

# DR<sup>®</sup> SNOW THROWER ATTACHMENT

## SAFETY & OPERATING INSTRUCTIONS



30" Single Stage SNOW THROWER for use with DR<sup>®</sup> FIELD and BRUSH MOWERS

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### **! WARNING!**

**PLEASE READ AND UNDERSTAND THIS MANUAL AND ALL INSTRUCTIONS BEFORE OPERATING THIS ATTACHMENT.**

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Congratulations on your purchase of a new DR SNOW THROWER ATTACHMENT!

We have done our utmost to ensure that your DR SNOW THROWER ATTACHMENT 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 or correct 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.** 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 SNOW THROWER ATTACHMENT! Having 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  
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## INTRODUCING THE DR SNOW THROWER ATTACHMENT

This manual will help you set up and safely operate your new DR SNOW THROWER ATTACHMENT. 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*

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#### **WARNING!**

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

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#### **CAUTION!**

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

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#### **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.

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**Tip:** This is a helpful hint to guide you in getting the most out of your DR SNOW THROWER ATTACHMENT.

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

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

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

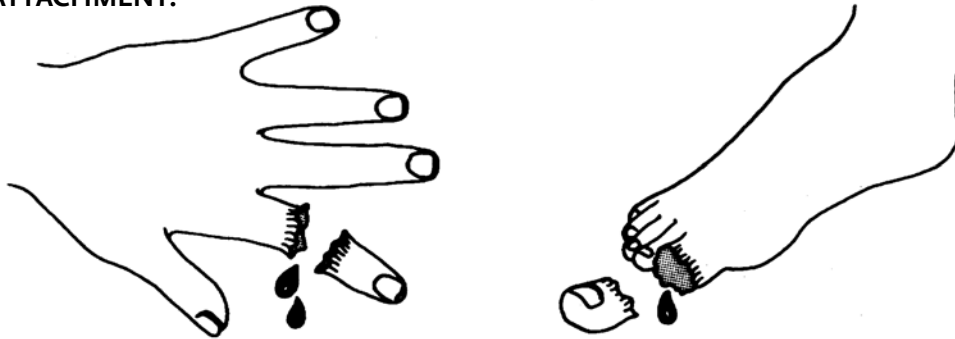
## Specifications

Country Home Products, Inc. Single Stage DR SNOW THROWER ATTACHMENT	
Overall width	30-1/2"
Overall height (without chute)	18-3/4"
Overall height (with chute)	35-1/2"
Overall length	29-1/2 "
Inlet width	29-3/4"
Inlet height	17-7/8"
Frame thickness	12 gauge
Side thickness	12 gauge
Number of stages	1
Drive	"V" type Belt and "V" type Pulley
Drive Pulley	6" O.D.
Idler belt adjustment	Automatic Spring Tensioner
Auger Drive	#40 Chain and Sprockets
Ratio	2.82:1
Auger RPM	1100 RPM
Idler chain adjustment	Automatic Spring Tensioner
Auger diameter	11-3/4"
Auger pitch	11-3/4"; Dual Pitch
Chute position	Center
Chute rotation	Manual
Adjustable Deflector	Yes
Adjustable Skid Shoes	Yes
Replaceable Cutting Edge	Yes
Shear-Bolt on Drive Pulley	Yes
Drift Cutters	Optional
Hitch System	Fixed to DR Field and Brush Mower
Weight with Chute	138 lbs.

## GENERAL SAFETY RULES

### **WARNING!**

- READ THIS *SAFETY & OPERATING INSTRUCTIONS* MANUAL BEFORE YOU USE THE DR SNOW THROWER ATTACHMENT. BECOME FAMILIAR WITH THE OPERATION AND SERVICE RECOMMENDATIONS TO ENSURE THE BEST PERFORMANCE FROM YOUR NEW SNOW THROWER. ALSO, REVIEW THE *SAFETY & OPERATING INSTRUCTIONS* FOR YOUR DR FIELD and BRUSH MOWER BEFORE THE SET UP AND OPERATION OF THE DR SNOW THROWER ATTACHMENT.
- THOROUGHLY INSPECT THE AREA IN WHICH YOU WILL BE WORKING AND REMOVE ALL OBJECTS THAT COULD DAMAGE THE SNOW THROWER.
- THIS IS A HIGH-POWERED MACHINE, WITH MOVING PARTS OPERATING WITH HIGH ENERGY AT HIGH SPEEDS. YOU MUST USE PROPER CLOTHING AND SAFETY GEAR WHEN OPERATING THIS MACHINE TO PREVENT OR MINIMIZE THE RISK OF SEVERE INJURY. THIS MACHINE CAN CRUSH, GRIND, CUT, AND SEVER PARTS OF YOUR BODY IF THEY ENTER THE INLET OR DISCHARGE AREA OF YOUR DR SNOW THROWER ATTACHMENT.



### Labels

Your DR SNOW THROWER ATTACHMENT 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 SNOW THROWER ATTACHMENT as you assemble and *before* you operate the unit. Replace damaged or missing safety and information labels immediately.



Make sure to read and observe all Warnings before operating the machine. (#215101)



Keep your hands, feet, and clothing away from the rotating Auger. (#215121)



Keep your hands, feet, and clothing away from the Drive Belt, and shut off the Power Unit engine before servicing. (#215141)



Keep your hands out of the Discharge Chute. (#215111)



Stop the engine and lubricate the Drive Chain after every two (2) hours of operation. (#215131)



## Protecting Yourself and Those Around You

### **WARNING!**

THIS IS A HIGH-POWERED MACHINE, WITH MOVING PARTS OPERATING WITH HIGH ENERGY AT HIGH SPEEDS. YOU MUST OPERATE THE MACHINE 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 OPERATING THIS MACHINE:

- ALWAYS SET THE PARKING BRAKE AND BE SURE THE SNOW THROWER AUGER (BLADE) AND WHEEL CONTROLS ARE DISENGAGED BEFORE ATTEMPTING TO START THE ENGINE ON YOUR DR FIELD AND BRUSH MOWER.
- ALWAYS WEAR PROTECTIVE GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS WHILE OPERATING THE SNOW THROWER TO PROTECT YOUR EYES FROM POSSIBLE THROWN DEBRIS.
- AVOID WEARING LOOSE CLOTHING OR JEWELRY, WHICH CAN CATCH ON MOVING PARTS OR CONTROLS.
- WE RECOMMEND THAT YOU WEAR ADEQUATE WINTER GARMENTS WHEN OPERATING THE SNOW THROWER. BE SURE YOUR GLOVES FIT PROPERLY AND DO NOT HAVE LOOSE CUFFS OR DRAWSTRINGS.
- USE EAR PROTECTORS OR EAR PLUGS RATED FOR AT LEAST 20 DBA TO PROTECT YOUR HEARING.
- NEVER ALLOW PEOPLE WHO ARE UNFAMILIAR WITH THESE INSTRUCTIONS TO USE THE DR SNOW THROWER ATTACHMENT. ALLOW ONLY RESPONSIBLE INDIVIDUALS WHO ARE FAMILIAR WITH THESE RULES OF SAFE OPERATION TO USE YOUR MACHINE.
- KEEP YOUR HANDS AND FEET AWAY FROM THE BELTS, CHAINS, PULLEYS, AND CONCEALED AREAS WHILE THE ENGINE IS RUNNING. NEVER REACH IN THE SNOW THROWER CHUTE OR AUGER AREA WHEN THE ENGINE IS RUNNING.
- WATCH FOR TRAFFIC WHEN OPERATING IN OR NEAR ROADWAYS. PAY EXTRA ATTENTION WHEN OPERATING NEAR PUBLIC ROADWAYS.
- BE AWARE OF YOUR SURROUNDINGS WHEN OPERATING THE DR SNOW THROWER ATTACHMENT, E.G., DITCHES, CULVERTS, DROP-OFFS, AND HILLS.
- KEEP BYSTANDERS AWAY FROM YOUR WORK AREA AT ALL TIMES. SNOW AND ICE EXIT THE MACHINE AT HIGH SPEED. TO BE SAFE, DO NOT OPERATE THE MACHINE NEAR SMALL CHILDREN OR PETS, AND NEVER ALLOW CHILDREN TO OPERATE THE MACHINE. DISENGAGE THE SNOW THROWER AND STOP THE ENGINE WHEN ANOTHER PERSON OR PET APPROACHES.
- ALWAYS OPERATE THE SNOW THROWER FROM THE “OPERATOR ZONE” (FIGURE 10 ON PAGE 14). NEVER PASS BY THE DISCHARGE CHUTE WHEN THE ENGINE IS RUNNING OR THE AUGER IS TURNING.
- ALWAYS DISENGAGE THE SNOW THROWER BELT DRIVE, TURN OFF THE POWER UNIT ENGINE AND REMOVE THE SPARK PLUG WIRE(S) BEFORE CLEANING, ADJUSTING OR SERVICING THE SNOW THROWER.
- USE EXTRA CARE WHEN APPROACHING BLIND CORNERS, SHRUBS, TREES, OR OTHER OBSTRUCTIONS THAT MIGHT HIDE PEOPLE OR PETS FROM SIGHT.
- CLEAR THE AREA OF OBJECTS SUCH AS SLEDS AND SHOVELS, ETC. INGESTING THESE OBJECTS INTO THE SNOW THROWER COULD DAMAGE THE MACHINE AND/OR CAUSE INJURY.
- NEVER, UNDER ANY CONDITIONS, REMOVE, BEND, CUT, FIT, WELD, OR OTHERWISE ALTER STANDARD PARTS ON THE DR SNOW THROWER ATTACHMENT. MODIFICATIONS TO YOUR MACHINE COULD CAUSE PERSONAL INJURIES AND PROPERTY DAMAGE AND WILL VOID YOUR WARRANTY.

