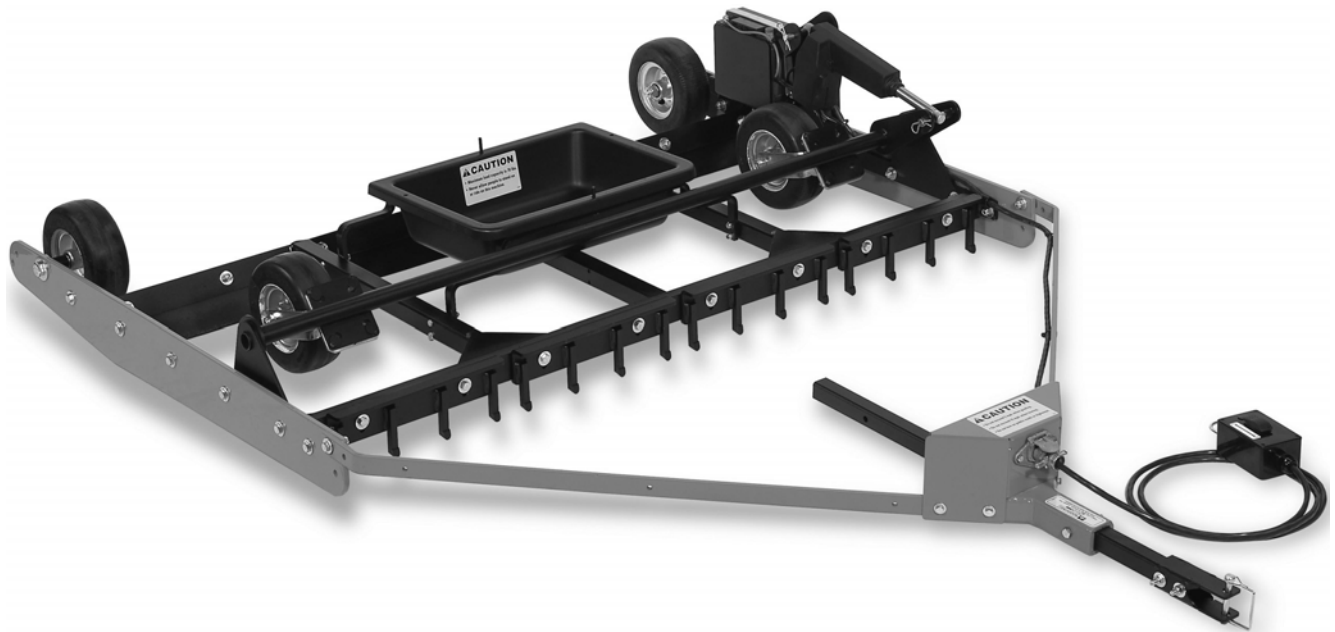


DR[®] POWER GRADER™



SAFETY & OPERATING INSTRUCTIONS



! WARNING!

READ AND UNDERSTAND THIS MANUAL AND ALL INSTRUCTIONS BEFORE OPERATING THIS GRADER.

THANK YOU!

Congratulations on your purchase of a new DR POWER GRADER!

We have done our utmost to ensure that your DR POWER GRADER 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 serial number or 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.

In addition, please tell your friends about your new DR POWER GRADER! 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.

SALES MANAGER

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DR® Power Equipment
A division of Country Home Products®
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INTRODUCING THE DR POWER GRADER

This manual will help you set up and safely operate your new DR POWER GRADER. 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 serial number and/or 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 DR POWER GRADER.

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

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.

GENERAL SAFETY RULES

! WARNING!

READ THIS *SAFETY & OPERATING INSTRUCTIONS* MANUAL BEFORE YOU USE THE DR POWER GRADER. BECOME FAMILIAR WITH THE SERVICE RECOMMENDATIONS TO ENSURE THE BEST PERFORMANCE FROM YOUR POWER GRADER.

Labels

Your DR POWER GRADER carries prominent labels as reminders for its proper and safe use. Shown below are copies of all the labels that appear on the equipment. Take a moment to study them and make a note of their location on your DR POWER GRADER as you assemble and *before* you operate the machine. Replace damaged or missing safety and information labels immediately.



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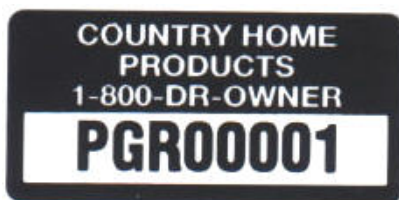
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Protecting Yourself and Those Around You

WARNING!

ALWAYS TAKE THE FOLLOWING PRECAUTIONS WHEN OPERATING THIS GRADER:

- ALWAYS WEAR PROTECTIVE GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS WHILE GRADING TO PROTECT YOUR EYES FROM POSSIBLE THROWN BITS OF DIRT OR GRAVEL.
 - WEAR SHOES WITH NON-SLIP TREADS WHEN USING YOUR DR POWER GRADER. IF YOU HAVE SAFETY SHOES, WE RECOMMEND WEARING THEM. DO NOT USE THE GRADER WHILE BAREFOOT OR WEARING OPEN SANDALS.
 - WEAR A HELMET WHEN OPERATING AN ATV.
-

Operating the DR POWER GRADER Safely

WARNING!

YOU MUST OPERATE THE POWER GRADER SAFELY. UNSAFE OPERATION CAN CREATE A NUMBER OF HAZARDS FOR YOU. ALWAYS TAKE THE FOLLOWING PRECAUTIONS WHEN USING THIS GRADER:

- READ, UNDERSTAND, AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL. BE THOROUGHLY FAMILIAR WITH THE CONTROLS AND THE PROPER USE OF YOUR GRADER BEFORE USING.
 - THOROUGHLY INSPECT THE AREA WHERE YOUR GRADER WILL BE USED, AND REMOVE ALL STONES, STICKS, WIRE, PET SUPPLIES, OR LAWN TOYS, AND ANY OTHER FOREIGN OBJECTS THAT YOU COULD RUN OVER. ALSO, NOTE THE LOCATION OF STUMPS, AND OTHER POSSIBLE HAZARDS THAT YOU SHOULD AVOID DURING OPERATION.
 - WATCH FOR TRAFFIC WHEN OPERATING IN OR NEAR ROADWAYS. PAY EXTRA ATTENTION WHEN OPERATING NEAR PUBLIC ROADWAYS.
 - WHEN OPERATING IN A ROADWAY, WE SUGGEST THAT YOU PUT OUT OBSTRUCTIONS (MARKER CONES OR PAIS) TO DIVERT ANY TRAFFIC AWAY FROM YOUR WORK AREA.
 - BE AWARE OF YOUR SURROUNDINGS WHEN OPERATING THE DR POWER GRADER, E.G., DITCHES, CULVERTS, DROP-OFFS, AND HILLS.
 - NEVER ALLOW PEOPLE WHO ARE UNFAMILIAR WITH THESE INSTRUCTIONS TO USE THE DR POWER GRADER.
 - TO BE SAFE, DO NOT OPERATE THE GRADER NEAR SMALL CHILDREN OR PETS, AND NEVER ALLOW CHILDREN TO OPERATE THE POWER GRADER. STOP THE GRADING ACTION WHEN ANOTHER PERSON OR PET APPROACHES.
 - DO NOT ALLOW PEOPLE TO RIDE ON THE GRADER.
 - ALWAYS UNPLUG THE CONTROL BOX FROM THE BATTERY BEFORE ADJUSTING OR SERVICING THE POWER GRADER. IF YOU HAVE TO STOP TO REMOVE ANY DEBRIS FROM THE GRADER, ALWAYS SHUT OFF THE TOW VEHICLE'S ENGINE AND SET THE PARKING BRAKE.
 - DO NOT, UNDER ANY CONDITIONS, REMOVE, BEND, CUT, FIT, WELD, OR OTHERWISE ALTER STANDARD PARTS ON THE DR POWER GRADER. MODIFICATIONS TO YOUR MACHINE COULD CAUSE PERSONAL INJURIES AND WILL VOID YOUR WARRANTY.
 - WHILE USING THE DR POWER GRADER, DON'T HURRY OR TAKE THINGS FOR GRANTED.
 - DO NOT OPERATE THE GRADER WHEN UNDER THE INFLUENCE OF ALCOHOL OR MEDICATION.
 - USE THE DR POWER GRADER ONLY IN DAYLIGHT OR GOOD ARTIFICIAL LIGHT.
-

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 GRADING ACTIVITY. *NEVER ASSUME THAT CHILDREN WILL REMAIN WHERE YOU LAST SAW THEM.*

- KEEP CHILDREN OUT OF THE GRADING AREA AND UNDER THE WATCHFUL CARE OF A RESPONSIBLE ADULT.
 - BE ALERT, STOP AND TURN THE TOW VEHICLE OFF IF CHILDREN ENTER THE WORK AREA.
 - NEVER ALLOW CHILDREN TO OPERATE THE DR POWER GRADER.
 - NEVER ALLOW CHILDREN TO RIDE ON THE TOW VEHICLE OR THE DR POWER GRADER.
-

Safety with Electric-Powered Machines

WARNING!

NEVER OVERLOOK THE HAZARDS OF ELECTRICITY. ALWAYS FOLLOW THESE PRECAUTIONS:

- NEVER ATTEMPT TO OPEN THE CONTROL BOX OR MOTOR ASSEMBLY. NEVER ATTEMPT ANY ELECTRICAL REPAIRS YOURSELF. IF IN DOUBT, CONSULT A QUALIFIED ELECTRICIAN OR CONTACT COUNTRY HOME PRODUCTS' TOLL-FREE SUPPORT AT 1-800-DR-OWNER (376-9637) FOR HELP OR INFORMATION.
 - NEVER OPERATE YOUR GRADER IN THE RAIN OR IN WET CONDITIONS. REMEMBER, THIS IS AN ELECTRIC GRADER.
 - NEVER OPERATE THE DR POWER GRADER WITH A DAMAGED CONTROL CABLE.
 - NEVER PULL ON THE CONTROL POWER CORD TO MOVE THE GRADER.
 - ALWAYS GRASP THE CONTROL POWER CORD PLUG WHEN UNPLUGGING THE CORD; NEVER PULL THE PLUG OUT BY THE CORD.
 - NEVER TAMPER WITH SAFETY DEVICES. CHECK THEIR PROPER OPERATION REGULARLY.
 - ALWAYS KEEP THE CONTROL POWER CORD AWAY FROM EXCESSIVE HEAT, OIL, AND SHARP OBJECTS.
-

Tip: Reference page 31 for troubleshooting tips.

Handling the Battery Safely

WARNING!

- **USE ONLY THE 12-VOLT, LEAD-ACID, RECHARGEABLE BATTERY, AND THE 12-VOLT BATTERY CHARGER THAT SHIPPED WITH YOUR GRADER, OR THEIR COUNTRY HOME PRODUCTS REPLACEMENT. USING THE WRONG TYPE OF BATTERY OR CHARGER COULD CAUSE A FIRE OR EXPLOSION RESULTING IN SERIOUS INJURY.**
 - **NEVER LIFT OR CARRY THE BATTERY BY THE WIRES OR CONNECTORS. THIS CAN DAMAGE THE BATTERY AND POSSIBLY CAUSE A FIRE RESULTING IN SERIOUS INJURY. LIFT AND CARRY THE BATTERY BY THE CASE ONLY.**
-

Only adults should handle the battery. The battery is heavy and contains sulfuric acid (electrolyte). Dropping the battery could result in serious injury. Get a firm grip and use caution when removing or changing the battery.

