

# DR<sup>®</sup> ALL-TERRAIN<sup>™</sup> MOWER 46" LAWN MOWER DECK

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## *Safety & Operating Instructions*



**⚠** Please read these safety and operating instructions before using this product. Failure to do so can result in serious injury.

# THANK YOU!

And congratulations on your purchase of a new DR 46" LAWN MOWER DECK!

We have done our utmost to ensure that your DR 46" LAWN MOWER DECK will be one of the most trouble-free and satisfying pieces of equipment you have ever owned. Please let us know of any questions or problems you may have. We want to answer or correct them as quickly as possible. (When you do call, please have your serial number and/or order number handy—it will speed things up!) We also hope to hear from you on how much you like your new helper.

And, please tell your friends about your new DR 46" LAWN MOWER DECK! 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!



for all of us at  
Country Home Products, Inc.®

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#### **DOCUMENTATION**

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## Chapter 1: Introducing the DR 46" LAWN MOWER DECK

This manual will help you set up and safely operate your new DR 46" LAWN MOWER DECK. 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

 **WARNING!** This indicates a hazardous situation, which, if not avoided, could result in death or serious injury.

 **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 lawn deck.

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

**Note:** This information may be helpful to you.

If you are ever unsure about an action you are about to take, contact Country Home Product's toll-free support at 1-800-DR-OWNER (376-9637).



## Chapter 2: Safety Considerations

**⚠ WARNING!** This mowing machine is capable of amputating hands and feet and throwing objects. Failure to observe the following safety instructions could result in serious injury or death.

### Preparing to Use the DR 46" LAWN MOWER DECK

**⚠** Read these *Safety & Operating Instructions* before you use the DR 46" LAWN MOWER DECK. Also, review the *Safety & Operating Instructions* for your DR *ALL-TERRAIN* FIELD and BRUSH MOWER before the set-up and operation of the lawn deck. Become familiar with the controls, engine and service recommendations to ensure the best performance from your equipment.

**⚠ WARNING!** Inspect the area in which you will be working. Look for rocks, logs, sticks, rope, wire, garden tools, etc., and remove these objects before mowing. Mowing over these objects could damage the machine and cause injury.

### Safety and Information Labels

Always replace damaged or missing safety and information labels immediately.



To avoid injury, keep your hands and feet away from the spinning blade. (#136491)



This label shows the proper routing of the drive belt. (#AT14600)

## Protecting Yourself

**⚠️ WARNING!** This is a high-powered machine, with moving parts operating with high energy at high speeds. Proper clothing and safety gear must be used when operating this machine to prevent or minimize the risk of severe injury. Always take the following precautions when operating this machine:

- Always wear the protective goggles or safety glasses with side shields while mowing to protect your eyes from possible thrown objects.
- Wear shoes with non-slip treads when using your DR 46" LAWN MOWER DECK. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.
- Wear long pants while mowing.
- Avoid wearing loose clothing or jewelry, which might get caught on brush or in the mower's moving parts.
- Use earmuffs or earplugs to protect your hearing.
- We recommend wearing gloves while mowing.

## Operating the Machine Safely

**⚠️ WARNING!** This is a high-powered machine, with moving parts operating with high energy at high speeds. The machine must be operated safely. Unsafe operation can create a number of hazards for you, as well as anyone else in the nearby area. Always take the following precautions when using this machine:

- Keep bystanders at least 100 feet away from your work area at all times. Objects can be thrown far from the mower and at great speeds. To be safe, do not operate the machine near small children or pets, and never allow children to operate the mower. Disengage the blade and stop the engine when another person or pet approaches.
- Clear the area of objects such as rocks, toys, wire, bones, sticks etc., which could be picked up and thrown by the blade.
- Be sure all blade and wheel controls are DISENGAGED before attempting to start the engine. Engage and disengage the blade a few times to get used to it before mowing.
- Keep your hands and feet away from the blade, belts, chains, blade pulleys, and concealed areas while the engine is running. NEVER reach under the deck or grab hold of any part of the deck when the engine is running.
- ALWAYS shut off the engine whenever you leave the machine. Remove the spark plug wire(s) before adjusting the machine. If you have to stop to remove grass or debris from the underside of the deck, ALWAYS disconnect the spark plug wire(s) first.
- The exhaust area on the engine becomes very hot with use. Allow the engine to cool before doing maintenance or making adjustments.
- Keep combustible substances away from the engine when it is hot.
- When operating over uneven terrain and slopes, use EXTREME CAUTION to ensure solid and firm footing. Keep a firm hold on the handlebars and walk, never run.



- Stop the blade when crossing gravel drives, walks, or roads.
- Use the machine only in daylight or good artificial light.
- Use extra caution when mowing in wet or slippery conditions.
- ALWAYS OPERATE THE MOWER FROM BEHIND. Never pass or stand on the discharge (right) side or in front of machine when the engine is running.
- Do not pull the mower backwards unless absolutely necessary. Look down and behind before and while moving backwards.
- Do not, under any conditions, remove, bend, cut, fit, weld, or otherwise alter standard parts on the DR 46" LAWN MOWER DECK. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will void your warranty.
- Immediately stop the mower and turn off the power unit if you accidentally hit anything. Check everything thoroughly before you continue.
- If the machine starts to make an unusual noise or vibration, immediately shut off the engine, disconnect the spark plug wire(s), and allow all moving parts to come to a complete stop. Vibration is generally a warning of trouble. Inspect for clogging or damage. Clean and repair and/or replace damaged parts.
- While using the DR 46" LAWN MOWER DECK, don't hurry or take things for granted. When in doubt about the equipment or your surroundings, stop the machine and take the time to look things over. Make sure that you have 100% control of the mower at all times.
- Never allow people who are unfamiliar with these instructions to use the DR MOWER.
- Do not operate the machine when under the influence of alcohol or medication.
- Watch for traffic when mowing near roadways.

## Slope Operation

**⚠ WARNING!** Slopes are a major factor related to slip and fall accidents, which can result in severe injury. All slopes require caution. If you feel uneasy on a slope, do not mow it. Always follow these precautions:

### DO:

- Mow across the face of slopes, never up and down. Exercise extreme caution when changing direction on slopes.
- Remove objects such as rocks, tree limbs etc.
- Watch for holes, ruts, or bumps. Tall grass can hide obstacles.

### DO NOT:

- Do *not* mow near drop-offs, ditches, or embankments. You could lose your footing or balance.
- Do *not* mow on slopes greater than 20 degrees or any excessively steep slopes.
- Do *not* mow on wet slopes. Reduced traction could result in slipping.

## Safety for Children

**⚠ WARNING!** Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the mower and the mowing activity. *Never* assume that children will remain where you last saw them. Always follow these precautions:

- Keep children out of the mowing area and under the watchful care of a responsible adult.
- Be alert and turn the mower OFF if children enter the work area.
- Before and while moving backwards, look behind and *down* for small children.
- Never allow children to operate the mower.
- Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure your vision.

## Safety with Gasoline-Powered Machines

**⚠ WARNING!** Gasoline is a highly flammable liquid. Gasoline also gives off flammable vapor that can be easily ignited and cause a fire or explosion. Do not overlook the hazards of gasoline. Always follow these precautions:

- Do not run the engine in an enclosed area or without proper ventilation.
- Store all fuel in containers specifically designed and approved for this purpose.
- Fill the gasoline tank outdoors with the engine off and allow the engine to cool completely. Don't handle gasoline if you or anyone nearby is smoking, or if you're near anything that could cause it to ignite or explode.
- If you spill gasoline, do not attempt to start the engine. Move the machine away from the area of the spill and avoid creating any source of ignition until the gas vapors have dissipated. Wipe up any spilled fuel to prevent a fire hazard and properly dispose of the waste.
- Allow the engine to cool completely before storing in any enclosure. Never store the machine with gas in the tank or a fuel container, near an open flame or spark such as a water heater.
- Never make adjustments or repairs with the engine running. Disconnect the spark plug wire(s) and keep the wire(s) away from the spark plug(s) to prevent accidental starting.
- Do not change the engine governor settings or modify the engine speed.
- Keep all nuts and bolts, especially the blade attachment bolts, tight and keep the equipment in good operating condition.
- Never tamper with safety devices. Check their proper operation regularly.
- Keep the mower free of grass, leaves or other debris build-up.
- Stop and inspect the equipment if you strike an object. Repair, if necessary, before restarting.
- The mower blade is sharp and can cut. Wrap the blade or wear gloves, and use extra caution when serving them.

**Note:** If situations occur that are not covered by this manual, use care and good judgment. Call Toll-Free **1-800-DR-OWNER (376-9637)** for assistance.

## **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.



## Chapter 3: Setting Up Your DR 46" LAWN MOWER DECK

This chapter outlines a few simple steps you will need to follow to set up your new DR 46" LAWN MOWER DECK before you use it.

### Assembling the Lawn Mower Deck

#### Assembly Components: (Figure 1)

- 46" Lawn Deck (A)
- (2) Caster Wheels (B)
- (1) Caster Wheel Support Bracket (C)
- (1) 3/8" x 1" Cap Screw (D)
- (2) 3/8" x 1-3/4" Bolts (E)
- (6) 5/16" Lock Nuts (F)
- (4) 5/16" Washers (G)
- (1) 5/16" x 2" Pivot Tube Bolt (*not shown*)
- (2) 1/4"-20 x 2" Cap Screw (H)
- (8) Cutting Height Spacers (I)
- (1) Deck Support Bracket (J)
- (4) 1/4" Lock Nuts (*not shown*)
- (1) Mulching Plate (*not shown*)

#### Tools & Supplies Needed:

- 9/16" Socket or Wrench
- (2) 7/16" Wrench
- 1/2" Wrench
- 1/2" Socket w/Extension
- Vise Grips or Wire Pull
- 2" Block to prop up deck
- Grease gun w/Lithium Grease

#### Mounting the Front Caster Wheels

The caster wheel support is secured to the lawn deck for shipping with two 5/16" nuts and washers. Remove the caster wheel support and keep the nuts and washers for assembly.