## *Safety for Children and Pets*

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### **WARNING!**

TRAGIC ACCIDENTS CAN OCCUR IF THE OPERATOR IS NOT ALERT TO THE PRESENCE OF CHILDREN AND PETS. CHILDREN ARE OFTEN ATTRACTED TO THE MACHINE AND THE SNOW THROWING ACTIVITY. NEVER ASSUME THAT CHILDREN WILL REMAIN WHERE YOU LAST SAW THEM. ALWAYS FOLLOW THESE PRECAUTIONS:

- KEEP CHILDREN AND PETS OUT OF THE WORKING AREA AND UNDER THE WATCHFUL CARE OF A RESPONSIBLE ADULT.
  - BE ALERT AND TURN THE MACHINE OFF IF CHILDREN OR PETS ENTER THE WORK AREA.
  - NEVER ALLOW CHILDREN TO OPERATE THE MACHINE.
- 

## *Safety with Gasoline-Powered Engines*

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### **WARNING!**

GASOLINE IS A HIGHLY FLAMMABLE LIQUID. GASOLINE ALSO GIVES OFF FLAMMABLE VAPOR THAT CAN BE EASILY IGNITED AND CAUSE A FIRE OR EXPLOSION. NEVER OVERLOOK THE HAZARDS OF GASOLINE. ALWAYS FOLLOW THESE PRECAUTIONS:

- DO NOT RUN THE ENGINE INDOORS EXCEPT TO TRANSPORT THE DR SNOW THROWER ATTACHMENT IN OR OUT OF A BUILDING AS YOU COULD BREATHE IN DANGEROUS CARBON MONOXIDE GAS FROM THE ENGINE EXHAUST.
  - STORE ALL FUEL AND OIL IN CONTAINERS SPECIFICALLY DESIGNED AND APPROVED FOR THIS PURPOSE AND KEEP AWAY FROM HEAT AND OPEN FLAME, AND OUT OF THE REACH OF CHILDREN.
  - FILL THE GASOLINE TANK OUTDOORS WITH THE ENGINE OFF AND ALLOW THE ENGINE TO COOL COMPLETELY. DO NOT HANDLE GASOLINE IF YOU OR ANYONE NEARBY IS SMOKING, OR IF YOU ARE NEAR ANYTHING THAT COULD CAUSE IT TO IGNITE OR EXPLODE. REPLACE THE FUEL TANK AND FUEL CONTAINER CAPS SECURELY.
  - 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, SPACE HEATER, CLOTHES DRYER OR FURNACE.
  - NEVER MAKE ADJUSTMENTS OR REPAIRS WITH THE POWER UNIT ENGINE RUNNING.
  - DO NOT CHANGE THE ENGINE GOVERNOR SETTINGS OR MODIFY THE ENGINE SPEED.
  - NEVER TAMPER WITH SAFETY DEVICES. CHECK THEIR PROPER OPERATION REGULARLY.
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### **WARNING!**

YOU MUST OPERATE THE DR SNOW THROWER ATTACHMENT SAFELY TO PREVENT OR MINIMIZE THE RISK OF DEATH OR SERIOUS INJURY. UNSAFE OPERATION CAN CREATE A NUMBER OF HAZARDS FOR YOU. ALWAYS TAKE THE FOLLOWING PRECAUTIONS WHEN OPERATING THIS MACHINE:

- KEEP IN MIND THAT THE OPERATOR OR USER IS RESPONSIBLE FOR ACCIDENTS OR HAZARDS OCCURRING TO OTHER PEOPLE, THEIR PROPERTY, AND THEMSELVES.
- YOUR DR SNOW THROWER ATTACHMENT IS A POWERFUL TOOL, NOT A PLAYTHING. EXERCISE EXTREME CAUTION AT ALL TIMES. THE DESIGN OF YOUR MACHINE IS TO THROW SNOW. DO NOT USE IT FOR ANY OTHER PURPOSE.
- KNOW HOW TO STOP THE MACHINE QUICKLY IN CASE OF EMERGENCY BY DISENGAGING THE SNOW THROWER (BLADE CONTROL) AND SHUTTING DOWN THE POWER UNIT ENGINE.
- ALWAYS DISENGAGE SNOW THROWER (BLADE CONTROL), MAKE CERTAIN THE AUGER AND ALL MOVING PARTS HAVE COME TO A COMPLETE STOP, SHUT OFF THE POWER UNIT ENGINE AND REMOVE THE KEY WHENEVER YOU LEAVE THE OPERATING POSITION OR IF YOU HAVE TO STOP TO REMOVE SNOW FROM THE MACHINE.
- KEEP COMBUSTIBLE SUBSTANCES AWAY FROM THE POWER UNIT ENGINE WHEN IT IS HOT.
- STAY ALERT FOR HIDDEN HAZARDS OR TRAFFIC WHEN OPERATING NEAR A ROADWAY.
- DO NOT CARRY PASSENGERS ON YOUR DR SNOW THROWER ATTACHMENT.
- EXERCISE EXTREME CAUTION WHEN OPERATING ON OR CROSSING GRAVEL DRIVEWAYS, WALKS, OR ROADS. MAKE SURE TO ADJUST THE HEIGHT OF THE SKID SHOES SO THE CUTTING EDGE WILL CLEAR GRAVEL OR CRUSHED ROCK SURFACES.
- DO NOT ATTEMPT TO OPERATE THE MACHINE ON STEEP SLOPES OR NEAR EMBANKMENTS.
- USE CAUTION WHEN BACKING UP THE SNOW THROWER.
- SEE MANUFACTURER'S INSTRUCTIONS FOR PROPER OPERATION AND INSTALLATION OF ACCESSORIES. ONLY USE ACCESSORIES APPROVED BY COUNTRY HOME PRODUCTS, INC.
- IF THE SNOW THROWER AUGER STRIKES A FOREIGN OBJECT OR IF YOUR MACHINE SHOULD START MAKING AN UNUSUAL NOISE OR VIBRATION, IMMEDIATELY DISENGAGE AUGER (BLADE CONTROL), STOP THE POWER UNIT ENGINE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S). VIBRATION IS GENERALLY A WARNING OF TROUBLE. INSPECT FOR CLOGGING OR DAMAGE. CLEAN AND REPAIR AND/OR REPLACE DAMAGED PARTS.
- WHILE USING THE DR SNOW THROWER ATTACHMENT, DO NOT 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.
- NEVER OPERATE THE MACHINE WHEN UNDER THE INFLUENCE OF ALCOHOL, DRUGS, OR MEDICATION.
- USE THE MACHINE ONLY IN DAYLIGHT OR GOOD ARTIFICIAL LIGHT.
- KEEP ALL SHIELDS IN PLACE AND MAKE CERTAIN NUTS AND BOLTS ARE TIGHT TO ASSURE A SAFE WORKING CONDITION AND ALWAYS USE THE SUPPLIED SELF-LOCKING HARDWARE; DO NOT SUBSTITUTE.
- WEAR BOOTS WITH NON-SLIP TREADS WHEN USING YOUR DR SNOW THROWER ATTACHMENT.
- 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 THIS MACHINE 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.