- Examine the charger and the connectors for excessive wear or damage each time you charge the battery. If you determine there is a problem, do not use the charger or the battery until you have replaced the worn or damaged part.
- Batteries contain sulfuric acid. To prevent burns, avoid contact with skin, eyes, and clothing. To prevent fire or explosion keep sparks and open flames away from the battery.
- Exercise care in handling the battery in order not to short-circuit it with conducting materials such as rings, bracelets, and keys. When short-circuited, the battery or conductor may overheat and cause burns.
- Never throw away used batteries in your household trash. Bring them to a recycling center or household hazardous waste depot for proper disposal. Please refer to “Recycling a Used Battery”, on page 28, for more information.

NOTICE!

PLEASE DISPOSE OF USED BATTERIES RESPONSIBLY, ACCORDING TO YOUR LOCAL HAZARDOUS MATERIALS REGULATIONS.

Safely Charging the Battery

- Charge the battery before using your DR POWER GRADER. See “Charging the Battery” on page 17 and “Caring for the Battery” on page 28.
- Never allow the battery to completely discharge; charge the battery before this happens.
- Charge the battery before storing your DR POWER GRADER. Do not leave the battery discharged, as this can ruin it.
- Never allow children to charge the battery. The electricity involved in charging the battery could injure a child.
- NEVER charge the battery in the rain or in wet locations.

! CAUTION!

THE DR POWER GRADER MUST BE OPERATED SAFELY TO PREVENT OR MINIMIZE THE RISK OF MINOR OR MODERATE INJURY. UNSAFE OPERATION CAN CREATE A NUMBER OF HAZARDS FOR YOU. ALWAYS TAKE THE FOLLOWING PRECAUTIONS WHEN OPERATING THIS POWER GRADER:

- KEEP IN MIND THAT THE OPERATOR OR USER IS RESPONSIBLE FOR ACCIDENTS OR HAZARDS OCCURRING TO OTHER PEOPLE, THEIR PROPERTY, AND THEMSELVES.
 - DO NOT USE THE DR POWER GRADER TO DRAG, TOW, OR CARRY ITEMS.
 - NEVER OPERATE THE DR POWER GRADER WITH A TRUCK (2WD OR 4WD); DOING SO WILL VOID THE DR POWER GRADER WARRANTY.
 - NEVER LEAVE THE DR POWER GRADER UNATTENDED. IF YOU LEAVE THE AREA, SHUT OFF THE TOW VEHICLE, REMOVE THE KEY, AND UNPLUG THE DR POWER GRADER CONTROL BOX. IF YOU'RE THROUGH GRADING FOR THE DAY, REMOVE THE CONTROL BOX AND BRING IT INSIDE.
 - ALWAYS CHECK THE ALIGNMENT OF MOVING PARTS AND FOR DAMAGED OR WORN PARTS.
 - KEEP ALL NUTS AND BOLTS TIGHT AND KEEP THE EQUIPMENT AND ATTACHMENTS IN GOOD OPERATING CONDITION.
 - ALWAYS CHECK THE CONTROL POWER CABLE FOR DAMAGE PRIOR TO EVERY USE AND THAT IT IS FULLY PROTECTED FROM DAMAGE FROM THE EQUIPMENT OR MATERIALS WHILE OPERATING THE DR POWER GRADER.
 - USE ONLY MANUFACTURER-RECOMMENDED REPLACEMENT PARTS.
 - SEE MANUFACTURER'S INSTRUCTIONS FOR PROPER OPERATION AND INSTALLATION OF ACCESSORIES. ONLY USE ACCESSORIES APPROVED BY COUNTRY HOME PRODUCTS, INC.
 - DO NOT USE THE DR POWER GRADER IN A MANNER NOT IN ACCORDANCE WITH THESE INSTRUCTIONS.
 - NO LIST OF WARNINGS AND CAUTIONS CAN BE ALL-INCLUSIVE. IF SITUATIONS OCCUR THAT ARE NOT COVERED BY THIS MANUAL, THE OPERATOR MUST APPLY COMMON SENSE AND OPERATE THE DR POWER GRADER IN A SAFE MANNER. CALL 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 POWER GRADER

This chapter outlines a few simple steps you will need to follow to set up your new machine before you use it. It may be helpful to familiarize yourself with the controls and features on your new DR POWER GRADER by reviewing **Figure 1** before beginning the steps outlined in this chapter. **If you have any questions at all, please feel free to contact our Customer Service Representatives at our Toll-Free number: 1-800-DR-OWNER (376-9637).**

DR POWER GRADER Controls and Features

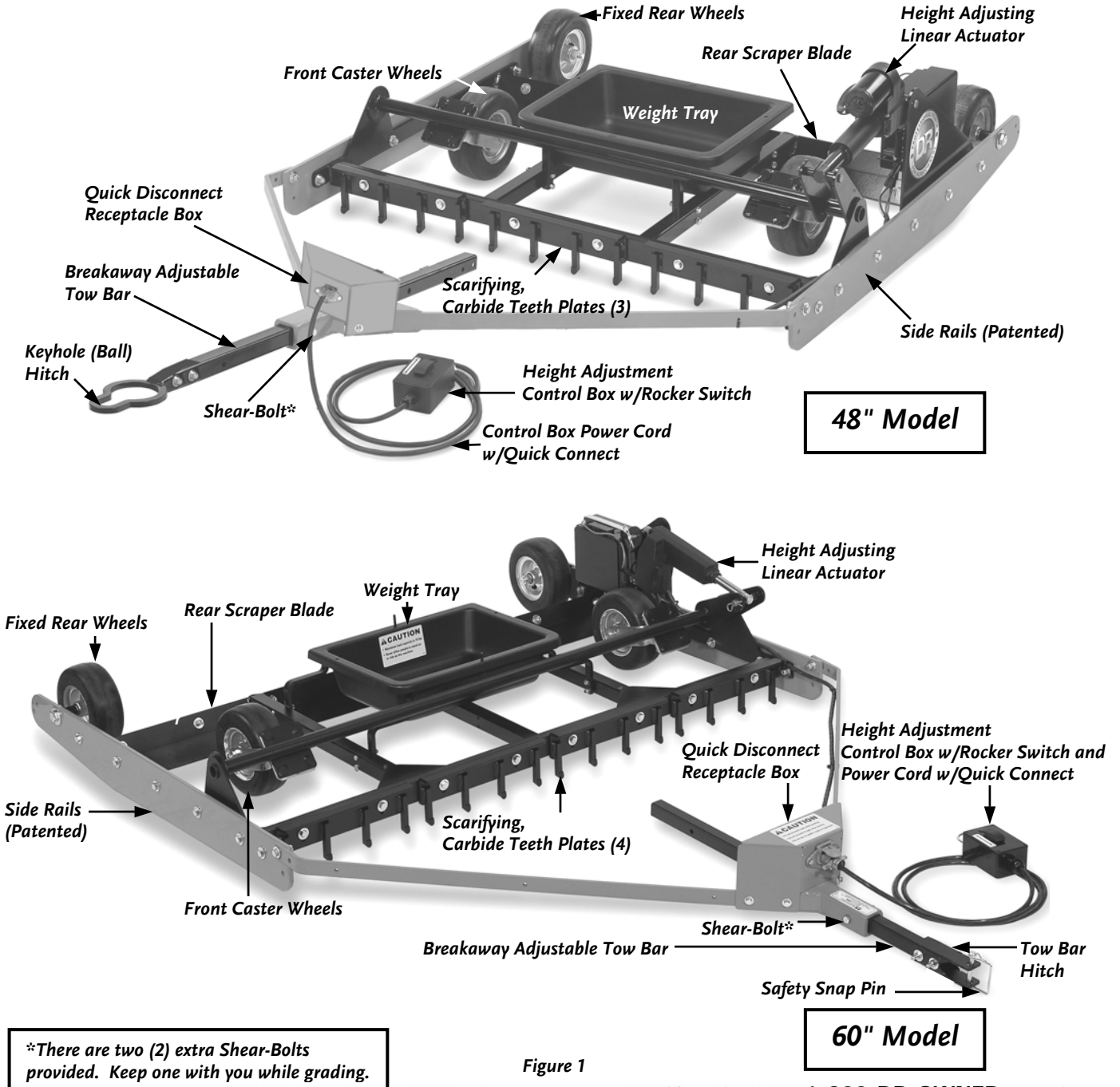


Figure 1

Unpacking the DR POWER GRADER

NOTE: Unpacking the DR POWER GRADER is a two-person job. We recommend you have an extra set of hands available before you begin, as the DR POWER GRADER weighs about 230 lbs.

Tools Required:

- Metal Shears (Side Cutters)
- Knife
- Eye Protection
- 9/16" Wrench

CAUTION!

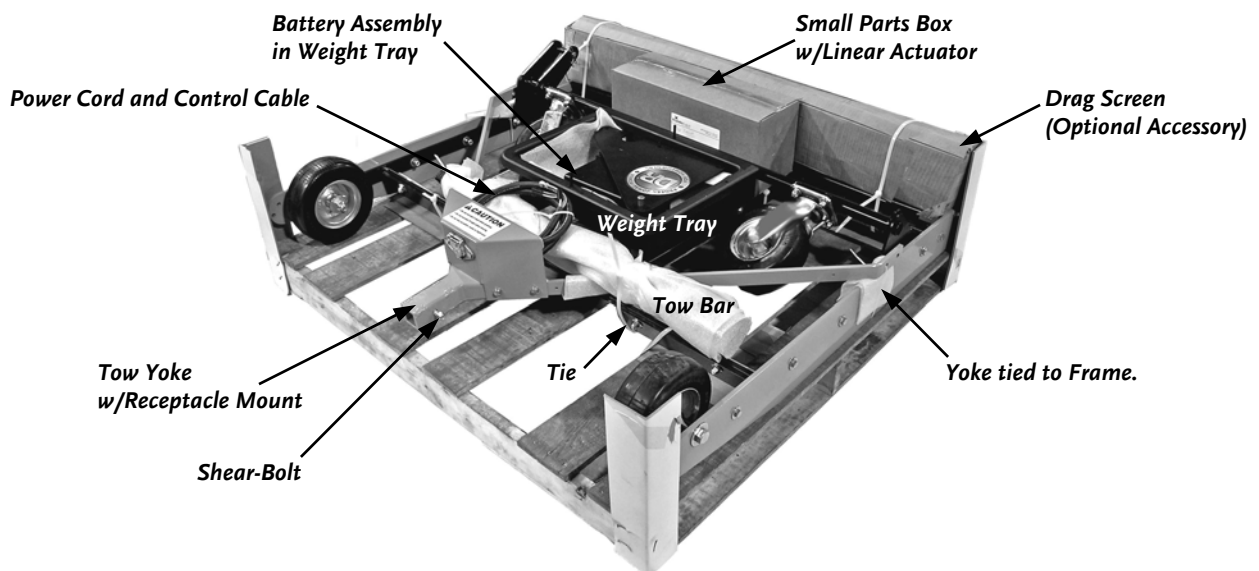
WEAR EYE PROTECTION WHEN CUTTING THE BANDING. THE BANDING MAY HAVE A LOT OF TENSION ON IT AND MAY SNAP AND CUT YOU. ALWAYS STAND TO ONE SIDE WHEN CUTTING THE BAND.