1. Position the caster wheel support bracket over the four studs coming up through the deck (Figure 2).
2. Install the 3/8" x 3/4" cap screw and washer in the rear support hole and hand tighten it (Figure 3).

**Note:** Do not fully tighten the nuts until all of them are installed.

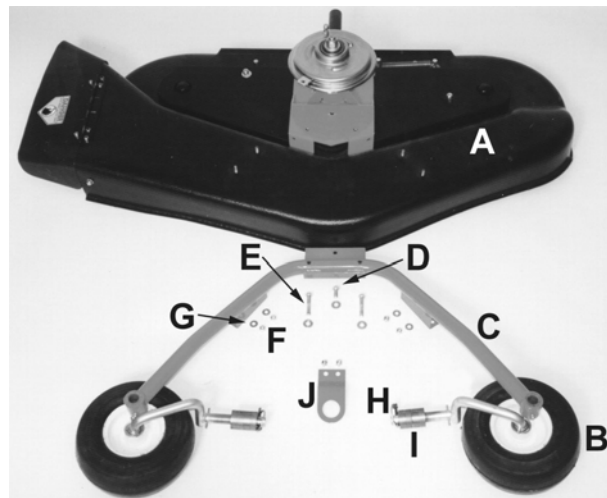


Figure 1

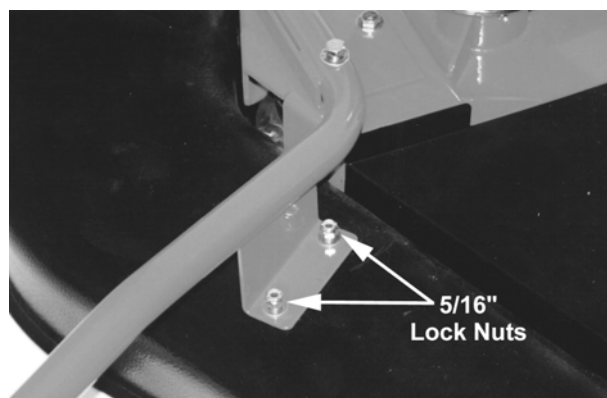


Figure 2

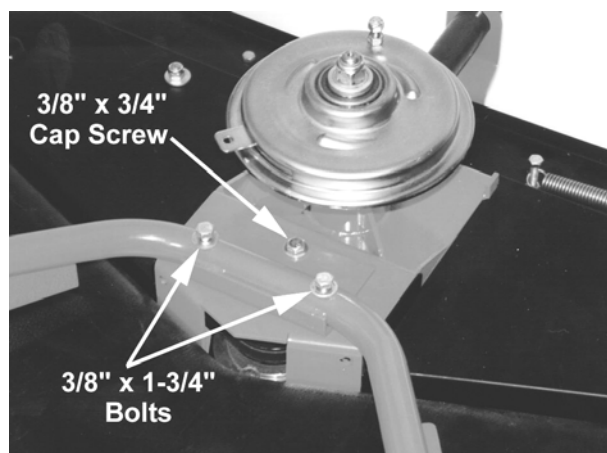


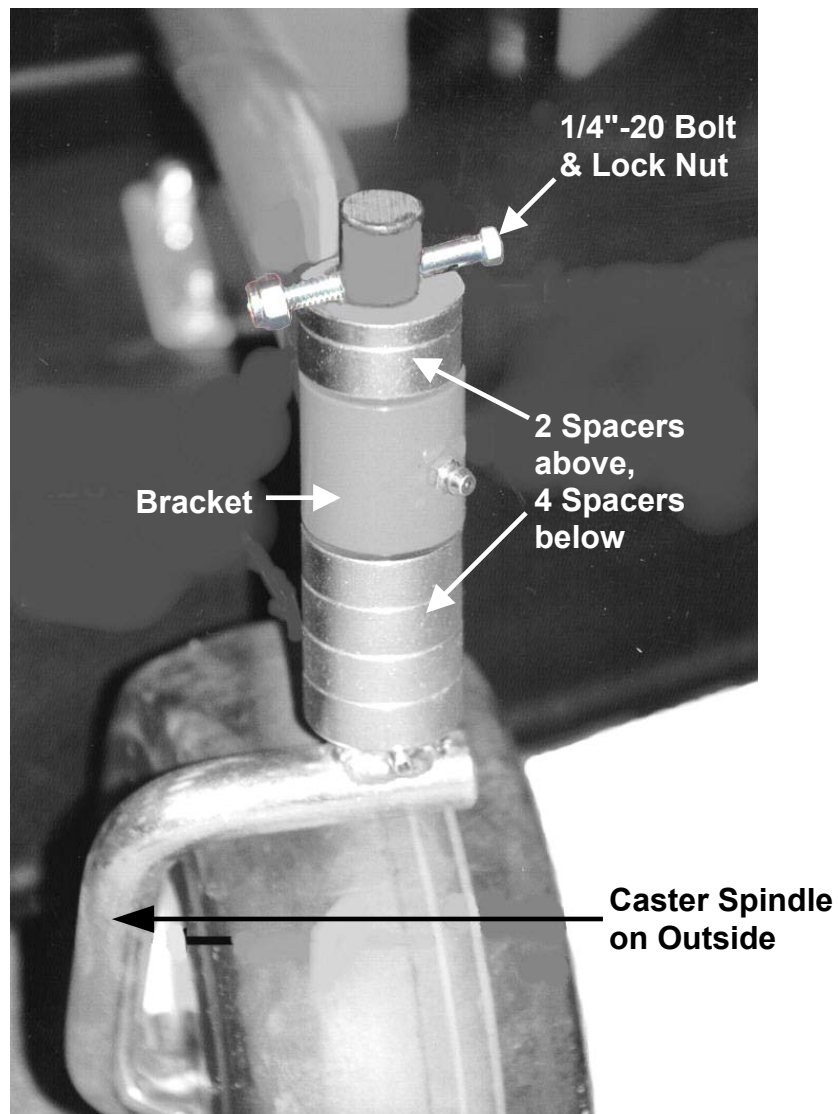
Figure 3

3. Install the two 3/8" x 1-3/4" bolts and washers into the two holes on the wheel support bracket and tighten with a 9/16" wrench (*Figure 3*).
4. Mount the four 5/16" lock nuts and washers on the deck studs (*Figure 2*) and finger tighten them. Then finish tightening them with a 1/2" socket or wrench.
5. Remove the 1/4"-20 Bolt & Lock Nut from the wheel spindle and remove the top two (2) spacers (one 1/4" and one 1/2"). Mount the wheel on the bracket, replace the two (2) spacers on top of the spindle, and replace the 1/4"-20 Bolt & Lock Nut (*Figure 4*).

**Note:** Install the Lock Nut only until one or two bolt threads appear.

6. Repeat for the other wheel. The cutting height is about 2" with the spacers positioned this way. By repositioning the spacers, you can change the cutting height in 1/4" and 1/2" increments. See "Adjusting the Cutting Height" on Page 20 for more information.

**Note:** There is a right and left wheel caster assembly. When you mount the wheels, the caster spindle should be on the outside when the wheel points toward the deck (*Figure 4*).



*Figure 4*

## Removing the Brush Deck

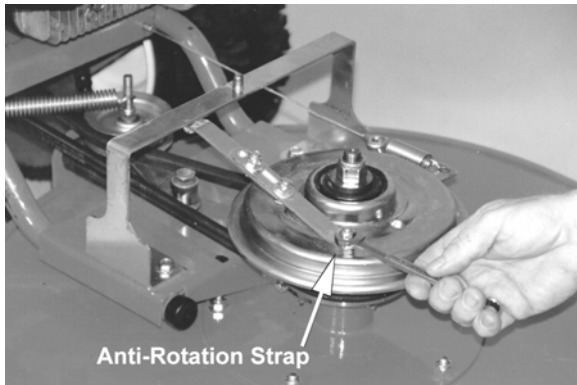
**⚠ WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

1. Remove the black belt guard by unscrewing the black knob, lifting the cover and pulling up and back to remove it.
2. Using a 1/2" wrench or socket, remove the lock nut on the anti-rotation strap and pull the strap away from the post (*Figure 5*).

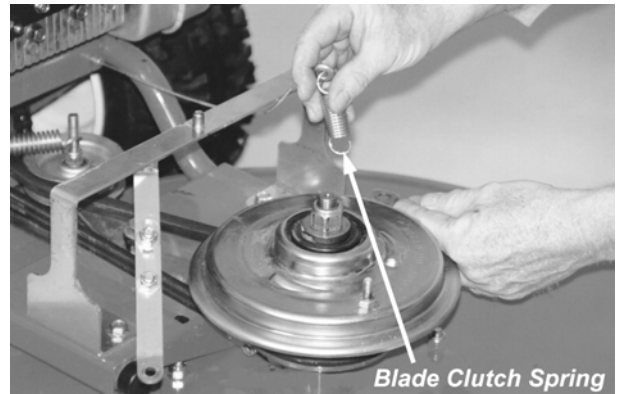
**Note:** Your anti-rotation strap may look different than the one pictured.

3. Rotate the Clutch counterclockwise to release the tension on the Blade Clutch Spring (*Figure 6*).
4. Remove the Blade Clutch Spring (*Figure 6*).
5. Remove the Extension Spring (*Figure 7*). Use vise grip pliers to remove the spring, or make a simple wire pull using the cable tie provided or a piece of wire as shown in the photo.

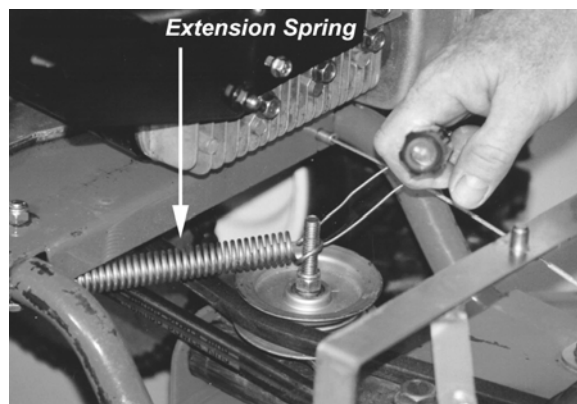
**⚠ CAUTION!** The Extension Spring (*Figure 7*) has considerable tension.