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## SETTING UP YOUR DR SNOW THROWER ATTACHMENT

This chapter outlines unpacking and a few simple steps you will need to follow to set up your new Snow Thrower and attach it to your DR FIELD and BRUSH MOWER. **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).**

### *Unpacking*

**NOTE:** *We recommend two people for the unpacking procedure, as the unit weighs 138 pounds.*

#### **Tools and Supplies Needed:**

- Knife
- Gloves
- Metal Shears (Side Cutters)
- 7/16" Wrench or Socket
- Eye Protection

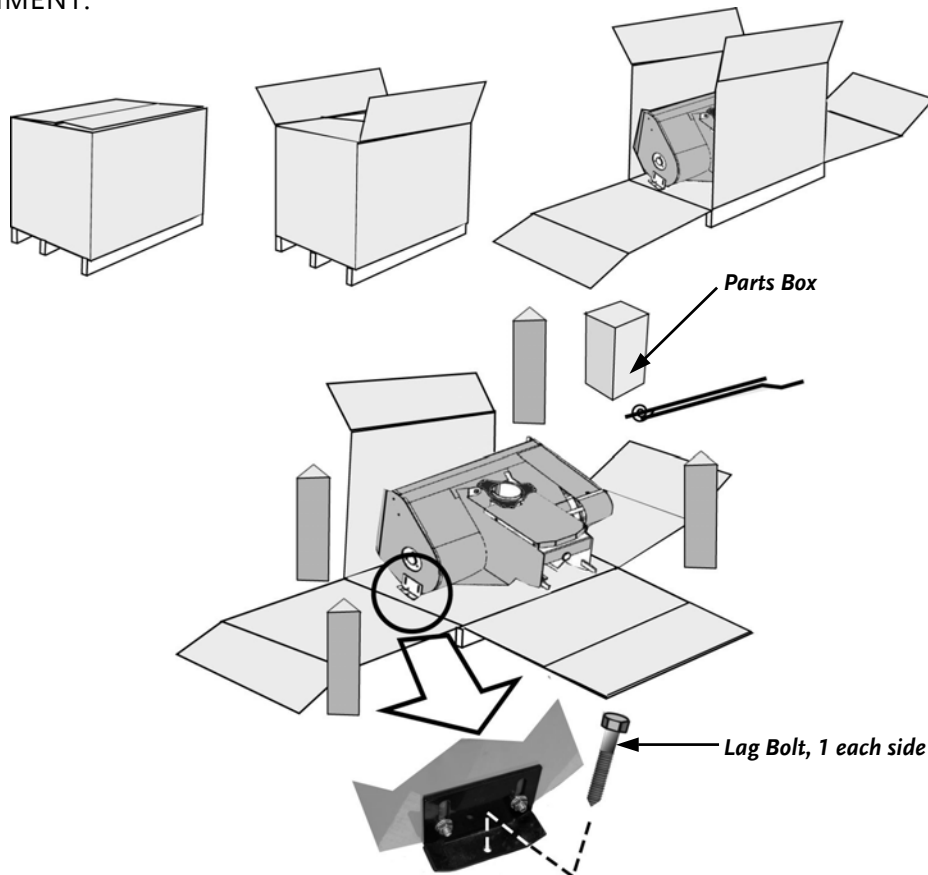
#### **Parts Supplied:**

- DR SNOW THROWER ATTACHMENT
- Rotation Handle
- Worm Shaft
- V-Belt
- Parts Box containing:
  - Handle Support
  - Chute Assembly
  - (3) Retaining Plates
  - U-Bolt, 1/4" NC x 1-1/8" x 2"
  - (2) Plastic Bushings
  - (6) Hex Head Bolts, 1/4" NC x 1/2"
  - (6) Flange Nuts, 1/4" NC
  - Flat Washer, Worm Shaft
  - Hair Pin, 2 mm x 41 mm
  - Cotter Pin, 1/8" x 1-3/4"
  - *Safety & Operating Instructions*
  - Packing List
  - (3) Spare Shear-Bolt & Nut
  - Washer, Chute Base

## **! WARNING!**

- WEAR EYE PROTECTION WHEN CUTTING THE BANDING. THE BANDING IS UNDER HIGH TENSION AND MAY SNAP AND STRIKE YOU WHEN CUT. STAND TO ONE SIDE WHEN CUTTING THE BANDING.
- STABILIZE THE SHIPPING CONTAINER ON CLEAN FLAT TERRAIN BEFORE ATTEMPTING TO UNPACK AND ASSEMBLE THE MACHINE.

1. Stand to one side and cut the banding around the carton.
2. Open the top of the stapled cardboard carton (*Figure 1*) and fold the sides down. The staples are sharp so be careful.
3. Remove the Parts Box containing the Chute and assorted hardware (*Figure 1*).
4. Stand to one side and cut the banding holding the machine to the pallet.  
**Be careful when cutting the banding.**
5. Using a 7/16" Wrench or Socket, remove the two (2) Lag Bolts (one on each side) that retain the Housing on the pallet (*Figure 1*).
6. With the help of another person, lift the snow thrower from the pallet.
7. Compare the contents of the shipping container and Parts Box with the Parts Supplied list on the previous page. **If any of the parts are missing, contact 1-800-DR-OWNER (376-9637).** Do not discard your packaging material until you are fully satisfied with your new DR SNOW THROWER ATTACHMENT.



*Figure 1*

## Attaching the Discharge Chute

For assembly, place the DR SNOW THROWER ATTACHMENT on a flat and level surface.

### Tools and Supplies Needed:

- (2) 7/16" Wrench or Socket
- General Purpose Petroleum Based Grease

1. Place the Chute Base Washer over the Discharge Hole.
2. Apply a thin film of General Purpose Petroleum Based Grease to both sides (top and bottom) of the Chute Gear (**Figure 2**).
3. Then place the Discharge Chute, with the Chute Base Washer around the Discharge Hole under the Chute Base, on top of the DR SNOW THROWER ATTACHMENT Housing (**Figure 2**).
4. Align the two (2) holes in the Retaining Plate with the holes in the top of the Housing and secure in place using two (2) 1/4" x 1/2" Bolts and Flange Nuts (**Figure 2**).
5. Repeat Step 3 for the remaining two (2) Retaining Plates (**Figure 2**).
6. Tighten the Bolts and Nuts using two (2) 7/16" Wrenches.
7. Verify that the Discharge Chute will rotate freely (**Figure 2**).

