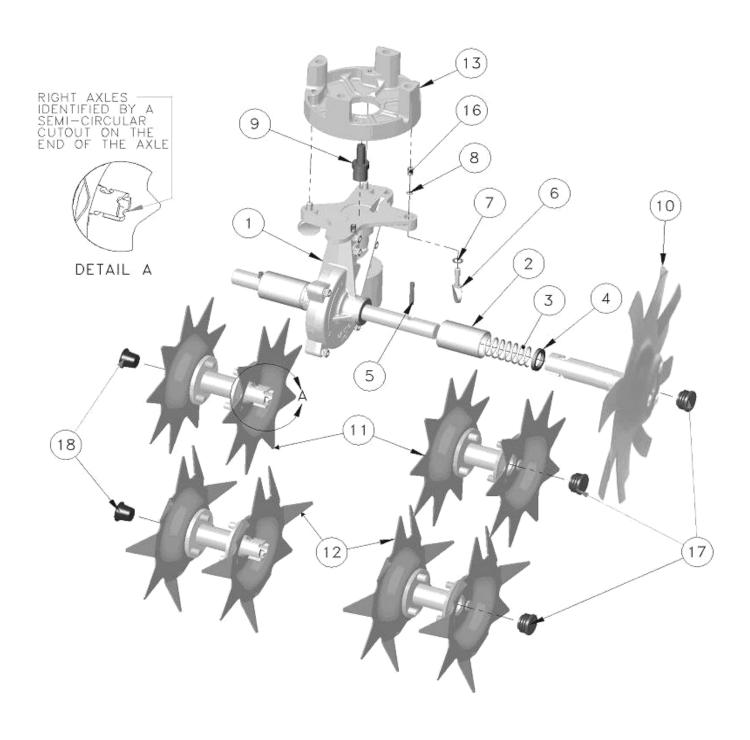
PARTS LIST & ASSEMBLY DIAGRAM

Parts List – Gear-Driven Power Take-off System

NOTE: Part numbers listed are available through Country Home Products, Inc. Not all parts appear on all diagrams.

Ref#	Qty	Part #	Description			
1	1	160771 C	Transmission, Right Angle Drive			
2	2	160761 A	Spring Cage			
3	2	160751	Compression Spring			
4	2	160741	Spring Retainer			
5	2	160781	Pin, Coiled Spring, ¼" x 1½", Heavy Duty			
6	3	160721	Screw, Thumb, Captive			
7	3	160901	Washer, Lock, ¼" Internal Tooth			
8	3	164721	O-ring			
9	1	160791	Shaft Extension			
10	1	188661	Edger Assembly			
11	1	160931 A	Aerator Assembly			
12	1	160951 A	Cultivator Assembly			
13	1	164201	Lower Bearing Plate with Inserts			
14	1	164001	A&O Manual Right Angle Drive			
15	1	164101	Parts List Diagram, Right Angle Drive			
16	4	164111	Insert, ¼"–20			
17	1	164161	Plug, Round, Black, 1.00" OD			
18	1	164151	Plug, Tapered, Red, 0.94" OD			

Gear-Driven Power Take-off System



Daily Checklist for the DR Gear-Driven Power Take-Off System

To help maintain your DR Gear-Driven Power Take-Off System for optimum performance, we recommend you follow this checklist each time you use your machine.

HARDWARE: Check all nuts and bolts to be sure that the components are se
--

[] Follow the daily checklist as outline	ed in your DR	:TRIMMER/MO	WER Safety &	Operating
Instructions manual.				



COUNTRY HOME PRODUCTS, Inc.

MEIGS ROAD, P.O. BOX 25, VERGENNES, VERMONT 05491