*Figure 5*



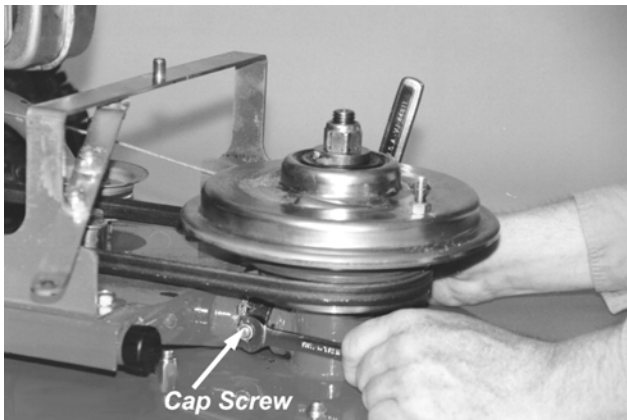
*Figure 6*



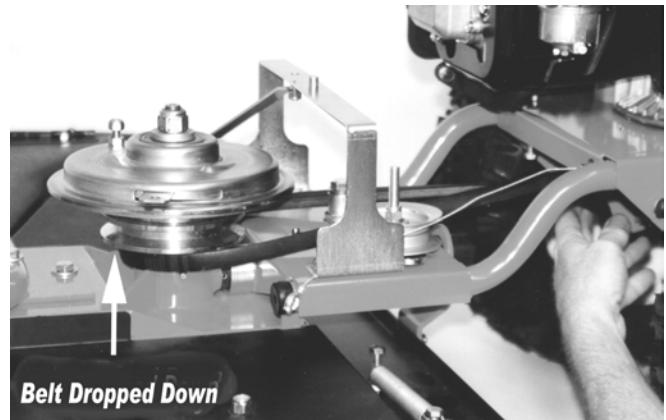
*Figure 7*

6. Remove the 5/16" x 2" Cap Screw from the Pivot Tube (*Figure 8*).
7. Push the deck back toward the engine to create slack on the belt. Then pull the belt forward and drop it down off the blade clutch pulley (*Figure 9*).
8. Twist the other end of the belt and drop it off the 3" engine pulley. You may need to move the power unit forward or back a little so the belt doesn't hit the bolts on the differential.
9. Remove the belt.
10. Remove the Deck Support Bracket (*Figure 10*).
11. Carefully pull the power unit away from the Brush Deck.

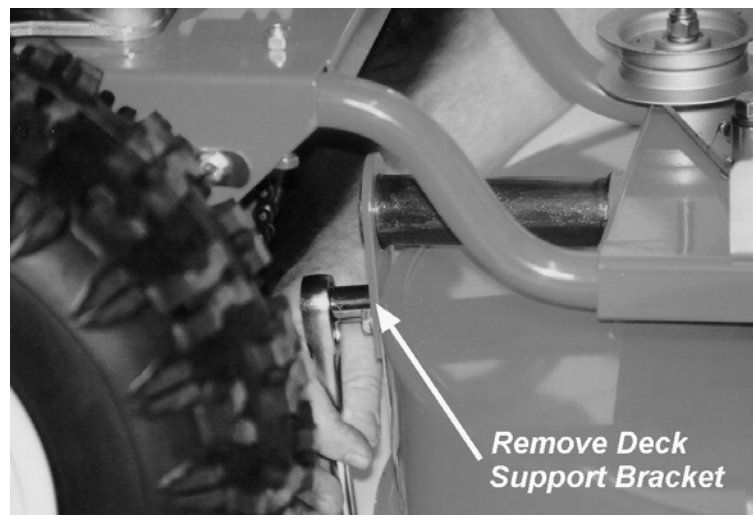
**Note:** You should block up the Brush Deck when pulling the power unit back for ease of removal and to prevent the deck from falling.



*Figure 8*



*Figure 9*



*Figure 10*

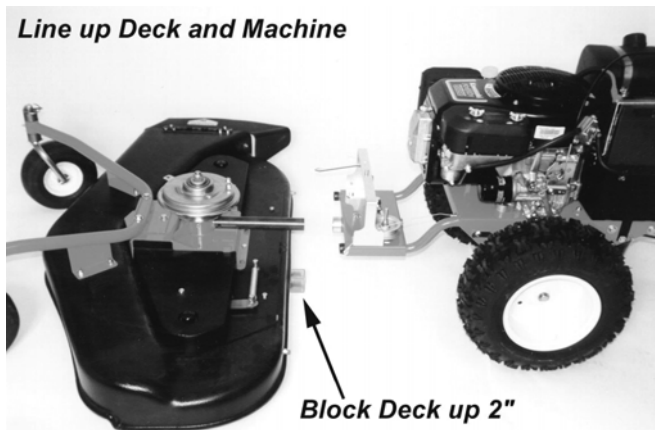


## Installing the 46" Lawn Mower Deck

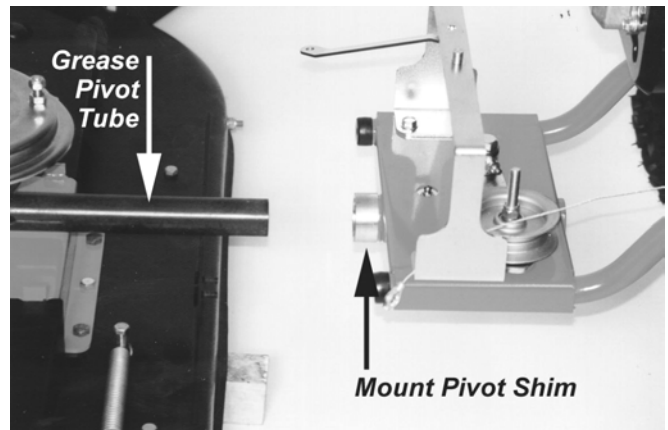
**⚠ WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

**Note:** It will help to place the front of the lawn mower deck against a wall so you can push against it, or have another person help you with the installation.

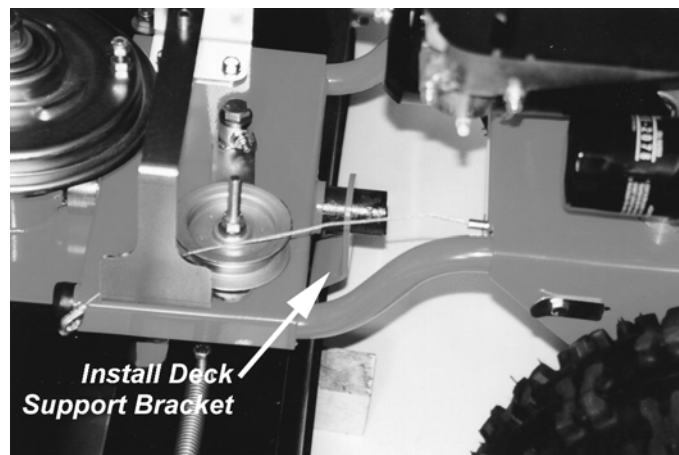
1. Block the rear of the lawn mower deck up about 2", and line up the power unit with the deck (*Figure 11*).
2. Place the Pivot Shim on the machine opening for the Pivot Tube (*Figure 12*).
3. Apply a light coat of grease or oil to the Pivot Tube (*Figure 12*) to allow the mower deck to slide on more easily.
4. Mount the deck by lining up the Pivot Tube with the Pivot Shim and inserting the Pivot Tube in the hole in the frame of the machine.
5. Install the Deck Support Bracket (*Figure 13*) with the two (2) 5/16" Lock Nuts and tighten.



*Figure 11*



*Figure 12*



*Figure 13*

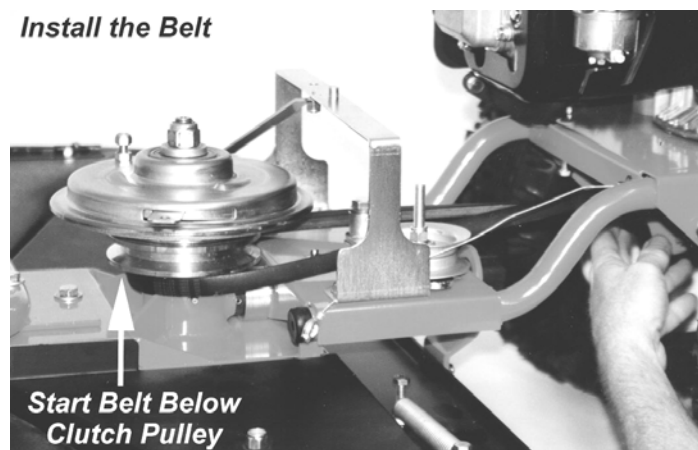
**Note:** The assembly from this step forward is with the ATM Power Unit.

6. Install the Drive Belt by looping it under the Clutch Pulley, inside the Idler Pulley and back to the lower Engine Pulley (*Figure 14*). You may have to twist the Belt to get it past the Hub and Engine Pulley. If it's difficult to get the Belt past the Differential Hub Bolts, move the machine forward or back a little so the Belt clears the Differential Hub Bolts.
7. Push the Deck away from the Power Unit as far as possible and push the Pivot Washer back toward the engine (it should be between the bolt and the frame).
8. Replace the 5/16" Bolt through the hole in the Pivot Tube and mount the 5/16" Lock Nut so 1 to 2 threads show – do not over tighten (*Figure 15*). If the Bolt won't go in, use a piece of wood as a wedge to push the Deck away from the Power Unit and line up the holes.
9. Replace the Extension Spring (*Figure 16*).