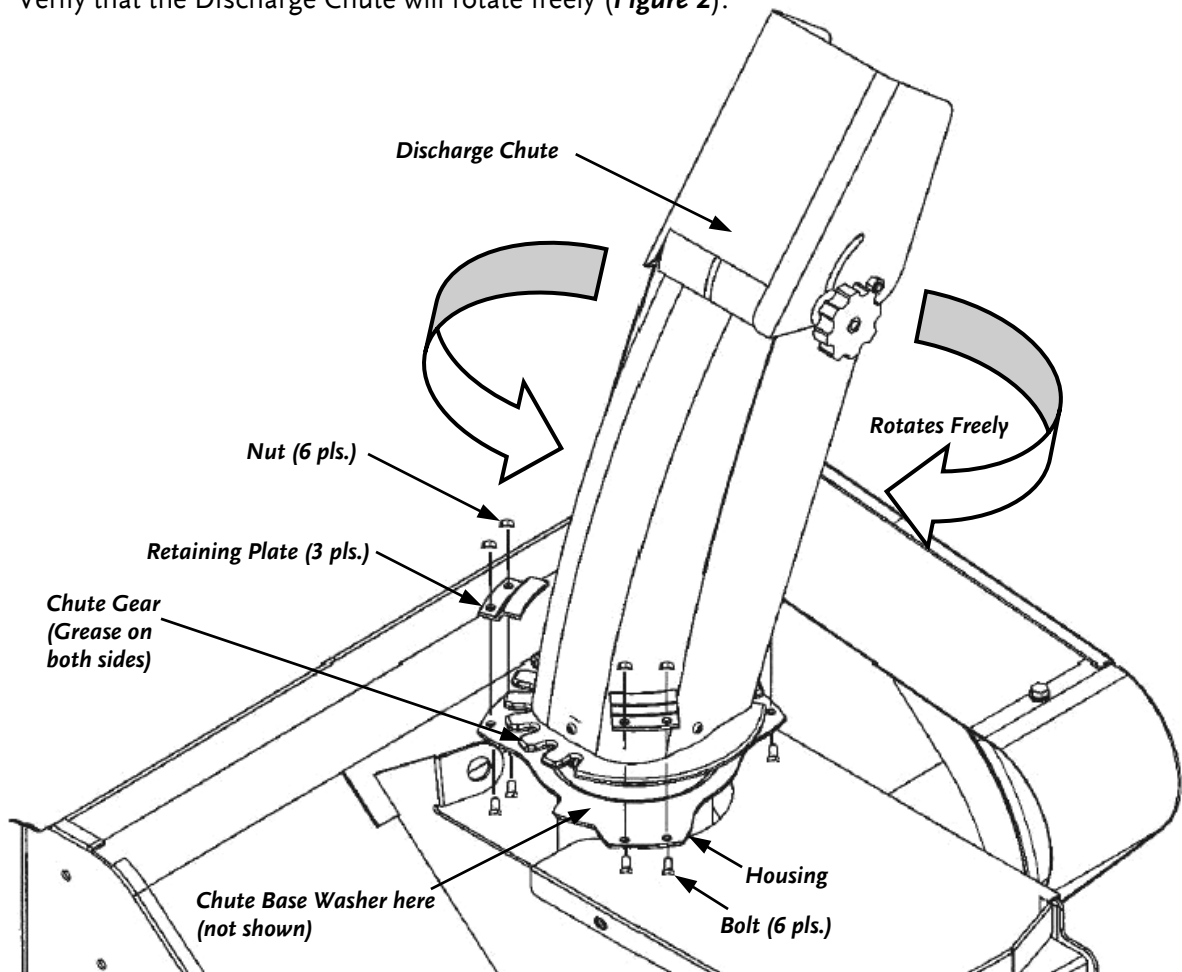


Figure 2

CALL TOLL FREE 1-800-DR-OWNER

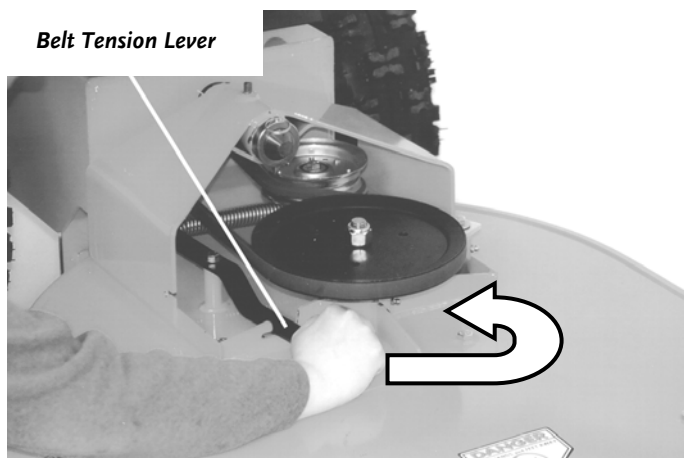


Figure 3

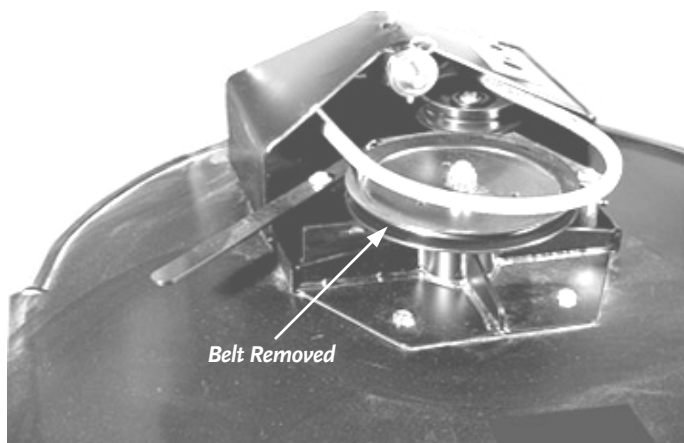


Figure 4



Figure 5

## Removing the Mower Brush Deck

### **! WARNING!**

**BEFORE PERFORMING THIS PROCEDURE: STOP THE ENGINE, SET THE PARKING BRAKE, AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

1. Remove the black Belt Guard by unscrewing the black Knob, lifting the cover and pulling up and back to remove it.
2. Release the Belt Tension Lever (*Figure 3*).
3. Remove the Belt from the pulley (*Figure 4*) and then drop it from the engine pulley below the machine.
4. Remove the Pin and Collar (*Figure 5*); then pull the Power Unit away from the deck.

### **! CAUTION!**

**DO NOT PULL THE DECK AWAY FROM THE POWER UNIT UNLESS YOU HAVE SOMEONE HOLDING THE HANDLEBARS TO PREVENT IT FROM FALLING BACKWARD.**

5. Tilt the Power Unit forward and rest it on the Attachment Pin.



## Installing the DR SNOW THROWER ATTACHMENT

### Tools and Supplies Needed:

- 1/2" Wrench or Socket
- 9/16" Box Wrench
- #2 Lithium Grease

1. Apply a thin coating of #2 Lithium Grease on the Attachment Pin (**Figure 6**).
2. Remove the four (4) Belt Cover Retaining Bolts using a 1/2" Wrench or Socket and remove the Cover (**Figure 6**).
3. Line up the DR SNOW THROWER ATTACHMENT with the Power Unit Attachment Pin and slide the Pin into the socket on the Snow Thrower (**Figure 6**).
4. Reattach the Collar and Retaining Pin (**Figure 5** on page 12) to secure the Snow Thrower.
5. Locate the Snow Thrower Drive Belt and make sure to install it on the Engine Pulley below the Power Unit (**Figure 6 or 8**).
6. Using a 9/16" Box Wrench on the Tension Pulley Nut (**Figure 7**), pull on the Wrench to release the tension and install the Belt on the Idler Pulley (**Figure 8**). Make sure that the V-belt is not twisted and fits into the V-groove on the Pulley.

**NOTE:** Pulling on the Wrench will tighten the Nut and move the Idler Arm.

7. Route the V-belt around the Drive Pulley, Tension Pulley, and Idler Pulley (**Figure 8**) and then ease the Tension Pulley back into position with the Wrench.
8. Reinstall the Belt Cover and secure in place using the four (4) Belt Cover Retaining Bolts. Tighten the Bolts using a 1/2" Wrench or Socket (**Figure 6**).