1. Place the carton near a flat surface large enough to hold the uncrated DR POWER GRADER.
2. Stand to one side and cut the banding around the shipping carton, and then remove the top of the carton.
3. Cut the ties on the Yoke Assembly and remove the Yoke with the Control Cable attached.

NOTE: The excess Control Cable is coiled and tied in the Weight Tray ready for connection to the Battery and Linear Actuator.

4. Cut the ties and remove the Tow Bar and Linear Actuator.
5. Remove the Small Parts Box and the Battery Assembly from the Weight Tray.
6. For now, leave the DR POWER GRADER on the shipping pallet for ease of assembly.
7. Check the parts supplied against the Parts Checklist on the next page. Most of the assembly hardware is loosely assembled to the frame and major components.

NOTE: Do not discard the packaging material until you are fully satisfied with your new machine.



Parts Checklist

Country Home Products ships the following items with your new DR POWER GRADER. Please check to make sure you have everything listed below. If you are missing any of these items, please call Customer Service Toll-Free **1-800-DR-OWNER (376-9637)** for assistance.

Parts in Carton:

- DR POWER GRADER
- Yoke Assembly w/Control Cable attached
- Tow Bar
- Clevis Base w/Battery Assembly, Clevis Pin, Spacers and Hitch Clip
- Small Parts Box containing:
 - Product Pack
 - Control Cord
 - Linear Actuator
 - Battery Charger Kit (Adapter w/Alligator Clips)
 - 8" Hook and Loop Strap
 - Hook and Loop Strap, w/Adhesive
 - Keyhole Hitch
 - Tow Hitch
 - (2) Safety Snap Pin
 - (2) Shear-Bolt, 3/8"-16
 - (2) Nylon Lock Nut, 3/8"-16
 - (5) Wire Ties, 7", Black
 - Cable Clamp
 - *Safety & Operating Instructions Manual*

Assembly Hardware (Not shown to Scale)

✱ = Included in Small Parts Box

Nuts



110731 1/4-20
Nylon Lock Nut



110761 5/16-18
Nylon Lock Nut



✱ 110751 3/8-16
Nylon Lock Nut



160071 5/8-18
Nylon Lock Nut

Bolts



✱ 191871 3/8-16 Shear Bolt



111491 1/4-20 x 1" Bolt



157291 5/16-18 x 2-1/2" Bolt



180851 1/4-20 x 2-3/4" Bolt



119851 3/8-16 x 1-1/2 bolt



191741 5/8-18 x 6" Bolt

Washers



112381 1/4"
Flat Washer



101811 1/4-20
Split Lock Washer

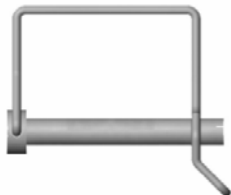


112411 5/16"
Flat Washer



112391 3/8"
Flat Washer

Pins



✱ 211551 Safety Snap Pin



211541 1/2 x 3-1/2 "
Clevis Pin



160031 Hitch Clip for 1/2" Shaft

Assembling the DR POWER GRADER

Tools Needed:

- (2) 9/16" Wrench or Socket

Installing the Battery

1. Locate the Clevis Base w/Battery Assembly
2. Using two (2) 9/16" Wrenches, bolt the Clevis Base w/Battery Assembly to the left Side Rail with the three (3) 3/8"-16 x 1-1/2" Bolts, 3/8" Flat Washers and 3/8" Nylon Lock Nuts (**Figure 3**).

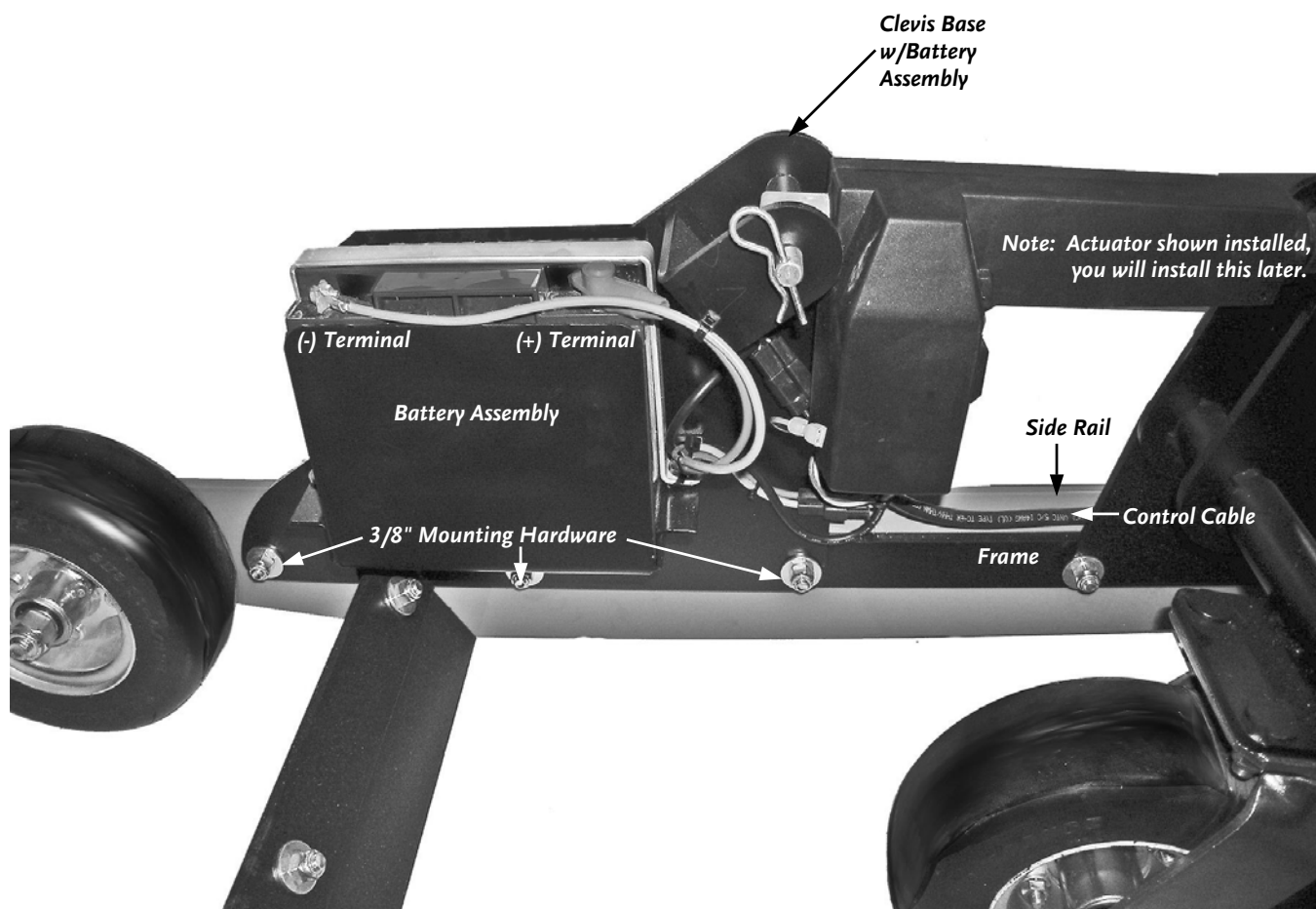


Figure 3

Attaching the Yoke

Tool Needed:

- (2) 9/16" Wrench
1. Position the Yoke in front of the DR POWER GRADER with the Receptacle Box facing up (**Figure 4**).
 2. Attach each side of the Yoke in the upper hole on the outside of the Side Rail using a 3/8"-16 x 1-1/2" Bolt, 3/8" Flat Washer and 3/8" Lock Nut (**Figure 5**). Do not tighten at this time
 3. Run the Control Cable, from the Receptacle Box, along the left side arm of the Yoke and secure the Control Cable to the Yoke arm using three (3) Cable Ties through the pre-drilled holes in the Yoke (**Figure 6**).

NOTE: Tie the Control Cable below the pre-drilled holes and do not over tighten the Cable Ties as the Control Cable is subject to movement during use.

4. Remove the Nut (**Figure 7**) previously installed on the right side of the Yoke and install the Cable Clamp around the Control Cable and then onto the Bolt as shown.
5. Position the Clamp in the vertical position (**Figure 7**), replace the Nut, and tighten both sides.

NOTE: To allow the Yoke to pivot up and down, DO NOT fully tighten the Lock Nut against the hardware. Back the Lock Nut off 1/4 to 1/2 turn after contact with the hardware.

6. Slowly fold the Yoke back onto the frame to ensure that the Control Cable will not pinch.

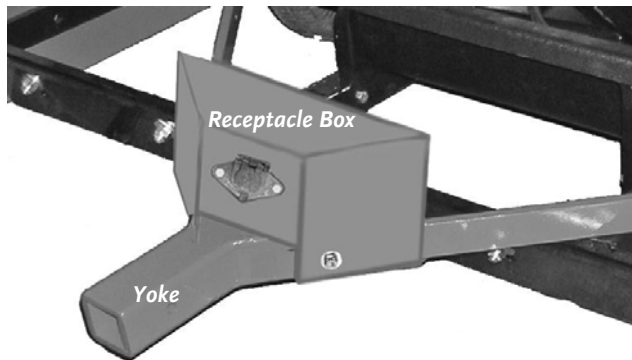


Figure 4



Figure 5

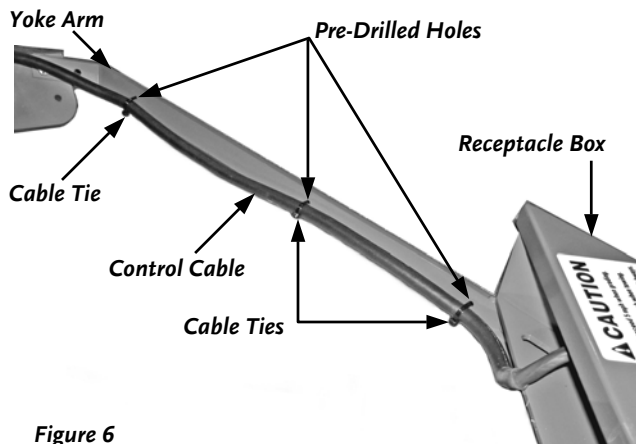


Figure 6

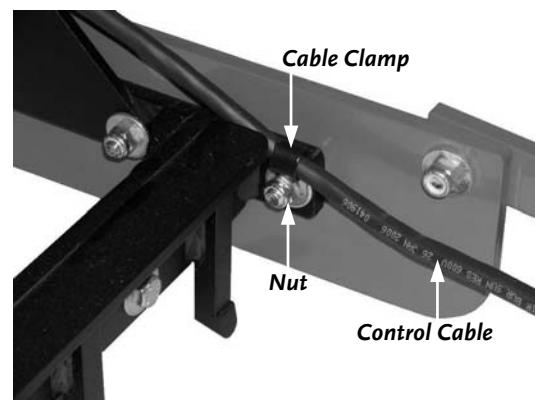


Figure 7

Installing the Linear Actuator

1. Remove the Hitch Clip, Clevis Pin, and two (2) Spacers assembled on the Clevis Base w/Battery Assembly (Figure 8).
2. Locate the Linear Actuator and place it between the Clevis Base w/Battery Assembly and the Axle Clevis with the Actuator Arm facing the forward and Motor facing down (Figure 9).
3. Reinsert the Spacers, Clevis Pin, and Hitch Pin in the Clevis Base w/Battery Assembly (Figure 8).