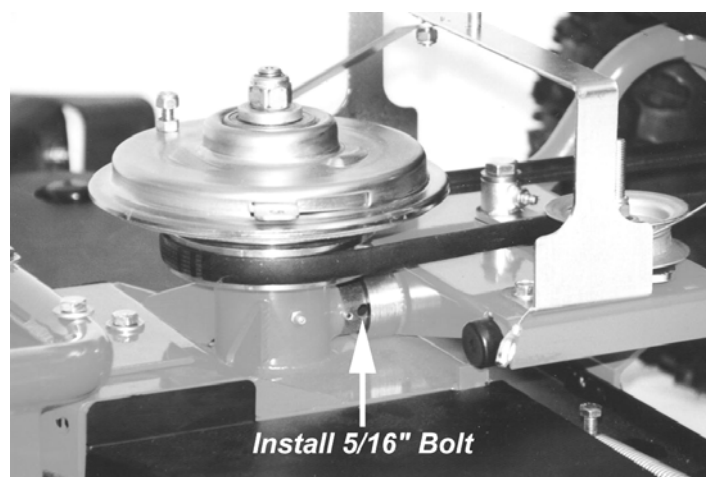
**Note:** You can use the cable tie provided or a piece of wire to make a loop to pull the Extension Spring into place.

**⚠ CAUTION!** The Extension Spring will have considerable tension (*Figure 16*).

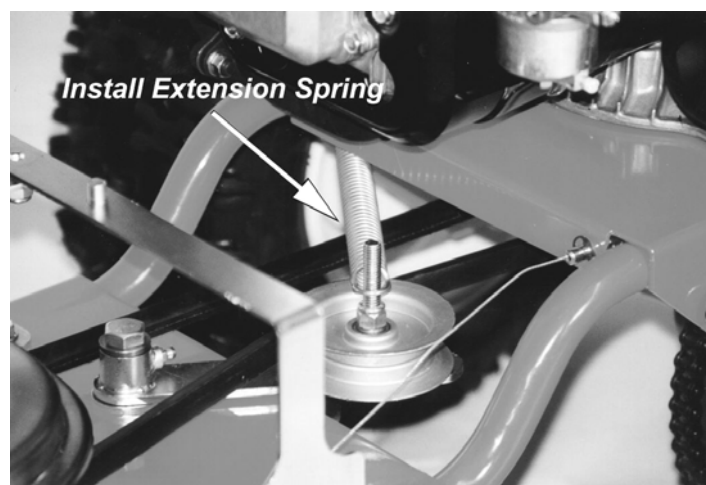
10. Replace the Blade Clutch Spring (see *Figure 6*).
11. Install the Anti-rotation Strap (see *Figure 5*).  
**Note:** Only tighten the nut on the Anti-rotation Strap until 2-3 threads show on the outside of the nut. This strap must be loose to operate properly.



*Figure 14*



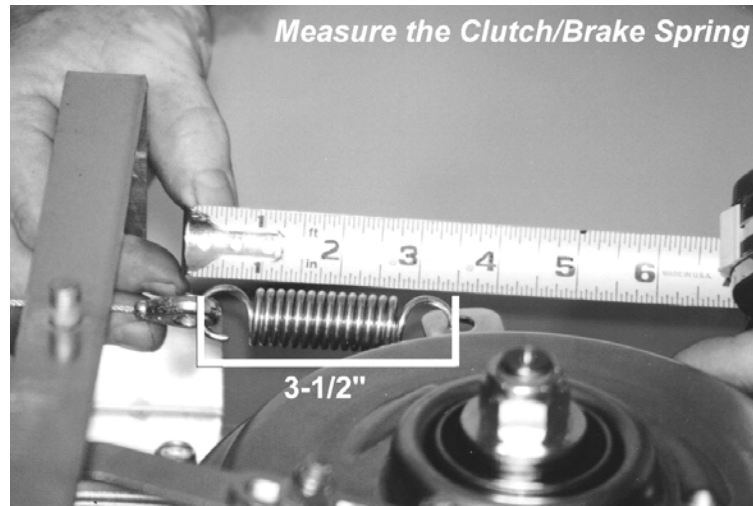
*Figure 15*



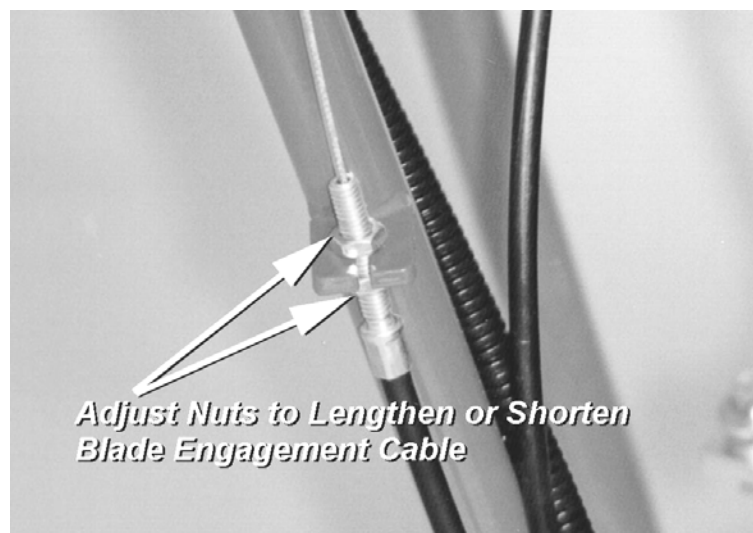
*Figure 16*

12. Install the Clutch/Brake Spring (*Figure 17*). Engage the Blade Control Lever and measure the length of the spring. It should measure 3-1/2" from end to end. If you need to adjust it, lengthen or shorten the Blade Engagement Cable by loosening or tightening the nuts on the cable on the right handlebar (*Figure 18*). After adjusting the cable, measure the spring again.
13. Install the black Pulley Cover and tighten the Knob.

**NOTICE!** Grease the Caster Wheel Spindles. In order to avoid a messy assembly, we did not grease the Caster Wheel Spindles at the Factory. Before using your new DR 46" LAWN MOWER DECK, please follow the instructions in the Lubrication section in Chapter 5.



*Figure 17*



*Figure 18*

## **Check the Tire Pressure**

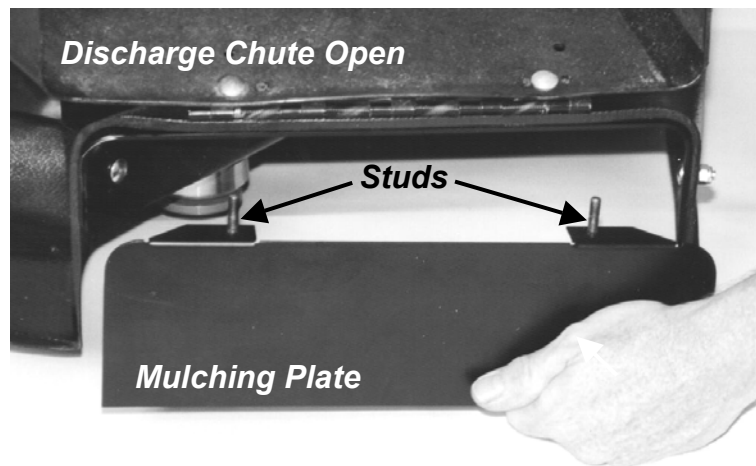
There should be 30-35 psi in each front Caster Wheel Tire.

## Installing the Mulching Plate

The Mulching Plate blocks the side Discharge Chute, causing cut material to circulate under the Mower Deck and get re-cut, reducing the need for raking. We do not recommend using the Mulching Plate in heavy, wet growth because material will tend to clog under the Mower Deck in those conditions.

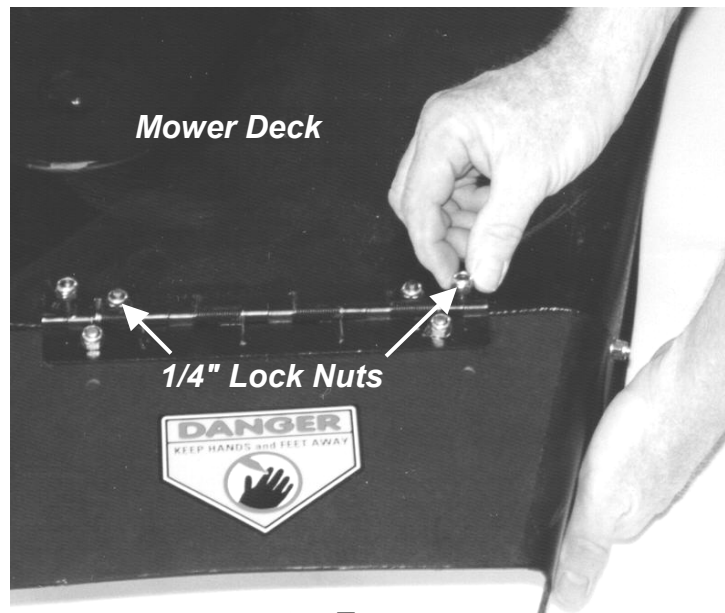
### Tool Needed:

- 7/16" Wrench or Socket
1. Raise the Discharge Chute and position the Mulching Plate below the hinge on the Discharge Chute, with the Studs coming up through the outer holes of the hinge (*Figure 19*).



*Figure 19*

2. Close the Discharge Chute and using the two 1/4" Lock Nuts from your parts bag, secure the Mulching Plate to the Mower Deck (*Figure 20*).



*Figure 20*

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## Chapter 4: Operating Your DR 46" LAWN MOWER DECK

This chapter covers the procedures for starting and stopping your new DR 46" LAWN MOWER DECK and discusses basic operation features and mowing tips. You may find it helpful to review the DR *ALL-TERRAIN* MOWER Controls and Features picture in the *Safety & Operating Instructions* of your DR *ALL-TERRAIN* FIELD and BRUSH MOWER before reading this chapter.

### The Pre-Start Safety Check

Your DR *ALL-TERRAIN* MOWER is fitted with an Operator Presence System to prevent it from functioning without an operator in the proper position at the controls. Also, normal wear and tear can bring about the need for adjustment to some running parts to insure that they function properly in terms of safe operation.

For your protection, it is imperative that these simple test procedures be performed before each use of the machine to verify that the safety equipment is in good order and that no part adjustments are needed for safe operation.

#### Test your Operator Presence Control System:

1. Stand in the operating position behind the handlebars, start your machine and engage the blade.
2. Remain behind the handlebars and release both hands from the controls.
3. THE ENGINE SHOULD SHUT OFF IMMEDIATELY. If your engine does not stop, your Operator Presence Control System may be damaged or disabled.