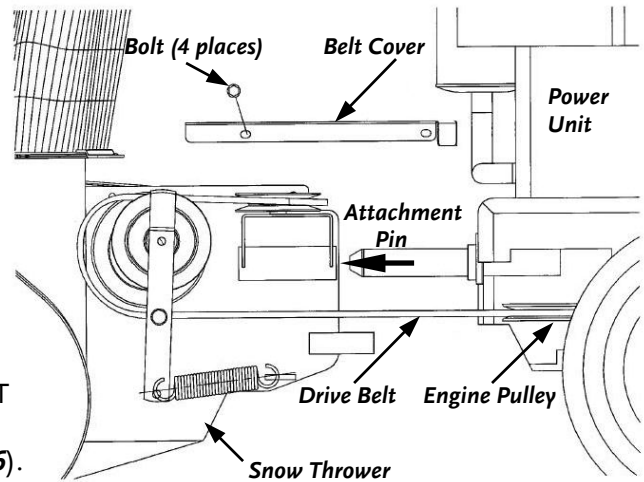


Figure 6

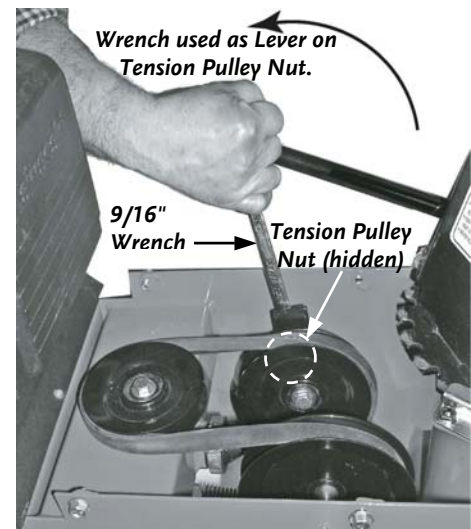


Figure 7

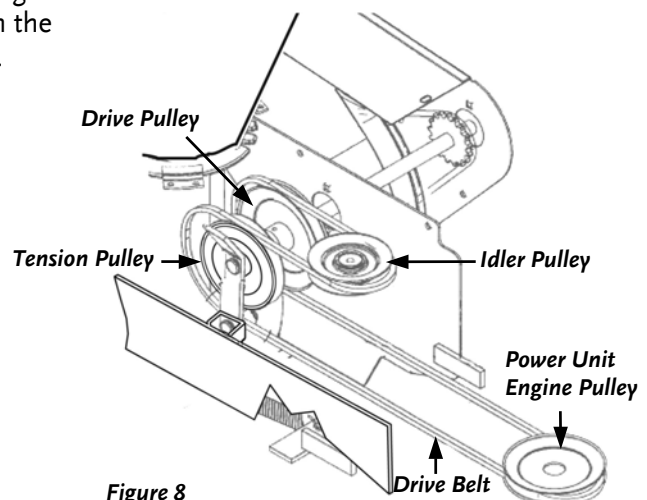


Figure 8

## Installing the Rotation Handle

### Tools Needed:

- 7/16" Wrench or Socket
  - Pliers
1. Using a 7/16" Wrench or Socket, install the Rotation Handle Support (**Figure 9**) on the left side Handle Bar of your DR FIELD and BRUSH MOWER approximately 28" from the ground using the U-Bolt, Plate and Nuts.
  2. Insert the Plastic Bushing, with the flange facing the operator, into the Snow Thrower Housing by pushing the Bushing forward until it snaps into place (**Figure 9**).
  3. Insert the Worm Gear end of the Rotation Shaft in the Plastic Bushing and engage the Worm Gear with the gear teeth on the Discharge Chute Flange (**Figure 9**).
  4. Place the Flat Washer over the end of the Worm Shaft and insert the Cotter Pin (**Figure 9**). Spread the ends of the Cotter Pin with the pliers to hold the Pin in place.
  5. Insert another Plastic Bushing, with the flange facing the operator, into the Rotation Handle Support by pushing the Bushing forward until it snaps into place (**Figure 9**).
  6. Insert the Handle of the Rotation Shaft through the Bushing in the Rotation Handle Support and then into end of the Worm Gear Shaft (**Figure 9**).
  7. Secure the two halves of the Rotation Shaft together by aligning the holes in the shaft ends and inserting a Hairpin Clip (**Figure 9**).
  8. Operate the Rotation Handle and check that the Discharge Chute rotates smoothly.

## **! CAUTION!**

MAKE SURE THE DISCHARGE CHUTE STOPS IN BOTH DIRECTIONS TO PREVENT SNOW FROM DISCHARGING IN THE OPERATOR ZONE (**FIGURE 10**).

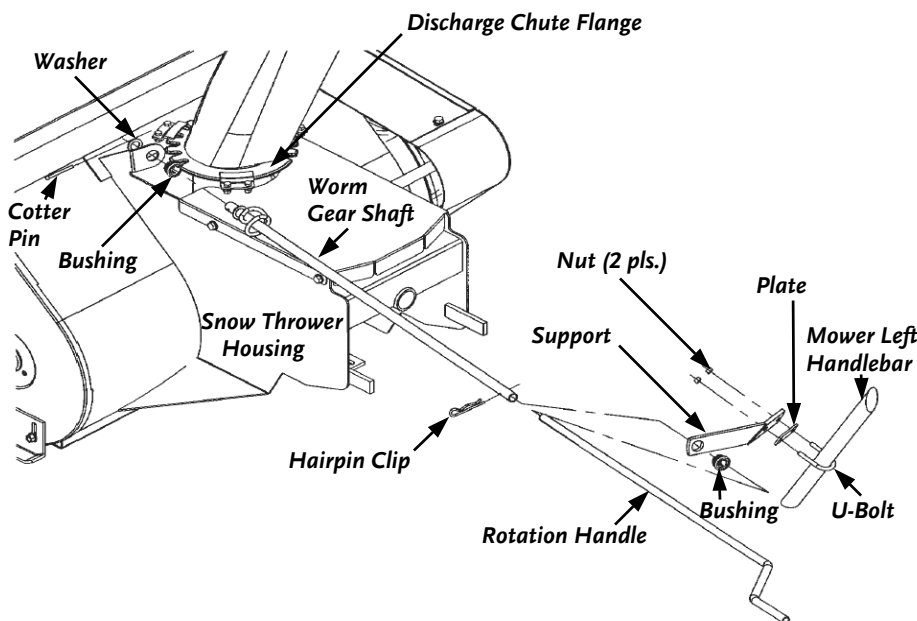


Figure 9

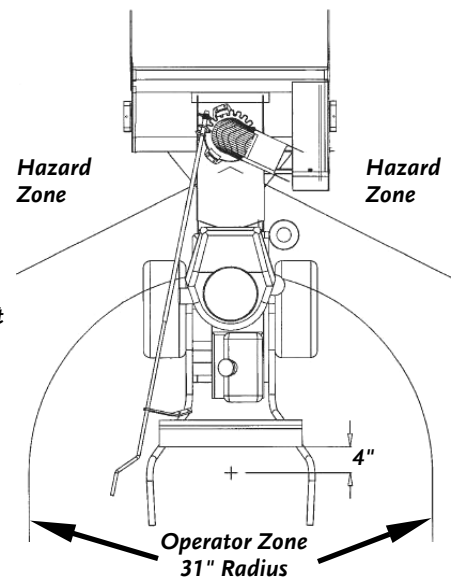


Figure 10

## Attaching the Optional Drift Cutters

### **! WARNING!**

**BEFORE PERFORMING THIS PROCEDURE: STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP, DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S), AND REMOVE THE KEY FOR SAFETY.**

#### Tools Needed:

- 1/2" Wrench or Socket
1. Align the two (2) square holes in the Drift Cutter with the two (2) round holes in the side of the Snow Thrower Housing (**Figure 11**).
  2. Insert two (2) 5/16" x 5/8" Carriage Bolts, from the outside, through the Drift Cutter and the Snow Thrower Housing (**Figure 11**).
  3. Secure the Bolts in place with two (2) 5/16" Flange Nuts and tighten using a 1/2" Wrench or Socket (**Figure 11**).
  4. Repeat Steps 1 through 3 for the Drift Cutter on the other side of the Snow Thrower Housing.