NOTE: The Spacers go on either side of the Actuator (Figure 8).

4. Route the Control Cable between the Caster Bracket and the Side Rail pushing it down on top of the Frame (Figure 3 on page 13).
5. Connect the Control Cable to the Linear Actuator and Battery Cables (Figure 10).
6. Using a Wire Tie around the exposed portion of the Battery Clamp Bolt between the Clamp and Frame, secure the Wire Harness as shown in Figure 10. Clip off access Wire Tie material.
7. Connect the Control Box w/Quick Disconnect to the Receptacle Box (Figure 1 on page 9) and push the Rocker Switch to the Lower position to extend the Linear Actuator Arm out to the maximum length.

! CAUTION!

AT THIS TIME, DISCONNECT THE CONTROL BOX TO PREVENT ACCIDENTAL MOTOR ACTUATION.

8. Remove the Hitch Clip, Clevis Pin, and two (2) Spacers assembled on the Axle Clevis (Figure 9).
9. Pick up the Caster Wheel Axle Assembly to rotate the Clevis Arm Fork forward (Figure 9), so that the hole in the Linear Actuator Arm aligns with the holes in the Clevis Arm Fork and reinsert the Spacers, Clevis Pin, and Hitch Clip (Figure 11 on the next page).

NOTE: The Spacers go on either side of the Actuator Arm (Figure 11 on the next page).

Tip: Insert the Spacers from the top down as you insert the Clevis Pin. You may have to slightly spread the Fork with your fingers to ease the last Spacer into place.

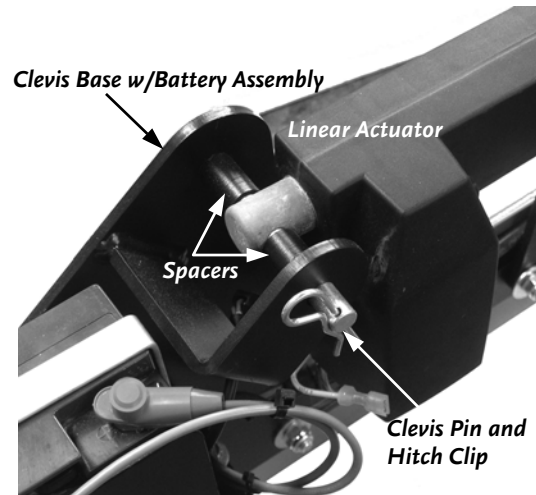


Figure 8

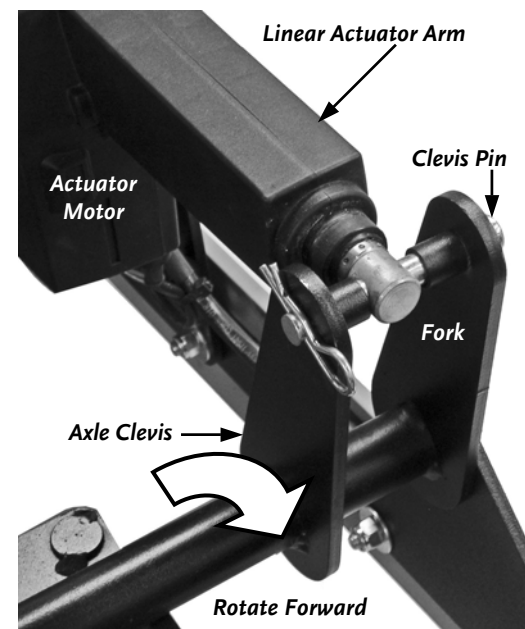


Figure 9

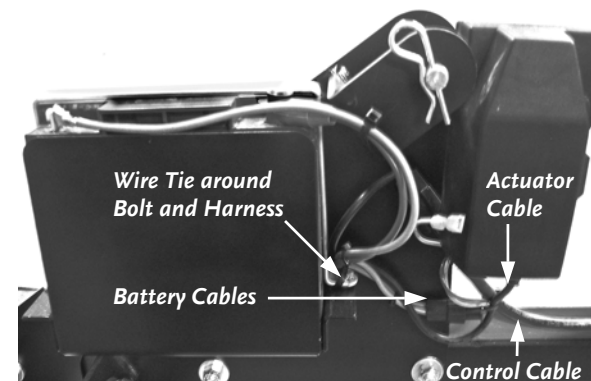


Figure 10

10. Reconnect the Control Cable to the Receptacle Box in the Yoke and raise the DR POWER GRADER (lower the wheels) with the Control Box Rocker Switch in the Raise position.
11. With the help of another person, you can now roll the DR POWER GRADER off the shipping pallet.

NOTE: You must now fully charge the Battery of your new DR POWER GRADER before using the machine. See the next page.

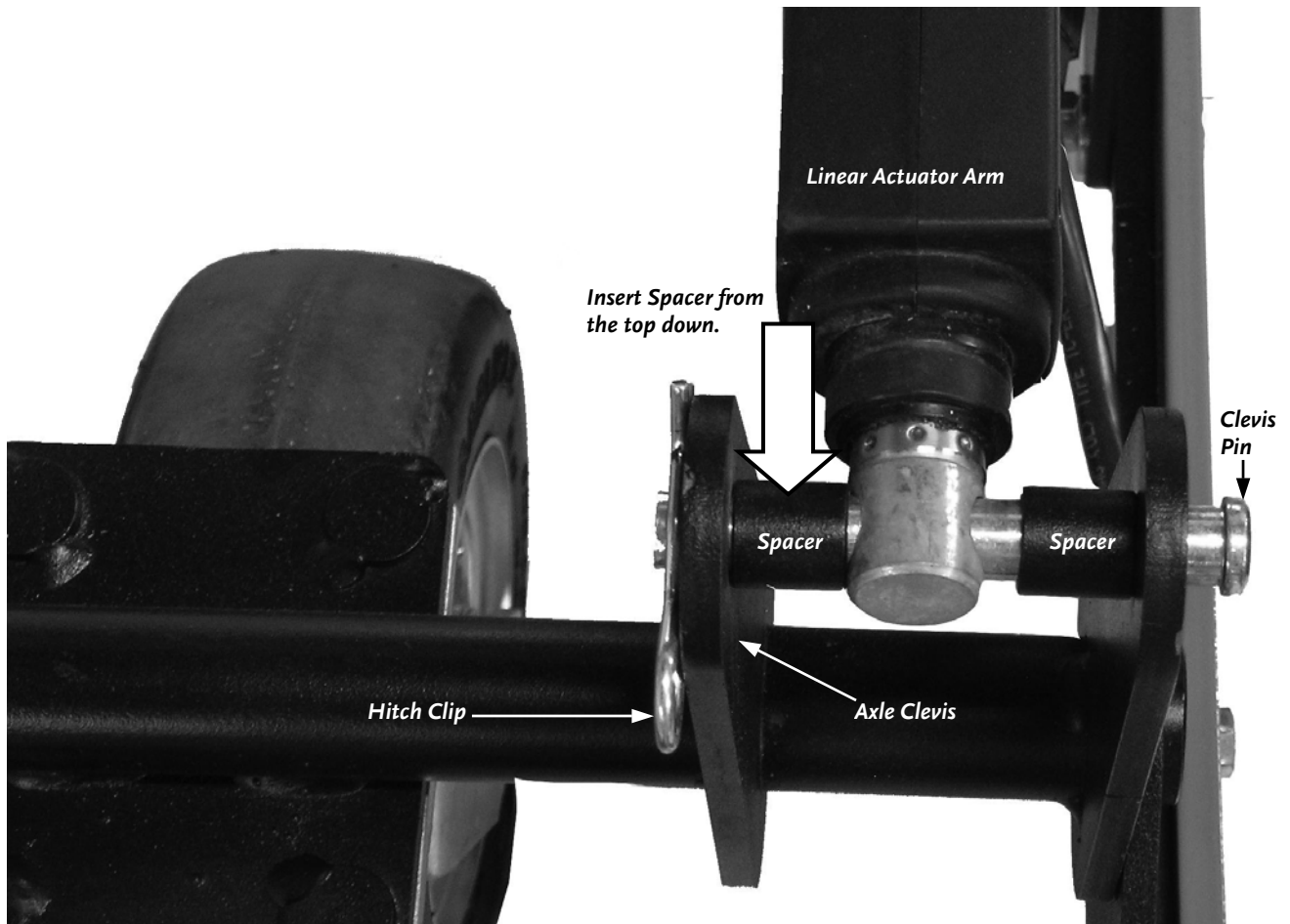


Figure 11

Charging the Battery



WARNING!

ELECTRICAL HAZARD: PREVENT FIRE

- NEVER MODIFY YOUR GRADER'S ELECTRICAL SYSTEM. MODIFICATIONS COULD RUIN THE ELECTRICAL SYSTEM AS WELL AS CAUSE A FIRE, RESULTING IN SERIOUS INJURY.
- USING ELECTRICAL COMPONENTS OTHER THAN THOSE SUPPLIED WITH YOUR GRADER COULD CAUSE THE ELECTRICAL SYSTEM TO OVERHEAT, EXPLODE, OR START A FIRE.
- ONLY ADULTS SHOULD HANDLE THE BATTERY, IT CONTAINS SULFURIC ACID (AN ELECTROLYTE). THE BATTERY IS HEAVY; DROPPING IT COULD RESULT IN SERIOUS INJURY.
- NEVER LIFT OR CARRY THE BATTERY BY THE CABLES OR TERMINALS. THIS CAN DAMAGE THE BATTERY AND POSSIBLY START A FIRE, RESULTING IN SERIOUS INJURY. LIFT AND CARRY THE BATTERY ONLY BY ITS CASE.
- DO NOT SHORT CIRCUIT THE BATTERY.
- READ THE SAFETY INSTRUCTIONS ON THE BATTERY.

About the Battery

The DR POWER GRADER comes with a 12-Volt, maintenance-free, rechargeable, sealed lead acid battery. A fully charged battery runs about 20 hours or 800 up/down cycles. Properly maintained and charged, the battery provides years of dependable service.

Charging the Battery



WARNING!

ELECTRICAL HAZARD: PREVENT FIRE

- USING THE WRONG TYPE OF BATTERY OR CHARGER COULD CAUSE A FIRE OR EXPLOSION, RESULTING IN SERIOUS INJURY.
- NEVER ALLOW CHILDREN TO CHARGE THE BATTERY. THE ELECTRICITY INVOLVED IN CHARGING THE BATTERY COULD INJURE A CHILD.
- EXAMINE THE CHARGER, ITS CONNECTORS, AND THE BATTERY FOR EXCESSIVE WEAR OR DAMAGE EACH TIME YOU CHARGE THE BATTERY. IF YOU SEE ANY EXCESSIVE WEAR OR DAMAGE, DO NOT USE THE CHARGER OR THE BATTERY, REPLACE THEM.
- USE ONLY THE 12-VOLT CHARGER SUPPLIED WITH YOUR GRADER TO CHARGE THE BATTERY.
- USE THE CHARGER ONLY IN DRY LOCATIONS. AVOID CONTACT WITH WATER.

Charging the Battery is a simple process. Leave the Battery in your DR POWER GRADER when you charge it.