 **WARNING!** Turn off your machine by using the ignition key and stop using your machine immediately!

#### Inspect the system for the following:

- Intentional disabling of the system through part modification or temporary measures used to override the system.
- Loose electrical connections.
- Broken parts.

After inspection, repeat this test. If your system still does not operate properly, REMOVE THE KEY FROM THE IGNITION SWITCH TO PREVENT OTHERS FROM OPERATING THE EQUIPMENT.

Call our Technical Support Representatives at **1-800-DR-OWNER (376-9637)** for assistance.

### Checking and adjusting clutch engagement:

1. Start your machine in the normal manner.
2. With the operator presence lever depressed, shift into low gear.
3. Increase the engine rpm but do not squeeze the clutch lever. The machine should not move when the clutch lever is not squeezed.

**⚠ WARNING!** If your machine “creeps” during this test, your clutch needs adjustment. Consult Chapter 5 of your *Safety & Operating Instructions* manual for your DR *ALL-TERRAIN* FIELD and BRUSH MOWER and make all necessary corrections before using.

## Before Starting the Engine

3. Check the oil level every time you use the machine.
4. Check the gas level.
5. Open the fuel shut-off valve (on the bottom of the gas tank), if your model is equipped with one.

**Note:** The 8.0 HP Briggs & Stratton models do not have a fuel shut-off valve.

## Starting the Engine

### Electric – Starting

1. Move the throttle to the CHOKE position (to the RUN position if the engine is already warm).
2. Turn the key to START and hold it until the engine starts.
3. Release the key, it will snap to the RUN position.
4. Move the throttle to the RUN position.

### Manual – Starting (8.0 HP and 10.5 HP Briggs & Stratton Models only)

1. Move the throttle to the CHOKE position (to the RUN position if the engine is already warm).
2. Turn the key to START.
3. Grasp the recoil starter handle and slowly pull until you feel resistance. Let the cord retract a little bit, then pull the cord rapidly to start the engine. One or two pulls usually starts the DR *ALL-TERRAIN* FIELD and BRUSH MOWER.
4. Move the throttle to the RUN position.

## Engaging the Wheel Drive

The DR *ALL-TERRAIN* FIELD and BRUSH MOWER has a four-speed forward transmission and single-speed reverse. Forward speeds range from 1.4 mph in first gear to 4.3 mph in fourth gear on all but the 8.0 HP models. The ground speeds on the 8.0 HP models range from 1.2 mph in first gear to 3.8 mph in fourth gear. Use the lower gears for mowing in thick vegetation, on slopes and when maneuverability is tight. Use the higher gears for wide-open areas and lighter vegetation, or as “travel gears”. Reverse is ideal for maneuvering in tight spots.


**NOTICE!** Always release the Wheel Clutch Lever when shifting gears.

1. Move the Shift Lever to the desired gear.
2. Gently squeeze the Wheel Clutch Lever to engage a gear.
3. Release the Wheel Clutch Lever if you need to slow down or stop.

## Engaging the Lawn Deck Blades

1. Hold down the Operator Presence Lever.
2. Engage the Blade (Lawn Deck) Control Lever.

**Note:** If you engage the Blade (Lawn Deck) Control Lever before holding down the Operator Presence Lever the engine will shut off.

 **WARNING!** Always disengage the blades of the DR 46" LAWN MOWER DECK before shifting into reverse.

## Stopping the Lawn Deck Blades

Push the Blade (Lawn Deck) Control Lever forward to the OFF (DISENGAGED) position.

**Note:** Releasing the Operator Presence Lever while the lawn deck blades are engaged will cause the engine to shut off.




## Stopping the Engine

1. Disengage the lawn deck blades by pushing the Blade (Lawn Deck) Control Lever forward to the OFF (DISENGAGED) position.
2. Move the Shift Lever to the N (Neutral) position.
3. Move the Throttle Control to the IDLE position.
4. Turn the Key to the OFF position and remove it for safety.

**Note:** If your machine is equipped with a fuel shut-off valve, close it when transporting or storing the mower.

## Adjusting the Cutting Height

 **WARNING!** Always disengage the blades, stop the engine and disconnect the spark plug(s) wire(s) before adjusting the cutting height.

You can adjust the cutting height of the mower in 1/4" and 1/2" increments by moving the spacer disks on the caster wheels.

- To lower the cutting height, move one or more of the spacers to above the spindle bracket (see *Figure 4* on Page 10). Repeat for both sides.
- To raise the cutting height, move one or more of the spacers to below the spindle bracket (see *Figure 4* on Page 10). Repeat for both sides.

**Note 1:** If your DR *ALL-TERRAIN* FIELD and BRUSH MOWER has 16" wheels (8.0 HP models and some older models); the maximum number of 1/2" spacers that you can use below the caster wheel spindle bracket is four (4). Trying to raise the cutting height by adding more than four (4) 1/2" spacers below the caster wheel spindle bracket will result in an uneven cut. You may, however, adjust the cutting height down by adding more spacers above the caster wheel spindle bracket.

**Note 2:** To move the spacers, remove the 1/4"-20 Bolt & Nut, slide the spacers and bracket off the Caster Wheel Spindle and reposition them. When reassembling the wheel, be sure the Caster Spindle is on the outside of the wheel when the wheel is pointing back toward the mower deck (*Figure 4* on Page 10).



## Obstacle Tips

Dealing with obstacles in the terrain is easy with your new DR 46" LAWN MOWER DECK. The following section explains how to approach most common obstacles.

**⚠ WARNING!** The mower engine's power can easily throw stones, sticks and other debris at great velocity, which could cause personal injury or property damage. **DO NOT** run the machine over gravel driveways or over loose stones or mulch with the mower deck blades spinning.

- Always check your work area before mowing and remove any debris that might tangle or damage the machine.
- If you do run into debris and the mower deck becomes tangled, turn off the engine and disconnect the spark plug wire(s) before attempting to untangle the machine.

## Slopes

**⚠ WARNING!** When operating the DR 46" LAWN MOWER DECK over uneven terrain or slopes, use **EXTREME CAUTION** not to tip the machine over.

1. Do not use the DR 46" LAWN MOWER DECK on slopes greater than 20 degrees. Doing so could result in serious injury or damage to your machine.
2. If you have to mow on sloping terrain, mow across the slope, not up and down, for better control. Locking the wheel differential will improve traction, and keep the machine traveling on a straighter path.

**Note:** The 8HP model does not have a Locking Differential.

3. To avoid freewheeling, shift into a lower gear before going down a slope. Do not shift while on a slope.
4. Note that the mowing deck pivots from side to side, which helps avoid scalping, and keeps the weight balanced over the drive wheels when operating on uneven terrain.

## If the machine gets hung up

1. Disengage the lawn deck blades. Do not try to free the machine from debris while the blades are engaged.
2. Try putting the machine in reverse and backing away from the obstacle.
3. Try pushing down on the handlebars to lift the mowing deck over the obstacle.

### **⚠ WARNINGS!**

- If you need to leave the operating position to clear debris from the deck, first put the machine in "N" (Neutral), turn the engine off and disconnect the spark plug wire(s).
- **DO NOT** touch the exhaust areas when reaching for the spark plug(s) wire(s) —they are very hot.

## Turns

When turning, you'll get a tighter turn by releasing the Wheel Clutch Lever and slowing down the machine. This will give you better control and a cleaner cut. Remember, the faster the ground speed, the wider the turn will be.

## Reverse

1. Be very careful of your footing when operating the machine in reverse. Know what's behind you and take your time.
2. Disengage the lawn deck blades before shifting into reverse. Mow in the forward gears only, using reverse for maneuvering.
3. If you find it difficult to shift into reverse, lightly "feather" the Clutch Lever as you pull the Shift Lever into reverse, then quickly release the Clutch Lever.

## Cutting in Wet & Heavy Grass

1. Be very careful of your footing when mowing in wet conditions. Avoid steep slopes and other slippery areas.
2. The best cut is achieved by mowing when the grass is dry. If you have to mow when the grass is wet, use a lower, slower speed.
3. We do not recommend using the Mulching Plate in wet and heavy grass.

## Mowing Tips

- Whenever possible, mow in the opposite direction of your last pass so the grass flattened by the wheels will be pushed up and cut.
- Mow high spots with the side of the deck, not the center. This will help prevent scalping.
- Your mowing deck will pivot from side to side, which helps avoid scalping that could otherwise be caused by the wide cutting swath of the DR 46" LAWN MOWER DECK. To reduce scalping even more, try to plan your cutting so that one end of the deck passes through the middle of any bumps or dips.
- You'll get the cleanest cut with your DR 46" LAWN MOWER DECK when your grass is dry.
- The mowing deck will eject cut material when the side discharge chute is used.
- Ground Speed - There are three ways to control the ground speed of the mower:
  1. Using different gears for different conditions will give you the best control of the machine and is the easiest way to vary speed. The ground speeds range from 1.4 mph in first gear to 4.3 mph in fourth gear (1.2 mph to 3.8 mph with the 8.0 HP model).
  2. Changing the throttle setting not only affects the speed of the machine, but also the speed of the blades. Always mow with the highest possible throttle setting for the best engine cooling.
  3. Feathering the Wheel Drive Clutch by putting only slight pressure on the Clutch Lever will make the machine move more slowly. Pulling harder on the Clutch Lever will make the mower move faster.

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## Chapter 5: Maintaining the DR 46" LAWN MOWER DECK

This chapter covers regular maintenance procedures that will ensure the best performance and long life of your DR 46" LAWN MOWER DECK.

**⚠ WARNING!** Some of the following procedures require access to the underside of the lawn deck. If you need to tip the lawn deck back or on its side (with the discharge chute facing up) while still attached to the DR *ALL-TERRAIN* FIELD and BRUSH MOWER, you must first disconnect the spark plug wire(s), drain the oil and gas, and remove the air filters.

### Regular Maintenance Check List

**Note:** Service intervals shown are considered maximum under normal operating conditions. Increase frequencies under extremely dirty or dusty conditions.