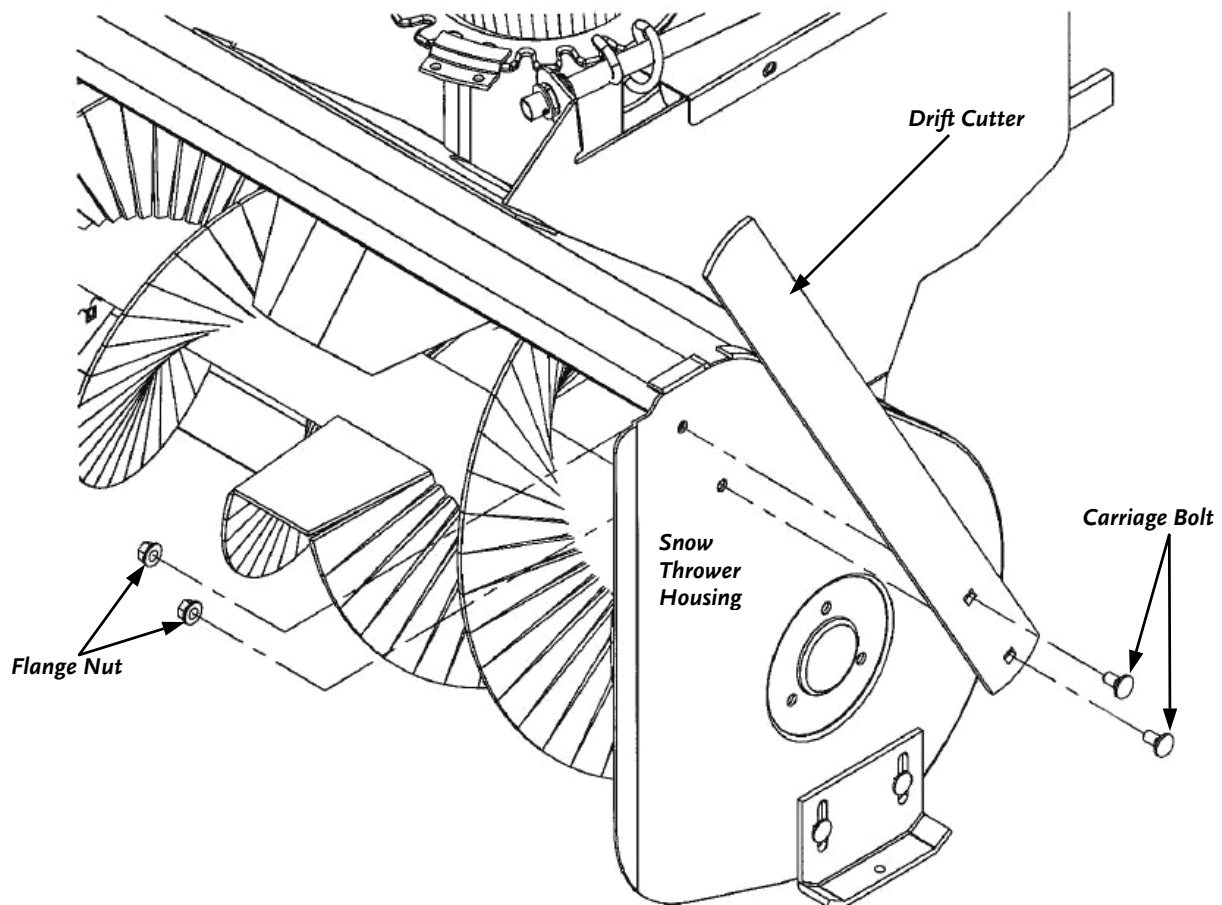


Figure 11

## Removing the DR SNOW THROWER ATTACHMENT



**BEFORE PERFORMING THIS PROCEDURE: SELECT A LEVEL SURFACE, STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP, DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S), AND REMOVE THE KEY FOR SAFETY.**

### Tools Needed:

- 1/2" Wrench or Socket
  - 9/16" Box Wrench
1. Remove the Hairpin Clip from the Rotation Handle and remove the Handle from the Handle Support (**Figure 9** on page 14). Reinstall the Hairpin Clip on the Rotation Handle for storage.
  2. Remove the four (4) Belt Cover Retaining Bolts using a 1/2" Wrench or Socket and remove the Cover (**Figure 6** or **8** on page 13).
  3. Using a 9/16" Box Wrench on the Tension Pulley Nut (**Figure 7** on page 13), pull on the Wrench to release the tension and remove the Belt from the Power Unit Engine Pulley (**Figure 8** on page 13).
  4. Remove the Retaining Pin and Collar from the Power Unit Attachment Pin (**Figure 5** on page 12) and carefully roll the Power Unit back away from the DR SNOW THROWER ATTACHMENT.
  5. Reinstall the Belt Cover and secure using the four (4) Belt Cover Retaining Bolts. Hand tighten the bolts for storage (**Figure 6** on page 13).

## OPERATING YOUR DR SNOW THROWER ATTACHMENT

This chapter covers the basic operation procedures for your new DR SNOW THROWER ATTACHMENT. It may be helpful to familiarize yourself with the features on your Snow Thrower by reviewing the picture below before beginning the steps outlined in this chapter.

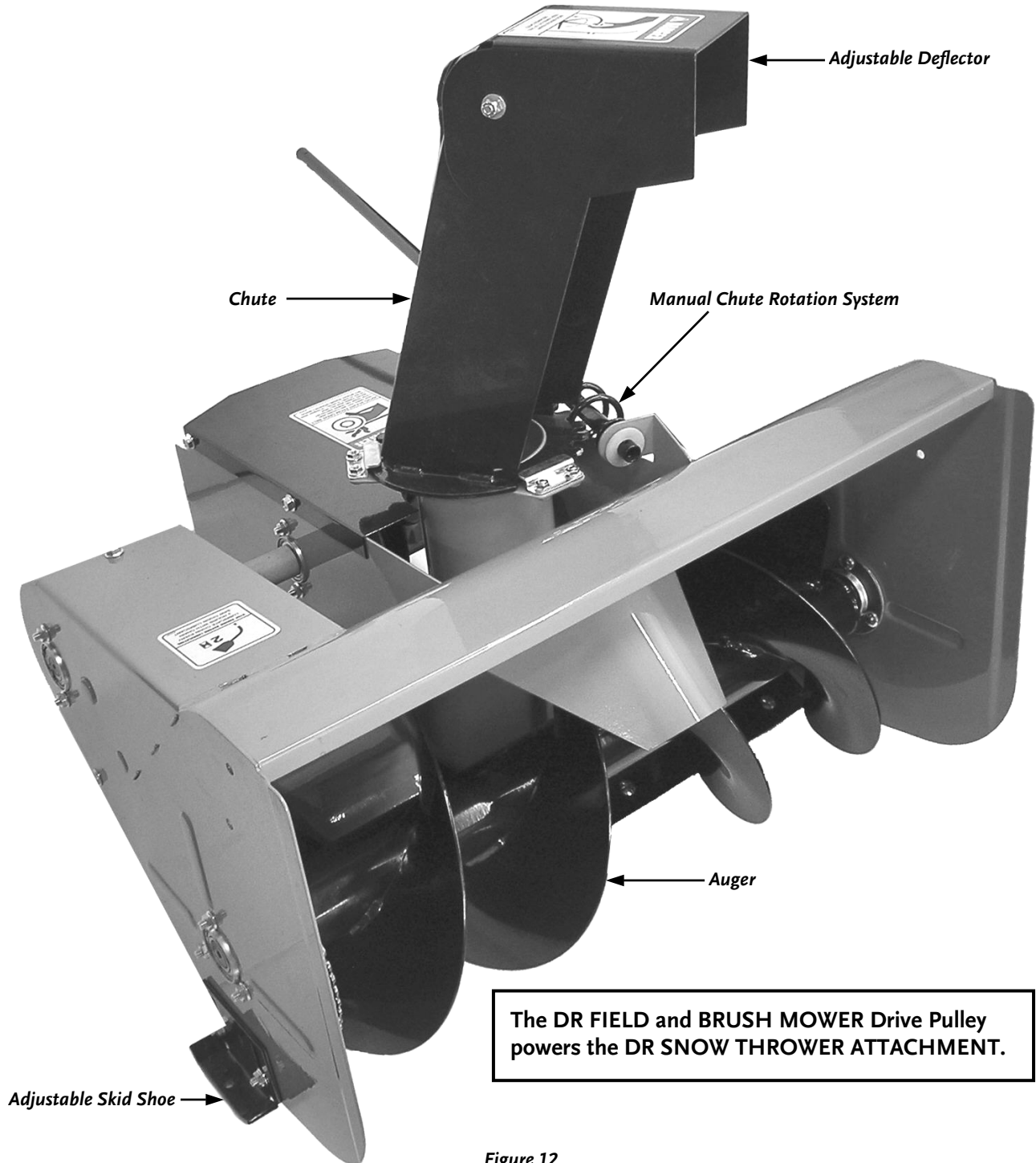


Figure 12

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**! WARNING!**

- THE DESIGN OF THIS MACHINE IS FOR THROWING SNOW. NEVER USE THIS MACHINE FOR ANY OTHER PURPOSE AS IT COULD CAUSE SERIOUS INJURY.
  - CONTACT WITH INTERNAL ROTATING PARTS WILL CAUSE SERIOUS PERSONAL INJURY. NEVER PUT HANDS, FACE, FEET OR CLOTHING INTO THE AUGER INPUT AREA OR DISCHARGE OPENING AT ANY TIME.
  - MAINTENANCE AND SERVICE SHOULD ONLY BE PERFORMED AFTER THE POWER UNIT ENGINE IS OFF, ALL MOVING PARTS HAVE COME TO A COMPLETE STOP, THE PARKING BRAKE IS SET, AND THE SPARK PLUG WIRE(S) REMOVED. AFTER ALL MOVING PARTS HAVE STOPPED COMPLETELY, USE ONLY A WOODEN STICK OR LONG PLASTIC TOOL TO CLEAR JAMMED SNOW AND ICE MATERIAL.
-

## Chute Rotation

Adjust the Chute with the Rotation Handle (*Figure 9 and 10* on page 14).