1. Attach the Black (-) alligator clipped wire from the Charger Adapter to the (-) terminal of the Battery, then attach the Red (+) alligator clipped wire to the (+) Battery terminal.
 2. Plug the Charger into a standard wall outlet.
- Every time you finish using your DR POWER GRADER, recharge the Battery. The time it takes to recharge the Battery depends on how drained it is when you start. Charging the Battery typically takes 6 to 8 hours if charged after each use. However, charging may take 24 to 48 hours if you allow the Battery to run down before it is charged. The Battery does not have a “memory”; so don’t worry about overcharging the Battery or charging it too often.
 - You can charge the Battery hundreds of times. The Battery lasts longer if you charge it before it is fully drained. Keep it fully charged and at room temperature when not using your DR POWER GRADER.
 - Once the Battery is charged, pull the plug from the wall outlet and then remove the Charger from your Battery. However, you can leave your Battery plugged in and charging for an extended period.
 - Store the Charger in its self-locking plastic shipping bag. Keep the charger in a dry location.
 - If the Battery does not hold its charge for very long under normal conditions or it simply won’t hold a charge, then replace it. You can purchase replacement Batteries directly from us. To install your new Battery, remove the Battery Cover, detach the cables and remove the dead Battery, next install the new Battery and attach the cables, then replace the Battery Cover. Refer to the assembly instructions for more details on page 13.

! NOTICE!

WHEN THE BATTERY GETS OLD AND NO LONGER ACCEPTS A CHARGE, REMOVE IT FROM YOUR GRADER. NEVER LEAVE A DEAD BATTERY IN YOUR GRADER.

Install the Scarifying Teeth Plates

The three (3) Scarifying Teeth Plates (there are four (4) plates on the 60" Model) are installed upside down for shipping. The following procedure is for installing the Scarifying Teeth Plates.

Tool Needed:

- (2) 9/16" Wrench

1. Use the Linear Actuator to raise the front of the DR POWER GRADER to the highest position.

! CAUTION!

PRIOR TO PERFORMING THE NEXT STEPS, DISCONNECT THE CONTROL BOX OR BATTERY TO PREVENT ACCIDENTAL ACTIVATION OF THE SCARIFYING TEETH PLATES.

2. Using two (2) 9/16" Wrenches, loosen and remove the two (2) Retaining Bolts on each Scarifying Teeth Plate (**Figure 12**).

NOTE: The 60" Model has four (4) sets of Scarifying Teeth Plates (48" Model shown in **Figure 12**).

3. Turn the Scarifying Teeth Plates over and reinstall with the mounting hardware as shown in **Figure 12**.

NOTE: The Scarifying Teeth Plates should be parallel to the frame when finished (**Figure 12**).

4. Tighten all of the Retaining Bolts on the Scarifying Teeth Plates and reconnect the Control Box or Battery.

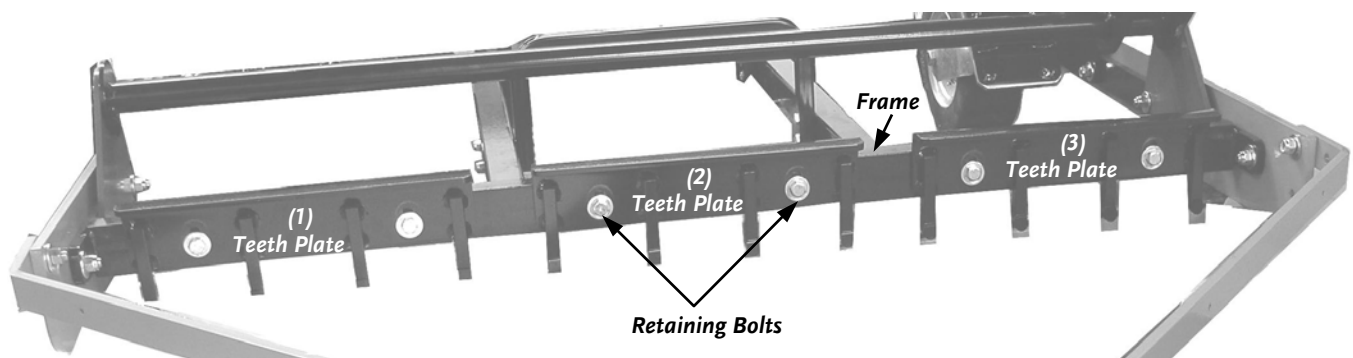


Figure 12

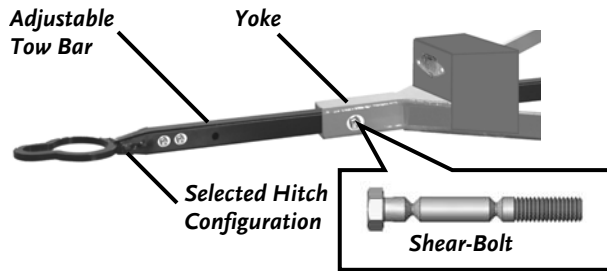


Figure 13

Connecting the DR POWER GRADER to your Tow Vehicle

The following procedure is for connecting the DR POWER GRADER to your tow vehicle using the Adjustable Tow Bar with the Hitch Pin configuration (Lawn Tractor) or Ball Hitch configuration (ATV).

Tools Needed:

- (2) 1/2" Wrench
- (2) 9/16" Wrench

1. Select the appropriate hitch configuration and using two (2) 1/2" Wrenches, attach the hitch to the Adjustable Tow Bar with two (2) 5/16"-18 x 2-1/2" Bolts, 5/16" Flat Washers, and 5/16"-18 Lock Nuts (**Figure 13**).

! NOTICE!

- **DO NOT OVER TIGHTEN THE SHEAR-BOLT.**
- **USE ONLY THE SHEAR-BOLT PROVIDED; USE OF ANY OTHER BOLT MAY CAUSE DAMAGE TO YOUR DR POWER GRADER. SEE FIGURE 13.**
- **THERE ARE TWO (2) EXTRA SHEAR-BOLTS PROVIDED. STORE THEM WITH YOUR OPERATORS MANUAL OR IN A SAFE LOCATION. KEEP ONE WITH YOU WHEN GRADING.**

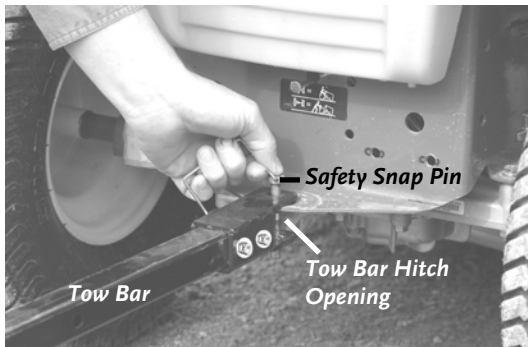


Figure 14

2. Insert the Adjustable Tow Bar into the front of the Yoke and align the holes between the Yoke and Tow Bar to suit the correct towing distance from your vehicle (**Figure 13**). Using two (2) 9/16" Wrenches, bolt the Tow Bar in place using the 3/8"-16 Shear-Bolt and 3/8" Locknut supplied.

Lawn Tractor:

1. Set the parking brake on your Lawn Tractor, lift the Tow Bar, and position the Tow Bar Hitch so that the Hitch Plate on your Lawn Tractor is in the opening in the Tow Bar Hitch (**Figure 14**).
2. Align the hole in the center of the Hitch Plate on your Lawn Tractor with the holes in the Tow Bar Hitch. Insert the Safety Snap Pin and attach the Safety Hitch Clip (**Figure 14**).

ATV:

1. Stop the engine and put the transmission in 1st gear. Set the parking brake on your ATV (if you have one), lift the Tow Bar on the DR POWER GRADER and slip the Keyhole Hitch over the Hitch Ball on the ATV (**Figure 15**); pulling back on the Tow Bar so the slot in the Keyhole Hitch fits around the Hitch Ball Shaft.

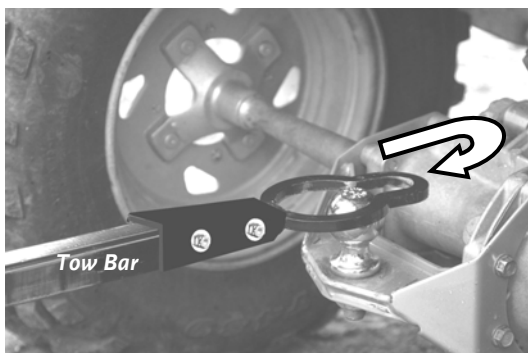


Figure 15

Attaching the DR POWER GRADER Control Box w/Rocker Switch

The following procedure includes the steps necessary for attaching the DR POWER GRADER Control Box w/Rocker Switch to your Tow Vehicle. There are two (2) options for attaching the Control Box:

1. Hang the Control Box by the attached U-Bolt (**Figure 16**) in an accessible and comfortable position on your Tow Vehicle from which you can operate the Height Adjustment Control Box w/Rocker Switch, or
2. Attach the Control Box on a clean flat surface using the self-adhesive Hook and Loop strips provided with the DR POWER GRADER (**Figure 16**).

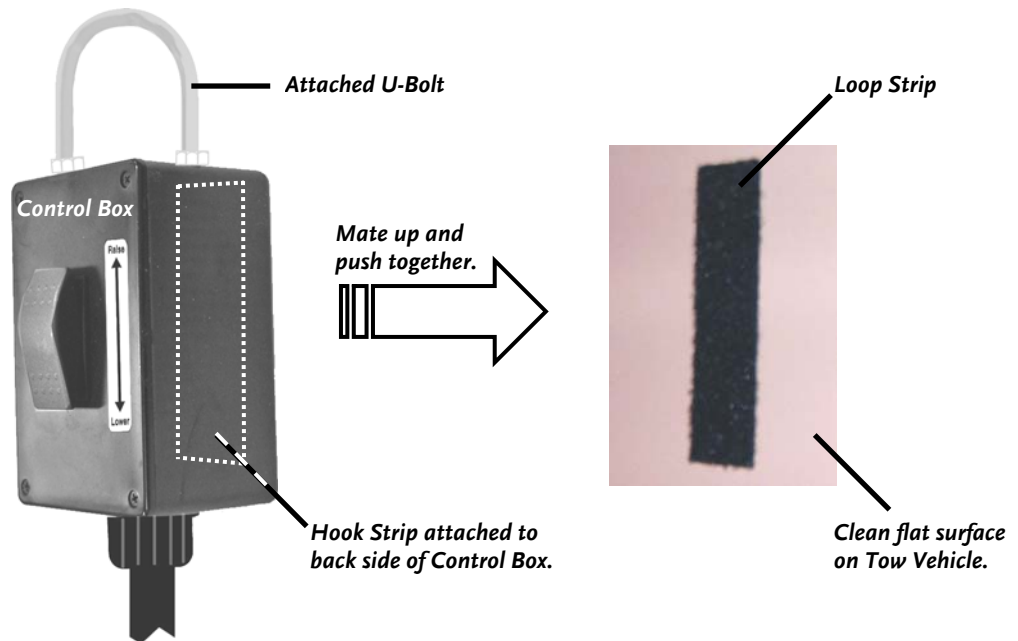


Figure 16

NOTE: Under some conditions, where very tight turning radii are encountered, the tension on the Control Box exerts a side thrust which can cause the Control Cable to be pulled from the Quick Disconnect Receptacle Box. In addition, if the Shear-Bolt should shear, the Control Cable must pull straight out of the Receptacle Box to disconnect freely. To assure this, tie the Control Cable to the Tow bar using the following procedure.