Procedure	Before Each Use	Every 25 Hours	Every 100 Hours
Check General Equipment Condition	▲		
Check Blades for Sharpness	▲		
Check Tire Pressure		▲	
Check Deck Belt Tension & Condition		▲	
Lubricate Mower Pivot Tube		▲	
Lubricate Belt Idler Arm		▲	
Lubricate Caster Wheel Spindles		▲	
Lubricate Caster Wheels		▲	
Lubricate Mower Deck Idler Pivot		▲	
Lubricate Mower Deck Spindle			▲

## Lubrication

Most of your DR 46" LAWN MOWER DECK was greased at the factory. You don't need to lubricate it until after the first 25 hours of use or each season.

**Note:** You must, however, grease the Caster Wheel Spindles before you use the deck.  
Please see Step 2 below.

### Tools & Supplies Needed:

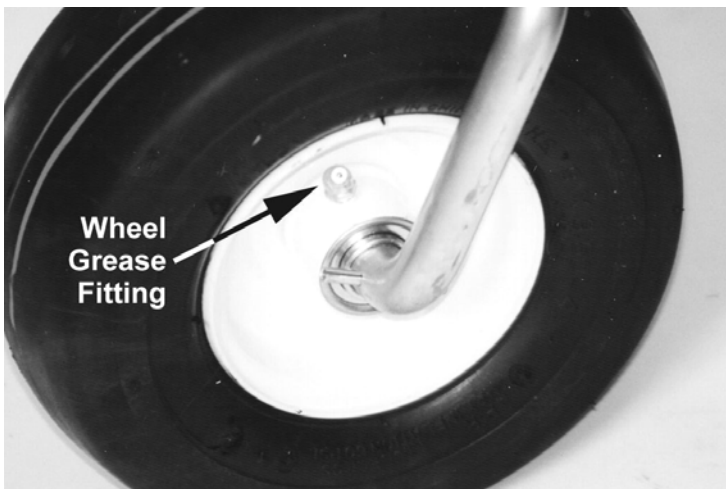
- Flexible hose grease gun
- Lithium grease
- FLUID FILM<sup>®</sup> or comparable lubricant
- 9/16" wrench

**⚠ WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

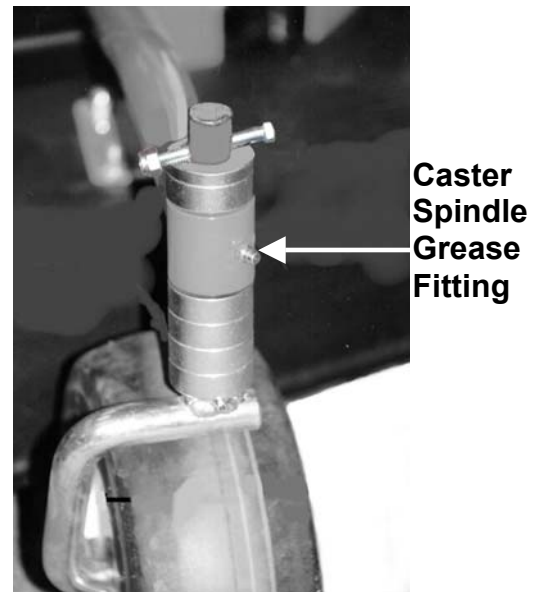
**Note:** When using the grease gun, unless otherwise instructed, pump only until you feel slight resistance (1-2 pumps should do it). Over greasing will cause grease to leak out of the seals and onto the mower drive belt.

### Perform Steps 1 through 4 every 25 hours of operation or each season:

1. Grease the fittings on the front Caster Wheels (*Figure 21*).
2. Grease the fittings on the Lawn Deck Frame where the Wheel Castor Spindles swivel (*Figure 22*).



*Figure 21*



*Figure 22*

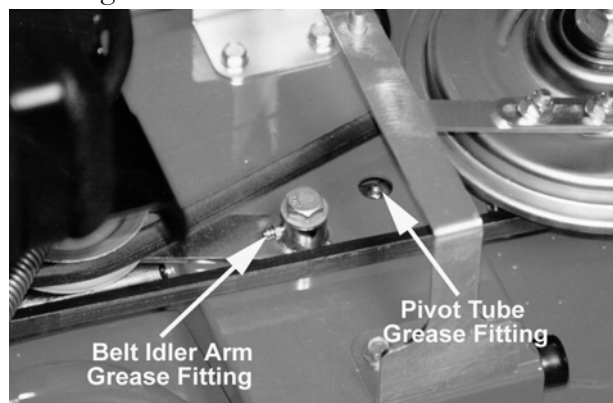
- Grease the fitting on the Mower Deck Idler Pivot (*Figure 23*).

**Note:** To get to the Mower Deck Idler Pivot, you'll need the 9/16" wrench to remove the nut on the left pulley cover on the Mower Deck.



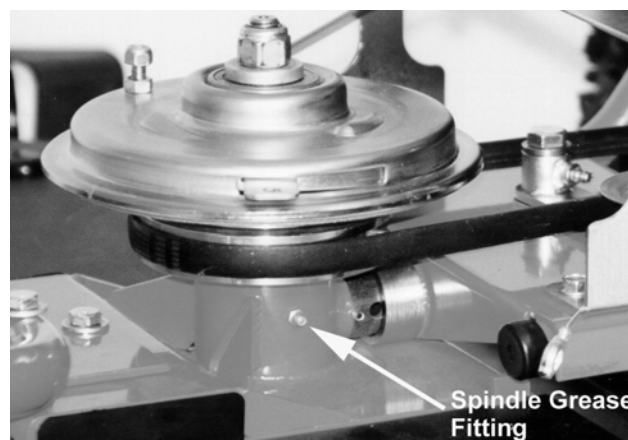
*Figure 23*

- Grease the fittings on the Mower Pivot Tube and the Belt Idler Arm (*Figure 24*).




*Figure 24*

- Grease the fitting (3-4 pumps) on the Mower Deck Spindle every 100 hours of use (*Figure 25*).



*Figure 25*

## Removing and Replacing the 56" Deck Drive Belt

 **WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

**NOTICE!** Use only a DR belt on your machine. The belt has been thoroughly tested and proven for many hours of use.

### Tools and Supplies Needed:

- 1/2" Socket w/extension
- 1/2" wrench
- Vise Grip Pliers
- 56" x 5/8" Belt, CHP Part #101721

1. To remove the Lawn Deck Drive Belt, refer to Pages 11 & 12 and perform Steps 1 through 9.
2. To replace the Lawn Deck Drive Belt, refer to Page 14 and perform Steps 6 through 11.

## Removing and Replacing the 80" Lawn Deck Belt

**⚠ WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

**NOTICE!** Use only a DR belt on your machine. The belt has been thoroughly tested and proven for many hours of use.

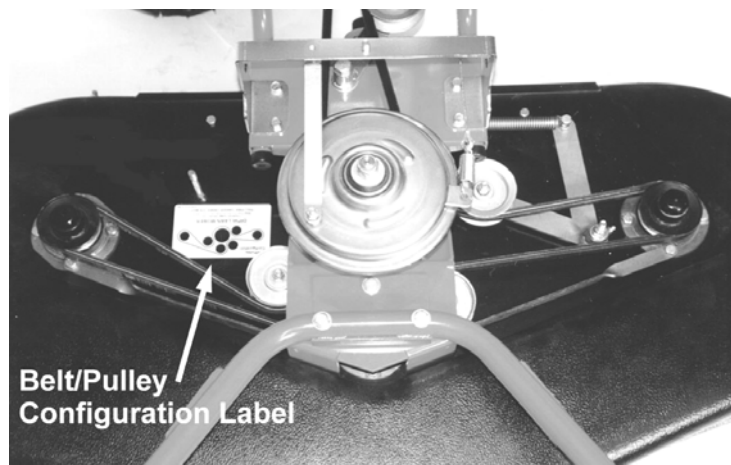
### Tools and Supplies Needed:

- 9/16" Wrench or Socket
  - 80" x 1/2" Belt, CHP Part #108421
  - Vise Grip Pliers or Wire Pull
1. Remove the Pulley Covers by removing the nuts on each cover with the 9/16" wrench or socket.
  2. Remove the Belt Tensioning Spring with the vice grip pliers or wire pull. Hold the Idler Arm back while pulling the spring off (*Figure 26*).
  3. Feed the belt off the pulleys (*Figure 27*).

**Note:** When installing the new belt, follow the diagram on the Belt/Pulley Configuration label on the deck (*Figure 27*).



*Figure 26*



*Figure 27*

## Removing and Replacing the Blades

**⚠ WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

### Tools Needed:

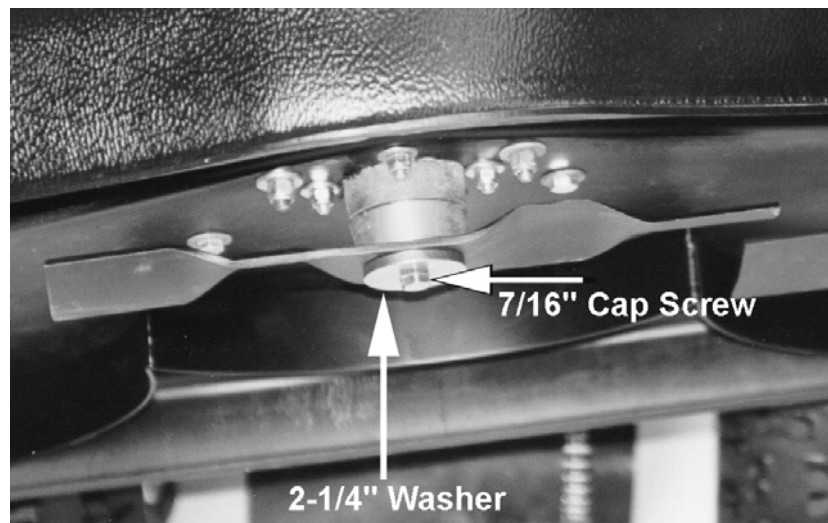
- 5/8 " Wrench or Socket
- Gloves, to handle the blade
- 2" x 4" board, to brace the blade (optional)
- Torque Wrench (optional)

**Tip:** You may want to block the blade with a piece of wood between the blade and the deck to hold it while turning the blade screw.