### **! WARNING!**

ALWAYS KEEP THE DR SNOW THROWER ATTACHMENT DISCHARGE CHUTE POINTED AWAY FROM PEOPLE, ANIMALS, AND OBJECTS THAT COULD BE STRUCK BY DEBRIS.

## Adjusting the Deflector

### **! WARNING!**

ALWAYS STOP THE ENGINE AND SET THE PARKING BRAKE BEFORE ADJUSTING THE DEFLECTOR.

Adjust the Deflector angle according to the distance that you want to throw the snow. To adjust, loosen the Deflector Adjustment Knob by turning it counterclockwise (*Figure 13*) and adjust the Deflector angle up or down, then re-tighten the Knob securely.



Figure 13

## Adjusting the Skid Shoes

### **! WARNING!**

**BEFORE ADJUSTING THE SKID SHOES, ALWAYS STOP THE ENGINE, SET THE PARKING BRAKE, AND REMOVE THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

Adjust the Skid Shoes in order to allow the required clearance (H) between the Cutting Edge of the Snow Thrower and the surface that you are cleaning (**Figure 14**). For a level paved or cement surface, the clearance (H) should be  $1/16"$  to  $1/8"$ . For a gravel or uneven surface, depending the gravel size, the clearance (H) should be  $1/2"$  to  $5/8"$ .

#### Tool Needed:

- $1/2"$  Wrench or Socket
1. Using a  $1/2"$  Wrench or Socket, loosen the two (2) Nuts on the  $5/16"$  x  $5/8"$  Carriage Bolts that retain the Skid Shoe (**Figure 14**). For ease of adjustment, loosen only one side at a time.
  2. Adjust the Skid Shoe to the required height (H) and tighten the Nuts (**Figure 14**).
  3. Repeat steps 1 and 2 for the Skid Shoe on the other side of the Snow Thrower.

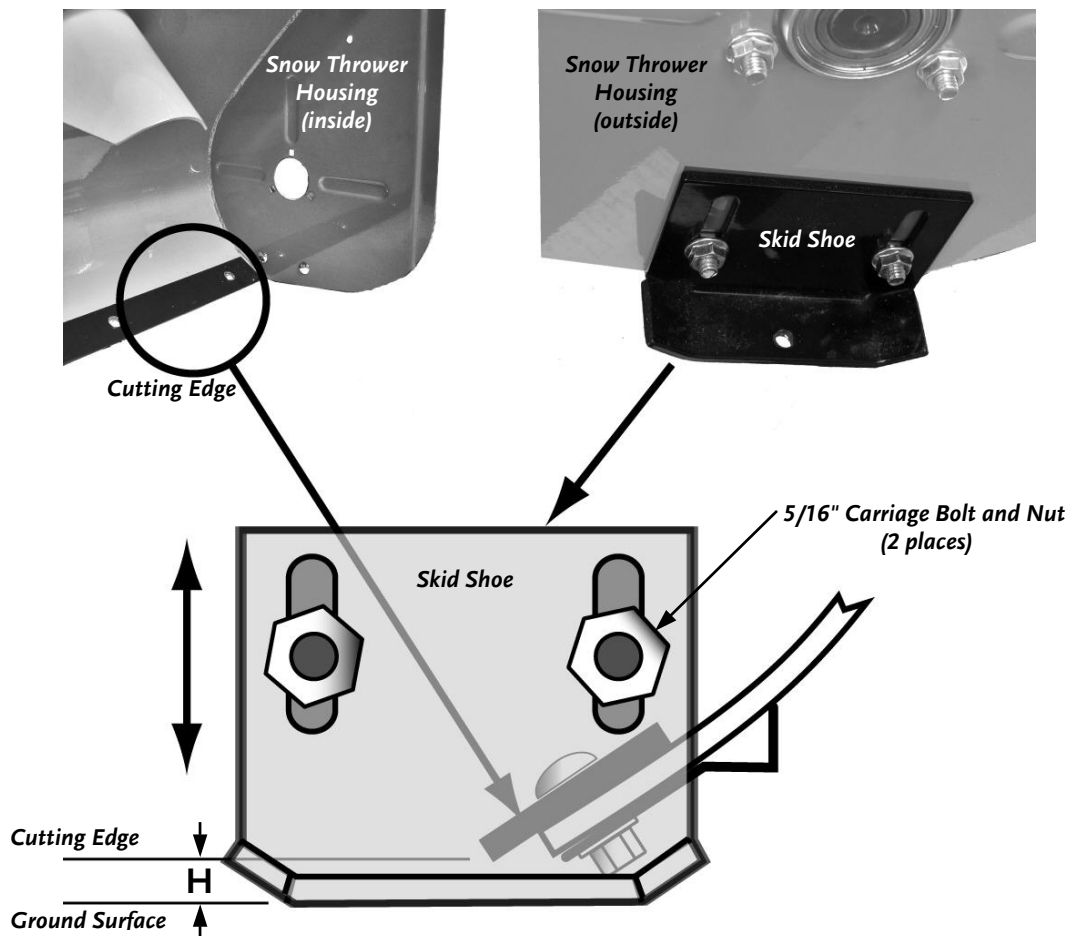


Figure 14



## Operating the DR SNOW THROWER ATTACHMENT

1. Use winter grade oil in your DR FIELD and BRUSH MOWER. See the Engine Owner's Manual.
2. ALWAYS wear protective winter clothing and safety glasses during operation of this machine.
3. Set the Parking Brake on your DR FIELD and BRUSH MOWER.
4. Check to see that there are no obstructions in the Auger before you start the machine.
5. Make sure to adjust the Skid Shoes equally for the surface that you are clearing.
6. Make certain that the Shift Lever is in the Neutral position and the PTO (Blade Control) Lever is in the Disengaged position (pulled back).
7. Start the engine in accordance with Chapter 4 of the *Safety & Operating Instructions* for your DR FIELD and BRUSH MOWER.
8. After the engine has warmed up, set the Throttle to a moderate engine speed.

---

### **NOTICE!**

**USE ONLY A MODERATE ENGINE SPEED WHEN ENGAGING THE PTO (BLADE CONTROL) LEVER. ENGAGING THE DRIVE BELT AT A HIGH ENGINE SPEED WILL SHORTEN THE CLUTCH LIFE.**

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9. Make sure the Snow Thrower Auger is clear of snow before engaging the Drive Belt.
10. To start the Snow Thrower Auger, engage the PTO (Belt Drive) by pushing the Blade Control Lever forward or pulling up on the Blade Control Knob for machines with an electric clutch.
11. Adjust the engine RPM to full throttle for maximum power. Low engine RPM may tend to clog the Discharge Chute.
12. Move the DR FIELD and BRUSH MOWER Shift Lever to the desired gear and release the Parking Brake.
13. Gently squeeze the Wheel Clutch Lever to engage a gear.
14. Keep the area of discharge clear of people, animals, buildings, glass, or anything else that will obstruct clear discharge, cause injury, or damage. Wind can also change discharge direction, so be aware.
15. Only operate the machine from the Operator Zone (see **Figure 10** on page 14).
16. Keep proper balance and footing while operating the machine.
17. If the Auger strikes a foreign object or if your machine should start making an unusual noise or vibration, immediately disengage the PTO, stop the engine and wait for all moving parts to come to a complete stop. After the machine has come to a complete stop, inspect for any damage and repair or replace any damaged parts before restarting and operating the machine.
18. Upon completion of your work, return the Throttle to Idle and allow the Auger to operate for a minute or two to prevent the Auger from icing.
19. Disengage the PTO drive and turn off the engine. Be sure to remove the Key for safety.