1. Install a Safety Snap Pin into the hole in the Tow Bar and around Control Cable (**Figure 17**).
2. Run a Wire Tie around the Control Cable and through the Yoke on the Safety Snap Pin (**Figure 18**).
3. Put the end of the Wire Tie into the Wire Tie Catch and draw the Tie closed, but do not tighten it completely (**Figure 18**). The Control Cable should be free to slip through the Tie during turns.

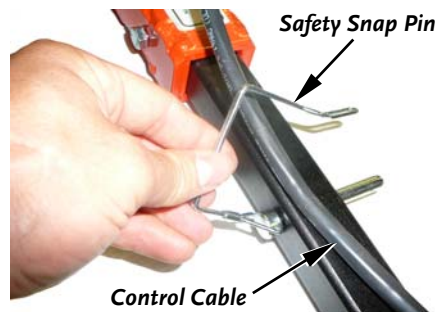


Figure 17

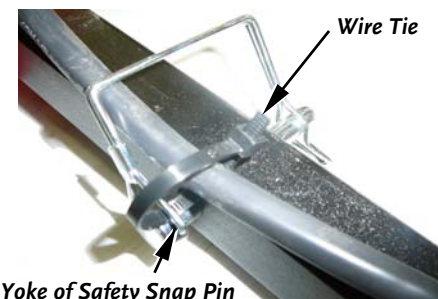


Figure 18

OPERATING YOUR DR POWER GRADER

This chapter covers the procedures for operating your new DR POWER GRADER and discusses basic operation features. You may find it helpful to review the Controls and Features on page 9.

Operating Safety

! WARNING!

- NEVER ALLOW ANYONE TO OPERATE THE DR POWER GRADER WITHOUT FIRST READING AND UNDERSTANDING ALL INSTRUCTIONS IN THIS MANUAL. BE THOROUGHLY FAMILIAR WITH THE CONTROLS AND THE PROPER USE OF YOUR GRADER BEFORE USING.
- NEVER LET PEOPLE RIDE ON THE GRADER.
- ALWAYS CHECK FOR OBJECTS IN THE GRADER'S PATH BEFORE MOVING.
- WHEN OPERATING IN A ROADWAY, WE SUGGEST THAT YOU PUT OUT OBSTRUCTIONS (MARKER CONES OR PAILS) TO DIVERT ANY TRAFFIC AWAY FROM YOUR WORK AREA. ALWAYS BE AWARE OF POTENTIAL TRAFFIC HAZARDS.

Understanding the Height Adjustment Control Box

The Height Adjustment Control Box contains a 3-position momentary Rocker Switch. The “Raise” position raises the Scarifying Teeth. The “Lower” position lowers the Scarifying Teeth. When you release the Switch, it will return to center or OFF position (*Figure 19*).



Figure 19

Operating Parameters

There are four (4) different types of tow vehicles recommended for the DR POWER GRADER. Each vehicle type has specific strengths, weaknesses, and operating parameters when used with the DR POWER GRADER.

- **Lawn Tractor**

- 14 HP and/or 500 pound tractor minimum for the 48" Model.
- 19 HP and/or 500 pound tractor minimum for the 60" Model.
- 5° slope or less.
- Material loosened during grading increases traction difficulties.
- Very good speed control and turning radius.
- Frequent Scarifying Teeth adjustment is necessary to maintain traction.
- Forward motion of the DR POWER GRADER should be initiated before ground contact.

- **Garden Tractor**

- 14 HP and/or 500 pound tractor minimum for the 48" Model..
- 19 HP and/or 500 pound tractor minimum for the 60" Model.
- 5° slope or less.
- Material loosened during grading increases traction difficulties.
- Very good speed control and turning radius.
- Frequent Scarifying Teeth adjustment may be necessary to maintain traction.
- Forward motion of the DR POWER GRADER may need to be initiated before ground contact.

- **ATV**

- Traction issues are less evident.
- More difficult to maintain consistent speed.
- Turning radius is large (best used for large, straight drives).

- **Utility Tractor**

- Traction is excellent.
- Visibility is very good.
- With the increased power, the chance of accidentally damaging the DR POWER GRADER's frame is increased.

- **Truck or Car**

- Do not use these types of vehicles; the DR POWER GRADER would be difficult to see.
- NEVER operate the DR POWER GRADER with a Truck (2WD or 4WD); doing so will void the DR POWER GRADER Warranty.

Operating Tips

CAUTION!

- **CLEAN OUT THE BOTTOM OF THE BATTERY HOLDER COMPLETELY BEFORE RE-INSTALLING THE BATTERY.**
 - **USING THE 8" HOOK AND LOOP STRAP, HANG THE EXTRA CABLE TO KEEP IT OUT OF THE WHEELS.**
 - **LOWER THE GRADER FRAME COMPLETELY TO THE GROUND SURFACE WHEN TRANSPORTING ON A TRAILER, PARKING ON A HILL, OR SERVICING THE GRADER.**
-

- Use additional weight (up to 70 pounds) in the Weight Tray when grading hard pack to begin scarification.
- Remove weight when the surface material loosens or when experiencing traction difficulties.
- Remove the weight and Weight Tray when grading in muddy conditions or sandy soil.
- Extend the Tow Bar to the fullest setting when used with a Utility Tractor.
- Expect to make 4 to 10 passes with the DR POWER GRADER to repair a roadway, depending on the condition.
- Avoid filling Pot Holes filled with water, wait until the holes are dry.
- Work the edges of Pot Holes that are more than 4 feet wide to soften the sides before you begin filling them.
- Avoid large rocks, embedded ledge, cattle guards, or similar obstructions.
- Remove rocks pulled to the surface during grading to provide a better final graded surface.
 - They can catch under the lawn deck (for lawn tractors).
- Once you have adequately scarified the road surface, raise the Scarifying Teeth Plates to allow the Rear Scrapper Blade to create a smooth surface.
 - Raise the Scarifying Teeth Plates out of the ground before turning around or leaving the work area.
- When using a lawn tractor as the tow vehicle, put the lawn mowing deck in the highest setting or just remove the deck to obtain the highest ground clearance.
 - For ease, do your spring grading before re-installing your lawn deck for the summer mowing activity.
- When using the DR POWER GRADER to prepare a seed bed, remove all large debris before grading.
 - Use the Optional Drag Screen to create the best finish in sand or to incorporate seed.
- Use Low Gear when using an ATV as the tow vehicle – Do not exceed 5 MPH while grading.
 - The maximum speed when not grading is 15 MPH.

NOTICE!

- **BRING THE CONTROL BOX INSIDE WHEN FINISHED GRADING.**
 - **FREQUENTLY CHECK THE TIGHTNESS OF THE BOLTS THAT FASTEN THE SCARIFYING TEETH PLATES TO THE FRAME.**
-

FAQ's

- *Can the DR POWER GRADER create a crown in the road?*

Answer: No

- *Can the DR POWER GRADER maintain the crown in the road?*

Answer: Yes, you can grade each side separately.

- *Can the DR POWER GRADER ruin the crown in the road?*

Answer: Yes, only if you grade down the centerline of the road.

- *How long will the battery last?*

Answer: Approximately 20 hours or 800 up/down cycles.

- *Can I use my lawn tractor in sandy soils?*

Answer: Lawn tractors do not perform as well as an ATV or utility tractor in sandy soils.

- *Why does the Yoke have a Shear-Bolt?*

Answer: The Shear-Bolt will absorb the shock by breaking if you hit a large rock, ledge, or other obstruction.

MAINTAINING THE DR POWER GRADER

This chapter covers regular maintenance procedures that will ensure the best performance and long life of your DR POWER GRADER.

WARNING!

WHEN PERFORMING ANY MAINTENANCE, YOU MUST FIRST SHUT OFF THE TOW VEHICLE, SET THE PARKING BRAKE AND UNPLUG THE CONTROL CABLE. READ THE "GENERAL SAFETY RULES" (CHAPTER 2) OF THIS MANUAL BEFORE PERFORMING ANY REPAIRS OR MAINTENANCE.

Regular Maintenance Check:

- Keep the battery charged. See page 17.
- Hose down the DR POWER GRADER to keep the Scarifying Teeth Plates clean and clear of debris.

NOTICE!

DO NOT USE A POWER WASHER; THIS MAY FORCE WATER THROUGH THE SEALS ON THE HEIGHT ADJUSTING ACTUATOR.

- Verify that all Nuts and Bolts are tight.
- Check the Shear-Bolt for wear by grabbing the end and try to wiggle it. Replace the Shear-Bolt if worn or loose. Do not over tighten.
- Lubricate the Caster Wheel bearings every 25 hours of operation. See page 30.
- Check the general condition of the DR POWER GRADER, e.g., nuts, bolts, welds, etc.
- Periodically, (every 50 hours is recommended) remove the Scarifying Teeth Plates and clean between the plates and frame. This will allow for proper securing of the Scarifying Teeth Plates in their set position.

Caring for the Battery

Proper care can lengthen the life of a battery. Follow these recommendations to ensure your battery's best performance and long life:

- Do not continue to operate your DR POWER GRADER with a low battery.
- Try to keep your battery at full charge to maximize its life. If the machine is not used, charge the battery monthly. See "Charging the Battery" on page 17.
- Before charging the battery, observe its external appearance and keep it clean and dry. Never charge or use a battery that shows cracks, changes shape, leaks, or otherwise obviously damaged.
- Recharge a battery before fully discharged. **NEVER allow the battery to run down completely before charging. Leaving the battery discharged damages the battery.** Charge the battery at least once per month, even if you have not used your DR POWER GRADER.
- If the battery begins to leak, avoid contact with the leaking acid. Place the damaged battery in a plastic bag, then dispose of it properly.

WARNING!

IF BATTERY ACID DOES CONTACT YOUR SKIN OR EYES, FLUSH WITH COOL WATER FOR AT LEAST 15 MINUTES AND CALL A PHYSICIAN. IF ACID IS INGESTED, CALL A PHYSICIAN IMMEDIATELY.

Recycling a Used Battery

NOTICE!

PLEASE DISPOSE OF USED BATTERIES RESPONSIBLY, ACCORDING TO YOUR LOCAL HAZARDOUS MATERIALS REGULATIONS. NEVER THROW AWAY USED BATTERIES IN YOUR HOUSEHOLD TRASH.

Please dispose of your used batteries responsibly by recycling them. Call your local Solid Waste Management District or your local waste handler to locate the collection site nearest you. Some collection sites recycle batteries year-round; others collect them periodically.

You can also visit the Website of Earth 911 for more information (www.earth911.org). Once there, click the Municipal HHW link under Hazardous Household Waste, and enter your zip code. The site lists recycling centers located near you.

For a fee, you can recycle your batteries with the International Metals Reclamation Company. Visit them at www.inmetco.com and click Services, then click Battery Recycling; or contact them at:

INMETCO
PO Box 720
245 Portersville Road
Ellwood City, PA 16117
(724) 758-2800; fax (724) 758-2845

To learn more about hazardous waste recycling, visit the Website for Battery Council International (www.batterycouncil.org) or for the Environmental Protection Agency (www.epa.gov).

Replacing the Scarifying Teeth Plates

The following procedure is for replacing the three (3) Scarifying Teeth Plates (there are four (4) plates on the 60" Model).