1. Remove the 7/16" Cap Screw and 2-1/4" Washer (*Figure 28*).

**⚠ WARNING!** Use caution when pushing or pulling the wrench next to the blade. Wear gloves, if the wrench slips off the cap screw, you may be seriously injured.

2. Remove the blade.
3. Repeat Steps 1 and 2 for the other two (2) blades.
4. Mount the new blade, blade washer and cap screw, in that order, and tighten securely (Torque 30-40 ft-lbs.).
5. Repeat Step 4 for the other two (2) blades.



*Figure 28*



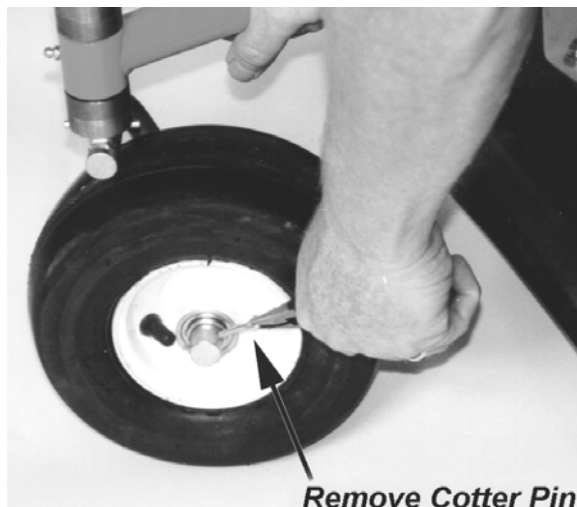
## Removing the Caster Wheels

**⚠ WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

### Tool Needed:

- Pliers

1. Straighten out the ends of the Cotter Pin with the Pliers.
2. Pull the Cotter Pin out of the Axle with the Pliers and slide the Wheel off (*Figure 29*).



*Figure 29*

## End of Season & Storage

Before storing your DR 46" LAWN MOWER DECK, certain precautions should be taken to protect it from deteriorations.

**⚠ WARNING!** If the DR 46" LAWN MOWER DECK will be stored while attached to the ATM, remove the spark plug wire(s) before servicing the lawn deck.


- Remove any wrapped weeds from the blade bearing housings. Clean grass and debris from the top and underneath the mower deck with a stiff brush.
- Check the blades for nicks and wear. Replace or sharpen and balance the blades if they become dull, or have them professionally sharpened if needed. Never try to straighten a bent blade. Dull or bent blades can cause excessive vibration and wear.
- Repaint all parts and areas where the paint has worn or peeled.
- Store the lawn deck a dry area.



## Chapter 6: Troubleshooting

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

### Troubleshooting Table

 **WARNING!** Before performing any maintenance procedure, stop the engine and disconnect the spark plug wire(s).

SYMPTOM	POSSIBLE CAUSE
<i>The deck lacks power.</i>	<p>⇒ Check the belt for wear.</p> <p>⇒ Check the blades drive pulleys for looseness. If you find a loose pulley, remove the pulley and inspect the pulley hub and blade spindle and replace if worn or damaged. The pulleys are designed to shear with severe loads or impact.</p> <p>⇒ If the difficulty persists, call <b>1(800) DR-OWNER (376-9637)</b> for assistance.</p>
<i>Excessive vibrations</i>	<p>⇒ Check the blades for nicks and wear. Replace or sharpen and balance the blades if they become dull, or have them professionally sharpened if needed. Never try to straighten a bent blade. Be sure to replace the blades in the proper orientation.</p> <p>⇒ The blades may not be seated properly on the hubs. Loosen the blade bolts, reset the blades and tighten the bolts.</p> <p>⇒ The blade spindle bearings may be bad. Call <b>1(800) DR-OWNER (376-9637)</b> for assistance.</p> <p>⇒ Check all the fasteners for looseness.</p>
<i>The belt frays or rolls over the pulleys.</i>	<p>⇒ A pulley groove may be nicked. Check the belt for wear and hard spots. File off any nicks on the pulleys.</p> <p>⇒ The belt may be stretched. Replace it.</p>
<i>The cut material is not being properly discharged out of the right side of the deck.</i>	<p>⇒ The discharge may be blocked. Disengage the blades, turn off the engine, disconnect the spark plug wire(s) and then check for debris.</p>
<i>The blades are not cutting or are loose.</i>	<p>⇒ The blades may not be seated properly on the hubs. Loosen the blade bolts, reset the blades and tighten the bolts.</p>

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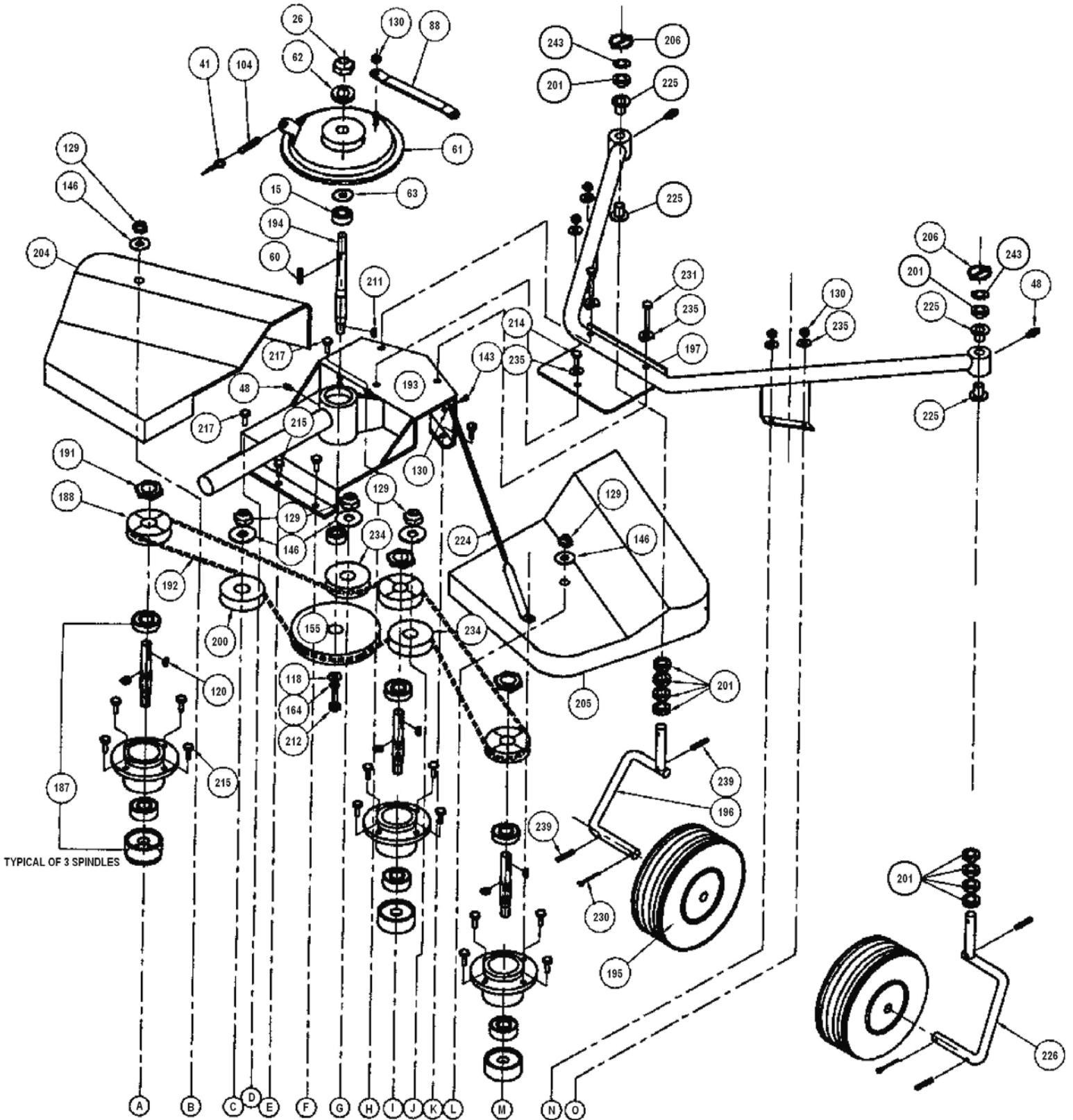
## Chapter 7: Parts Lists, Schematic Diagrams and Warranty

### Parts List — 46" Deck Drive Assembly

Note: Part numbers listed are available through Country Home Products, Inc.

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>	<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
15	100471	Bearing, Upper	196	129741	Spindle, Caster, Left
26	101311	Lock Nut, Blade, 5/8"- 11	197	108471	Caster Support Assembly
41	100621	Cable, Blade Engage	200	108501	Pulley, Idler
48	101891	Grease Fitting, 1/4" - 28	201	108511	Spacer, Wheel, 1/2"
60	101191	Key, 3/16" x 2" Square	203	108661	Belt Cover Assembly (not shown)
61	100581	Brake, Blade Clutch	204	113561	Cover, Belt, Left
62	101741	Washer, 1- 1/2" x .640" x 1/4"	205	114481	Cover, Belt, Right
63	101751	Washer, 1- 1/2" x .765" x 1/4"	211	119141	Key, Square, 3/16" x 3/4"
88	101631	Strap, Anti-Rotation	212	123211	Bolt, 5/16" – 18 x 3/4", HHCS, GR 5
104	101601	Spring, Blade Clutch, 2- 3/4"	214	111521	Bolt, 3/8"-16 x 1", HHCS, GR 5
118	112381	Washer, Flat, 1/4"	215	123361	Bolt, 5/16" x 1-1/4", HHCS, GR 5
120	110491	Key, Woodruff	217	119851	Bolt, 3/8"-16 x 1-1/2", HHCS, GR 5
129	110751	Nut, Locking, Nylon, 3/8"	224	123751	Brace, Support
130	110761	Nut, Locking, Nylon, 5/16"	225	123761	Bearing, Nylon, 3/4" Bore
143	111421	Screw, Cap, 5/16" x 3/4"	226	129761	Spindle, Caster, Right
146	111701	Washer, 3/8"	228	126841	Nut, Finish, 3/8"-16
155	111191	Pulley, Transmission, 6"	230	126851	Pin, Cotter, 3/16" x 1-1/2"
164	112431	Washer, Lock, Split, 5/16"	231	126861	Bolt, 3/8" – 16 x 2", HHCS, GR 5
187	127711	Housing, Bearing	234	108501	Pulley, Idler
188	108371	Pulley, A-Belt, 3"	235	112411	Washer, Flat, 5/16" x3/8"
191	108411	Nut, Lock, 3/4"- 16	239	110971	Pin, Roll, 3/16" x 1-3/4"
192	108421	Belt, 1/2" x 80"	240	129591	Brace, Right Idler Pulley
193	108431	Housing, Main Drive	241	129601	Bolt, 3/8"-16 x 3", HHCS, GR 5
194	127721	Shaft, Main Drive	243	129751	Spacer, Wheel, 1/4"
195	108451	Wheel, Caster	244	114561	Bolt, 1/4"-20 x 2", HHCS, GR 5
			245	110731	Nut, Locking, Nylon, 1/4"-20