To replace the Scarifying Teeth Plates:

Tool Needed:

- (2) 9/16" Wrench

1. Use the Linear Actuator to raise the front of the DR POWER GRADER to the maximum position.

! CAUTION!

PRIOR TO PERFORMING THE NEXT STEPS, DISCONNECT THE CONTROL BOX OR BATTERY TO PREVENT ACCIDENTAL ACTIVATION OF THE SCARIFYING TEETH PLATES.

2. Using two (2) 9/16" Wrenches, loosen and remove the two (2) Retaining Bolts on each Scarifying Teeth Plate (*Figure 20*).

NOTE: The 60" Model has four (4) sets of Scarifying Teeth Plates (48" Model shown in *Figure 20*).

3. Remove the old Scarifying Teeth Plates, clean the Frame, and replace them with the new Plates.

NOTE: The Scarifying Teeth Plates should be parallel to the frame when finished (*Figure 20*).

4. Tighten the Retaining Bolts on each Scarifying Teeth Plate and then reconnect the Control Box.

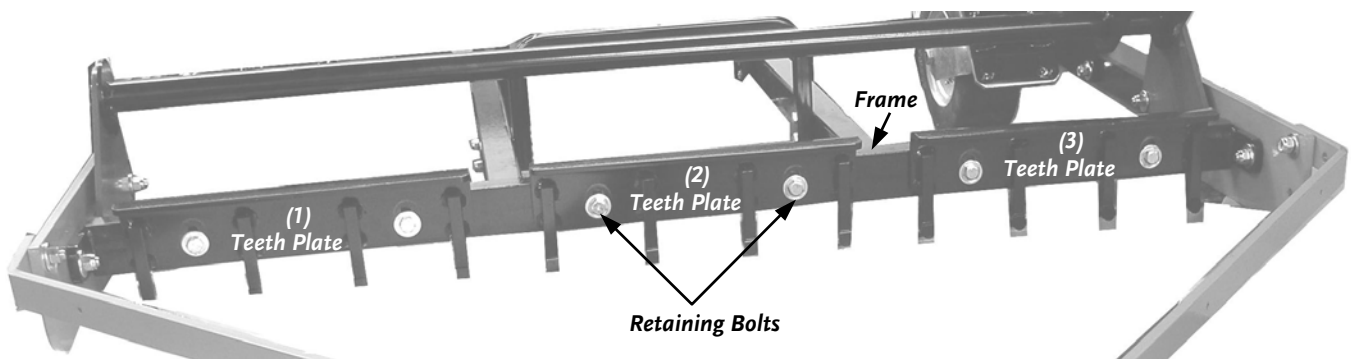


Figure 20

Lubrication

! WARNING!

WHEN PERFORMING ANY MAINTENANCE, YOU MUST FIRST SHUT OFF THE TOW VEHICLE, SET THE PARKING BRAKE AND UNPLUG THE CONTROL CABLE.

Tools and Supplies Needed

- Flexible hose grease gun
- Lithium grease

NOTE: Pump the grease gun only until you feel slight resistance (2 - 3 pumps).

1. Lubricate the Rear Fixed Wheel, the Front Caster Wheel and Caster bearings at the grease fittings every 25 hours of operation (**Figure 21**).



Figure 21

End of Season and Storage

- Charge the battery and bring it inside to store above freezing temperatures. See page 17.
- Hose down the DR POWER GRADER. Remove the Scarifying Teeth Plates to clean and clear them of debris.

! NOTICE!

DO NOT USE A POWER WASHER; THIS MAY FORCE WATER THROUGH THE SEALS ON THE HEIGHT ADJUSTING ACTUATOR.

- Lubricate the Rear Wheel bearings, Front Wheel bearings, and the Caster bearings.
- Wipe down the DR POWER GRADER to remove any moisture and dirt that may have accumulated.
- Remove the Control Box and store it, and the DR POWER GRADER, in a dry area to prevent moisture from damaging the electrical components of the machine.

TROUBLESHOOTING

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

Troubleshooting Table



WHEN PERFORMING ANY MAINTENANCE, YOU MUST FIRST SHUT OFF THE TOW VEHICLE, SET THE PARKING BRAKE, LOWER THE GRADER TO THE GROUND, AND UNPLUG THE CONTROL CABLE.

<i>SYMPTOM</i>	<i>POSSIBLE CAUSE</i>
<i>Frequently have to re-align the Scarifying Teeth Plates.</i>	⇒ Dirt has accumulated between the Scarifying Teeth Plates and Grader Frame. Remove the Scarifying Teeth Plates and wipe down the surfaces between the plates and the frame to remove accumulated dirt. Re-install the plates.
<i>The wheels on the tow vehicle spin during the grading operation.</i>	⇒ The Scarifying Teeth are set too low, causing too large a section of surface to be removed. Raise the height of the Scarifying Teeth Plates to improve traction. ⇒ There is too much weight in the Weight Tray. Remove some of the weight. ⇒ The Tow Vehicle is not adequate for your application.
<i>The Scarifying Teeth Plates will not move up or down with Control Box.</i>	⇒ The battery charge is low; charge the battery. ⇒ Loose wire connection. Check the connection at the Control Box quick release connector and the battery terminal connections. ⇒ If the problem persists, call 1-800-DR-OWNER (376-9637) for assistance.

PARTS LIST, SCHEMATIC DIAGRAM AND WARRANTY

Parts List - DR POWER GRADER Assembly

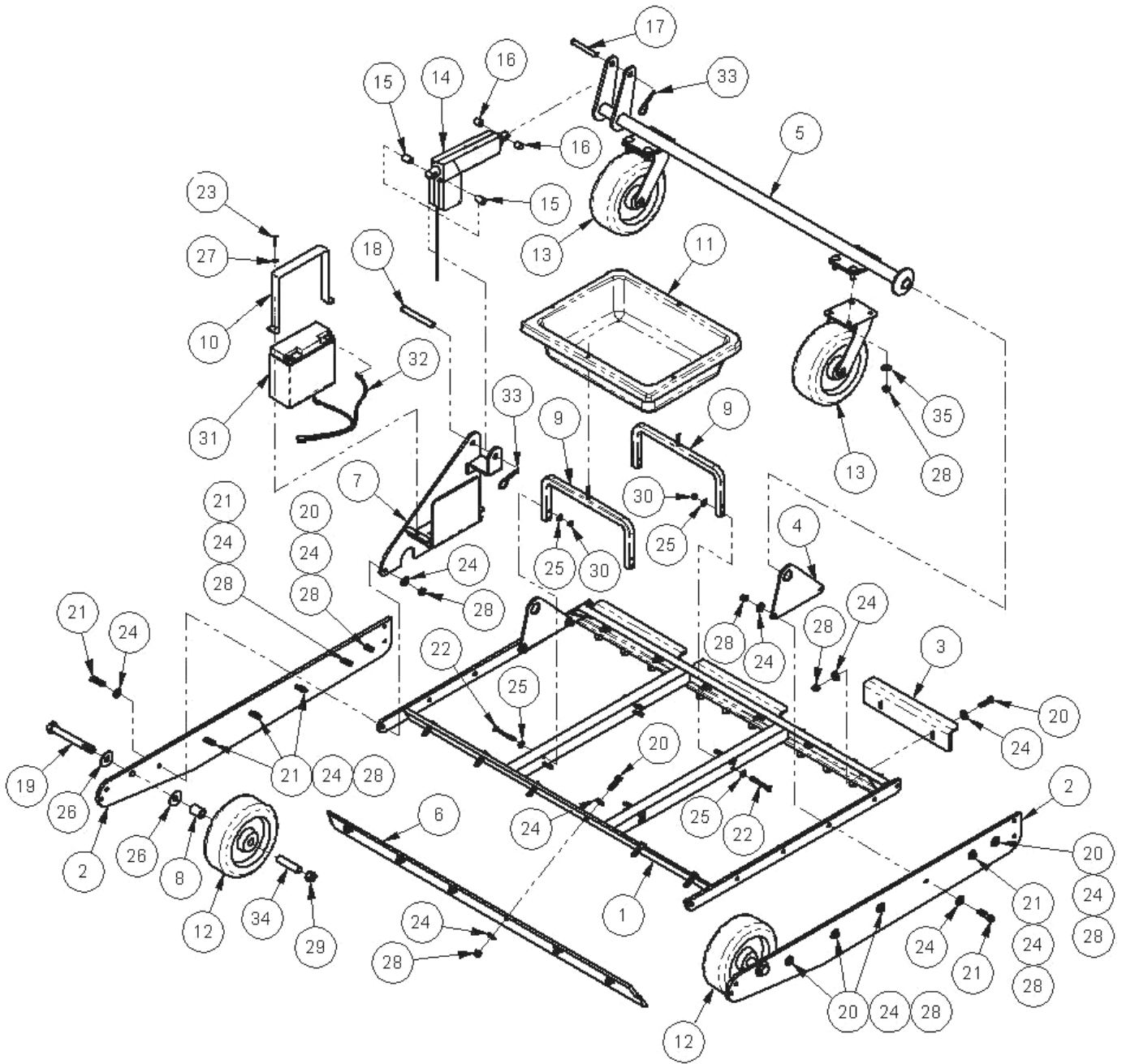
NOTE: Part numbers listed are available through Country Home Products, Inc.

Ref#	Part#	Description	Ref#	Part#	Description
01	191401	Frame, 48" Subassembly	31	104831	Battery, 12 VDC, 17 Amp-Hour
	221861	Frame, 60" Subassembly	32	191621	Wire Harness, Battery
02	191411	Rail, Side	33	160031	Pin, Hitch Clip, 1/2" to 9/16"
03	191461	Scarifying Teeth Plate (48" or 60" model)	34	214111	Spacer, .63" ID, .75" OD, 3.075" L
04	191421	Bracket, Caster	35	121701	Washer, Flat, 3/8" SAE
05	214571	Axle Assembly (48" model)	36	112381	Washer, Flat, 1/4" USS
	221871	Axle Assembly (60" model)	37	112411	Washer, Flat, 5/16", USS
06	191441	Blade, Scraper (48" model)	38	157451	Washer, Flat, 5/8", ANSI Type B, ZP
	221911	Blade, Scraper (60" model)	39	101811	Washer, Lock, 1/4", Split, ZP
07	191451	Bracket, Battery Mount	40	112481	Washer, Lock, 1/4", External Tooth
08	191531	Spacer, .688" ID, 1.0" OD, 1.38" L	41	110751	Nut, Nylon Lock, 3/8"-16
09	191821	Bracket, Tray Support (48" model)			
	221901	Bracket, Tray Support (60" model)			
10	124511	Clamp, Battery, 7-1/8" W x 5-1/2" H			
11	112261	Tray, Tool, 15" x 18" x 4.5"			
12	191471	Wheel, 8.0" Diameter			
13	191481	Wheel, Castor, 8.75" Diameter			
14	214561	Actuator, Linear Bar			
15	191541	Spacer, .545" ID, .675" OD, 1.06" L			
16	191551	Spacer, .545" ID, .675" OD, .71" L			
17	211541	Pin, Clevis, 1/2" x 3.5"L			
18	187371	Pin, Clevis, 1/2" x 4.5"L			
19	191741	Bolt, 5/8"-18 x 6.0" HCS			
20	119851	Bolt, 3/8"-16 x 1-1/2" HCS			
21	123341	Bolt, 3/8"-16 x 1-3/4" HCS			
22	180851	Bolt, 1/4"-20 x 2-3/4" HCS			
23	114701	Bolt, 1/4"-20 x 1/2" HCS			
24	112391	Washer, Flat, 3/8" USS			
25	112371	Washer, Flat, 10-24 USS			
26	157451	Washer, Flat, 5/8" USS			
27	112481	Washer, Lock, 1/4"			
28	110751	Nut, Nylon Lock, 3/8"-16			
29	160071	Nut, Nylon Lock, 5/8"- 18			
30	110731	Nut, Nylon Lock, 1/4"- 20			

Items Not Illustrated

113011	Charger, Battery
113041	Adapter, Battery Charger
193481	Label, Caution, Load Capacity
142201	Fuse, 20 amp

Schematic - DR POWER GRADER Assembly



070115

Parts List - DR POWER GRADER Control Assembly

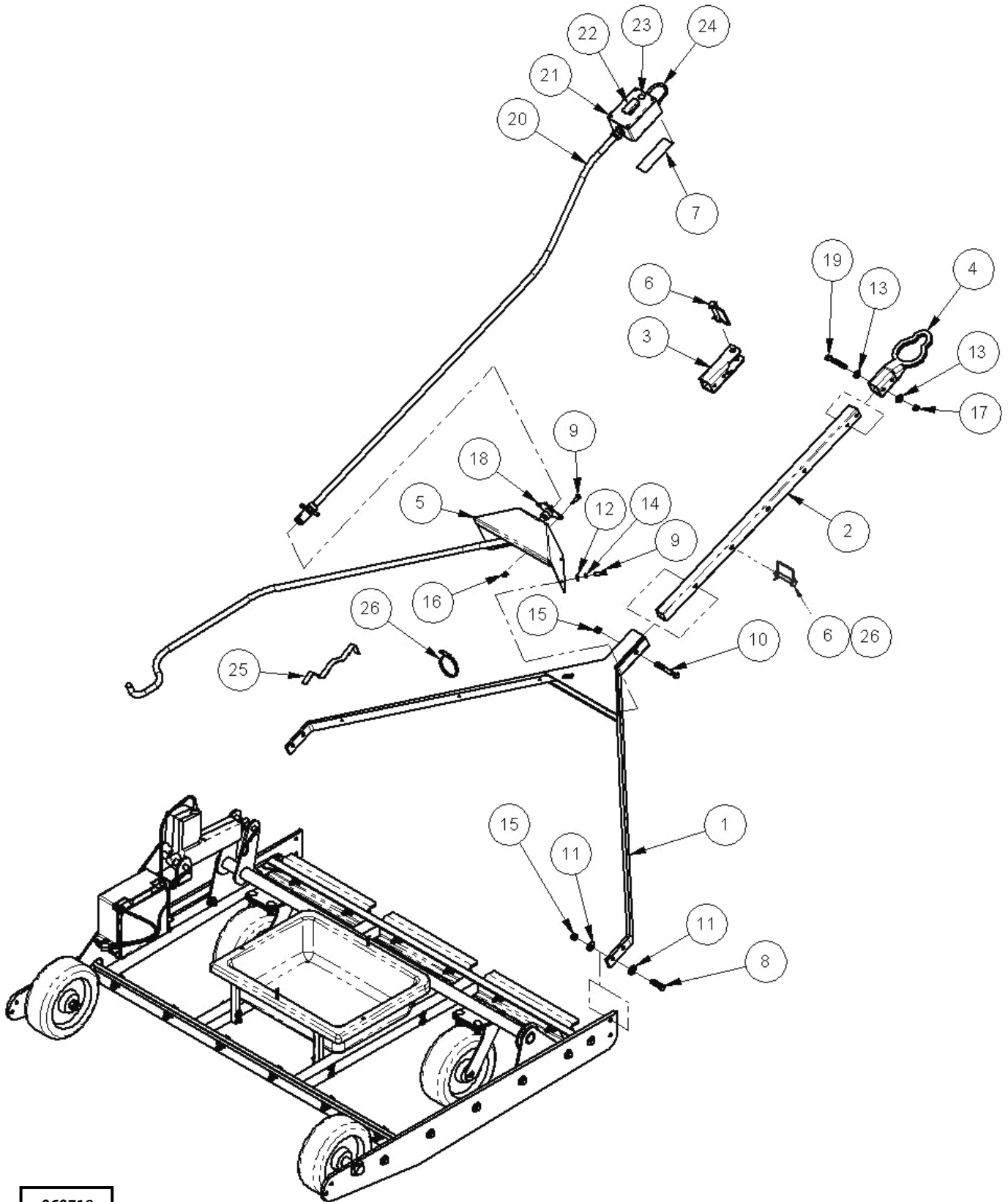
NOTE: Part numbers listed are available through Country Home Products, Inc.

Ref#	Part#	Description
01	191491	Yoke (48" model)
	221881	Yoke (60" model)
02	211521	Bar, Tow
03	191771	Hitch, Tow, Tractor
04	193731	Hitch, Tow Hook
05	191861	Bracket, Receptacle
06	211551	Pin, Snap, Safety, 3/8" x 2.25"
07	191691	Hook & Loop, w/Adhesive
08	119851	Bolt, 3/8"-16 x 1-1/2" HCS
09	111491	Bolt, 1/4"-20 x 1" HCS
10	191871	Bolt, Shear
11	112391	Washer, Flat, 3/8" USS
12	112381	Washer, Flat, 1/4" USS
13	112411	Washer, Flat, 5/16" USS
14	101811	Washer, Lock, 1/4"
15	110751	Nut, Nylon Lock, 3/8"-16
16	110731	Nut, Nylon Lock, 1/4"-20
17	110761	Nut, Nylon Lock, 5/16"-18
18	211561	Cord Assembly, Actuator
19	111591	Bolt, 5/16"-18 x 2-1/2" HCS
20	214011	Cord Assembly, Power Grader
21	191631	Box, Switch
22	191641	Switch, Rocker, DPDT, Momentary
23	193421	Plug, Toggle Switch
24	191731	U-Bolt, 1/4"-20 x 1-3/4" W x 3.0" L
25	191651	Strap, Hook & Loop
26	112141	Cable Tie, 7-1/2", Black

Items Not Illustrated

124371	Label, American Flag
192391	Label, 5-3/4" DR Logo, Silver
193391	Label, Warning MPH
193491	Label, Raise/Lower
214191	Label, Shear-Bolt Warning
221161	Label, Wire Use

Schematic - DR POWER GRADER Control Assembly



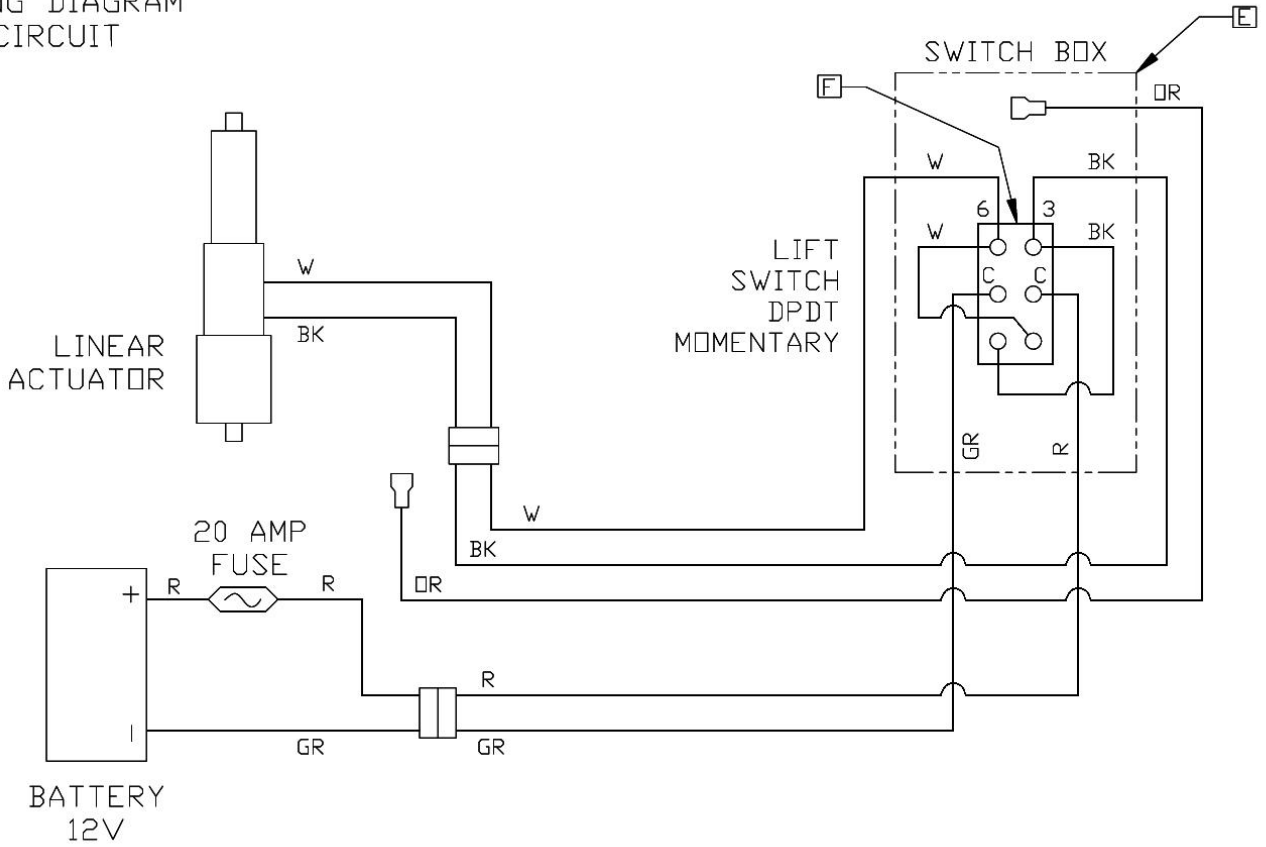
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CALL TOLL-FREE 1-800-DR-OWNER

Wiring Diagram

CHP POWER GRADER
 WIRING DIAGRAM
 12V CIRCUIT

E	SWITCH BDX
F	SWITCH, ROCKER



061203

DR[®] POWER GRADER



2-Year Limited Warranty

Terms and Conditions

The DR[®] POWER GRADER™ is warranted for two (2) years 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. (home of DR[®] Power Equipment) certifies that the DR[®] POWER GRADER™ 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 two (2) years in consumer use, ninety (90) days for any other use.

The 2-Year Limited Warranty on the DR[®] POWER GRADER™ starts on the date the machine ships from our factory. The 2-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 owner's manual. The warranty holder is responsible for replacement of normally wearing parts such as the Scarifying Teeth, Rear Scraper Blade, and Battery. 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 ship 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[®] POWER GRADER™.

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 HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

Daily Checklist for the DR POWER GRADER

To help maintain your DR POWER GRADER 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 secure.
- FRAME:** Check all welds to be sure that the frame is in tact and secure.
- CLEAN:** Make sure that mating surface between the Scarifying Teeth Plates and the Frame is clean and free of debris.
- BATTERY:** Make sure the Battery is fully charged.



COUNTRY HOME PRODUCTS, Inc.

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

1-800-DR-OWNER (376-9637) • www.dr-owner.com

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