# Schematic - 46" Deck Drive Assembly



## Parts List — 46" Main Deck Assembly

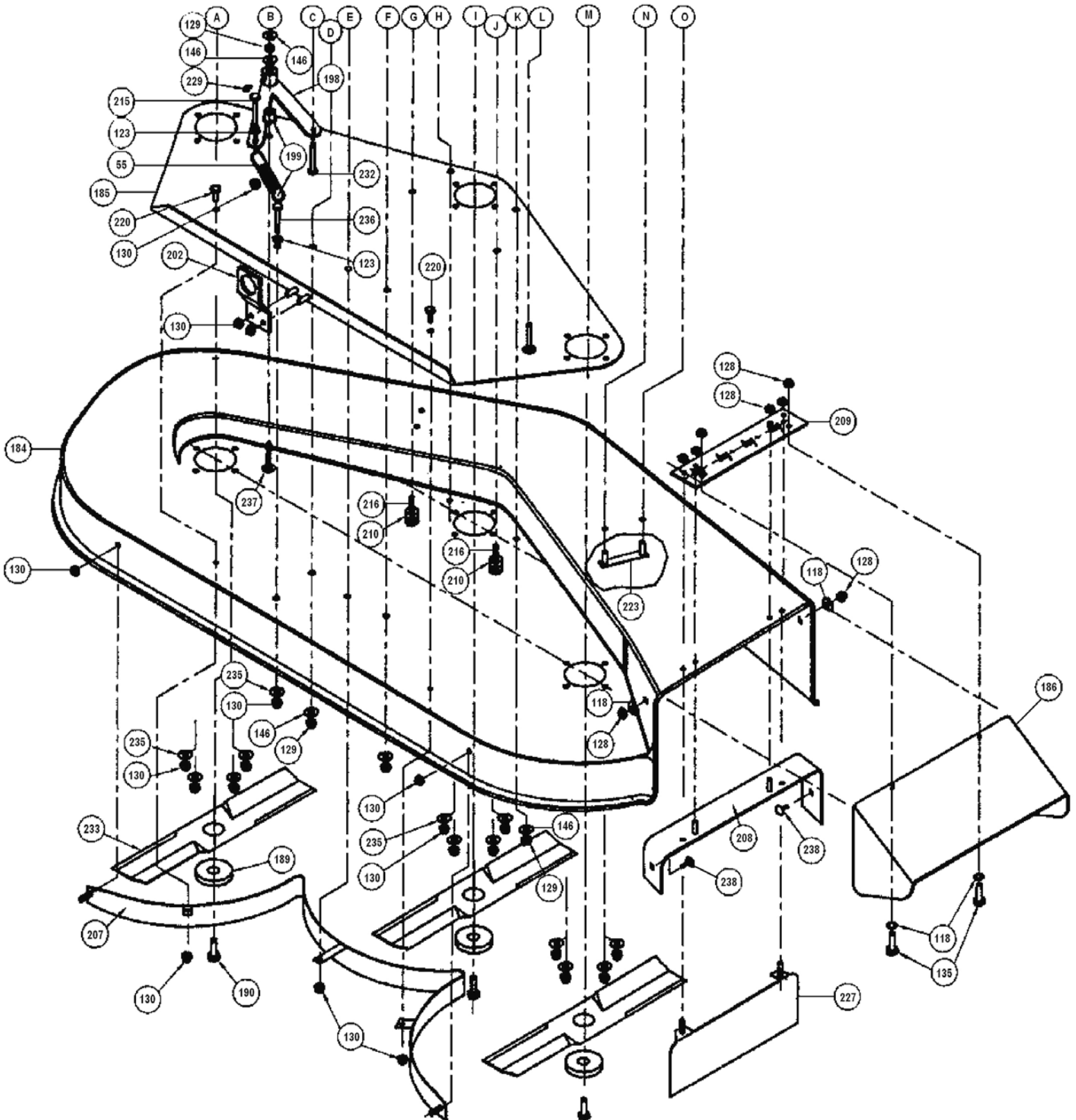
Note: Part numbers listed are available through Country Home Products, Inc.

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>	<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
55	101621	Spring, Extension, 5"	236	123601	Screw, Cap, 5/16" x 2-1/4"
118	112381	Washer, Flat, 1/4"	237	123431	Screw, Cap, 3/8" x 4-1/2"
123	110691	Nut, 5/16"- 18	238	109121	Bolt, Carriage, 1/4" x 3/4"
128	110731	Nut, Locking, Nylon, 1/4"			
129	110751	Nut, Locking, Nylon, 3/8"			
130	110761	Nut, Locking, Nylon, 5/16"			
135	111601	Screw, Cap, 1/4" – 20 x 1/2"			
146	111701	Washer, 3/8"			
184	108331	Lawn Deck, Shell only			
185	108341	Plate, Deck Support			
186	108351	Chute			
189	108381	Washer, Blade			
190	108401	Bolt, 7/16" – 14, x 1-1/2", HHCS			
198	108481	Arm, Idler			
199	108491	Bushing, Idler Arm			
202	108521	Support, Deck			
207	115971	Baffle, Lawn Deck			
208	116931	Bracket, Lawn Deck			
209	117101	Hinge			
210	118521	Spacer, Idler Pulley			
215	123361	Bolt, 5/16", x 1-1/4", HHCS, GR 5			
216	123371	Bolt, 3/8", x 2-3/4", HHCS, GR 5			
220	123601	Bolt, 5/16", x 2-1/4", HHCS, GR 5			
223	123741	Plate, Stud			
227	126821	Plate, Mulching			
229	126841	Grease Fitting, 45°			
232	126871	Bolt, 3/8" – 16, x 1-3/4", HHCS			
233	137011	Mulching Blade, 16" (set of 3)			
235	112411	Washer, Flat, 5/16" x3/8"			

### Safety & Information Labels

AT14600	Belt Routing Label
136491	Danger, Deck Label

# Schematic — 46" Main Deck Assembly



## Notes





# DR<sup>®</sup> POWER EQUIPMENT

## DR 46" LAWN MOWER DECK 1-Year Limited Warranty

### Terms and Conditions

The DR 42" LAWN MOWER DECK is warranted for one (1) year against defects in materials or workmanship when put to ordinary and normal consumer use; ninety (90) days for any other use.

For the purposes of all the above warranties, "ordinary and normal consumer use" refers to non-commercial residential use and does not include misuse, accidents or damage due to inadequate maintenance.

Country Home Products, Inc. certifies that the DR 42" LAWN MOWER DECK is fit for ordinary purposes for which a product of this type is used. Country Home Products, Inc. however, limits the implied warranties of merchantability and fitness in duration to a period of one (1) year in consumer use, ninety (90) days for any other use.

The 1-Year Limited Warranty on the DR 42" LAWN MOWER DECK starts on the date the machine ships from our factory. The 1-Year Limited Warranty is applicable only to the original owner.

The warranty holder is responsible for the performance of the required maintenance as defined by the manufacturer's owner's manual. The warranty holder is responsible for replacement of normally wearing parts such as the drive belt, bearings, and debris shield. Attachments and accessories to the machine are not covered by this warranty.

During the warranty period, the warranty holder is responsible for the machine transportation charges, if required. During the warranty period, warranty parts will be shipped by standard method at no charge to the warranty holder. Expedited shipping of warranty parts is the responsibility of the warranty holder.

SOME STATES DO NOT ALLOW LIMITATIONS ON THE LENGTH OF IMPLIED WARRANTIES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Country Home Products, Inc. shall not be liable under any circumstances for any **incidental or consequential damages or expenses** of any kind, including, but not limited to, cost of equipment rentals, loss of profit, or cost of hiring services to perform tasks normally performed by the DR 42" LAWN MOWER DECK.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

### Customer Service Hotline

Country Home Products, Inc.'s objective is to have 100% satisfied customers. For that reason, we operate a 6-day-a-week Technical Service Department for our Owners. You can access a Representative by dialing our TOLL-FREE Hotline at 1-800-DR-OWNER (376-9637). The sole job of our well-trained and friendly folks is to ensure that you get any help you need in a timely fashion. They are there to answer all your questions including: (1) inquiries on any of the above warranties, (2) inquiries about replacement parts, or (3) your questions regarding service, maintenance and operation.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

## **Daily Checklist for the DR 46" LAWN MOWER DECK**

To help maintain your DR 46" LAWN MOWER DECK for optimum performance, we recommend you follow this checklist each time you use your machine.

- BELT: Check the belt for wear, proper alignment and tension.
- BLADES: Check the blades for tightness, nicks and wear. Remove any wrapped weeds and grass from the blade bearing housings to prevent buildup.
- GENERAL CONDITION: Check the general condition of the lawn deck, e.g.; nuts, bolts, welds etc.



COUNTRY HOME PRODUCTS, Inc.

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

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1-800-DR-OWNER (376-9637) • [www.dr-owner.com](http://www.dr-owner.com)

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