## Snow Removal

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### **WARNING!**

- **TO AVOID SERIOUS PERSONAL INJURY, DO NOT USE YOUR HANDS OR FEET TO UNCLOG THE DISCHARGE CHUTE! NEVER ATTEMPT TO UNCLOG THE CHUTE WHILE THE ENGINE IS RUNNING. IF THE CHUTE CLOGS, DISENGAGE THE PTO DRIVE, WAIT FOR THE AUGER TO COMPLETELY STOP, APPLY THE PARKING BRAKE, SHUT OFF THE ENGINE, AND REMOVE THE SPARK PLUG WIRE(S) BEFORE UNCLOGGING THE CHUTE. FOR SAFETY, USE A SHORT STICK OR PLASTIC TOOL DESIGNED TO CLEAR SNOW FROM THE CHUTE.**
  - **ONLY OPERATE THE SNOW THROWER FROM THE OPERATOR ZONE (FIGURE 10 ON PAGE 14).**
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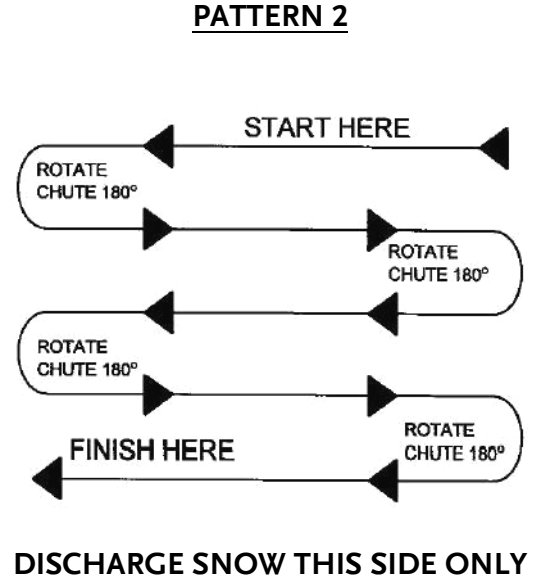
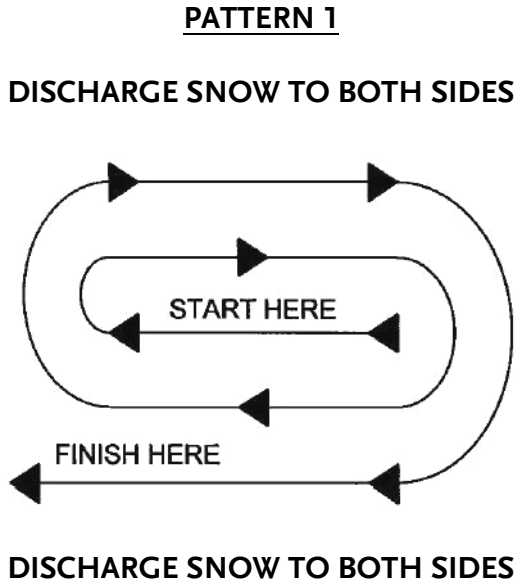
### **NOTICE!**

- **NEVER USE THE DR SNOW THROWER ATTACHMENT AS A SNOWPLOW. DO NOT PUSH THE SNOW; LET THE SNOW THROWER WORK ITS WAY THROUGH THE SNOW.**
  - **IF THE GROUND SPEED OF THE POWER UNIT IS TOO FAST, ENGAGE AND DISENGAGE THE WHEEL CLUTCH LEVER TO REDUCE THE SPEED AND PREVENT THE DISCHARGE CHUTE FROM BECOMING OVERLOADED, AND CLOGGED.**
  - **FOR BEST RESULTS, RAISE THE SNOW THROWER BY PUSHING DOWN ON THE HANDLEBARS AND REMOVE A TOP LAYER OF SNOW FIRST, OR TAKE A HALF-WIDTH PASS. A SECOND OR THIRD PASS WILL REMOVE THE REMAINING SNOW MUCH EASIER.**
- 

**Tip:** To increase traction and stability, use DR Tire Chains. Call 1-800-DR-OWNER (376-9637) to order.

## Snow Removal Methods

A definite pattern of operation is required to thoroughly clean an area of snow. These patterns will avoid throwing snow in unwanted places as well as eliminating a second removal of snow.



Where it is possible to throw the snow to the left and right (above), as on a long driveway, it is advantageous to start in the middle, working from one end of the driveway to the other. This allows you to throw the snow to both sides of the driveway without changing the direction of the Discharge Chute. In the example above, the Discharge Chute will be pointing to the left.

If you can only throw the snow to one side of the driveway or sidewalk (above), start on the opposite side. At the end of the first pass, rotate the Discharge Chute 180 degrees for the return pass. At the end of each succeeding pass, rotate the Discharge Chute 180 degrees to maintain the direction of the throw in the same area.

---

### **! NOTICE!**

**RUN THE DR SNOW THROWER ATTACHMENT A FEW MINUTES AFTER THROWING SNOW TO PREVENT THE AUGER FROM FREEZING UP.**

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### ***Cold Weather Operation***

At temperatures below 30°F and a high dew point, your DR FIELD and BRUSH MOWER engine may experience icing of the carburetor and/or the crankcase breather system. Country Home Products, Inc. offers an optional engine cover to prevent icing in these weather conditions. You can purchase the cover through Country Home Products, Inc. by calling **1-800-DR-OWNER (376-9637)**. Please have your DR FIELD and BRUSH MOWER Model# and Serial# on hand when the call is placed.



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## MAINTAINING THE DR SNOW THROWER ATTACHMENT

This chapter covers regular maintenance procedures that will ensure the best performance and long life of your DR SNOW THROWER ATTACHMENT. Always use genuine DR parts when replacement parts are required.

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### **WARNING!**

- **BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION ON THE DR SNOW THROWER ATTACHMENT WHEN IT IS STILL ATTACHED TO THE POWER UNIT, STOP THE ENGINE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP, SET THE PARKING BRAKE AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**
  - **NEVER PARK THE POWER UNIT WITH FUEL IN THE TANK INSIDE A BUILDING WHERE AN OPEN FLAME OR SPARKS ARE PRESENT. ALLOW THE ENGINE TO COOL DOWN BEFORE STORING IN ANY ENCLOSURE.**
  - **PROVIDE ADEQUATE BLOCKING BEFORE WORKING UNDER THE DR SNOW THROWER.**
- 

























### *Regular Maintenance Check List before each use*

- Check the Belt for proper orientation and wear after the first four (4) hours of operation. See **Figure 17** on page 28.
- Check the Engine oil level in your DR FIELD and BRUSH MOWER.
- Check the general condition of the Mower and Snow Thrower, e.g.; nuts, bolts, welds, etc.
- Make sure that the Snow Thrower has no foreign material in the Auger or Discharge Chute.
- Check the condition of the Drive Belt for nicks and fraying.
- To reduce ice build up on the Chute Gear, apply General Purpose Petroleum Based Grease to both sides (top and bottom) of the Gear and rotate the Chute back and forth a few times to spread the Grease. See **Figure 2** on page 11.

## Torque Specification Table

<b>GENERAL SPECIFICATION TABLE</b>													
<b>Use the following torques when special torques are not given</b>													
<b>NOTE:</b> These values apply to fasteners as received from supplier, dry, or when lubricated with normal engine oil. They do not apply if special graphited or moly disulfide greases or other extreme pressure lubricants are used. This applies to both UNF and UNC threads.													
<b>SEE Grade No.</b>		<b>2</b>				<b>5</b>				<b>8</b>			
<b>BOLT HEAD IDENTIFICATION MARKS AS PER GRADE</b>						  				  			
<b>NOTE: MANUFACTURING MARKS WILL VARY.</b>		<b>Torque</b>				<b>Torque</b>				<b>Torque</b>			
<b>BOLT SIZES</b>		<b>Pounds-Foot</b>		<b>Newtons-Meter</b>		<b>Pounds-Foot</b>		<b>Newtons-Meter</b>		<b>Pounds-Foot</b>		<b>Newtons-Meter</b>	
<b>Inches</b>	<b>Millimeters</b>	<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>
1/4	6.35	5	6	6.8	8.13	9	11.0	12.2	14.9	12	15	16.3	30.3
5/16	7.94	10	12	13.6	16.3	17	20.5	23.1	27.8	24	29	32.5	39.3
3/8	9.53	20	23	27.1	31.2	35	42.0	47.5	57.0	45	54	61.0	73.2
7/16	11.11	25	30	40.7	47.4	54	64.0	73.2	86.8	70	84	94.9	113.9
1/2	12.70	45	52	61.0	70.5	80	96.0	108.5	130.2	110	132	149.2	179.0
9/16	14.29	65	75	88.1	101.6	110	132.0	149.2	179.0	160	192	217.0	260.4
5/8	15.88	95	105	128.7	142.3	150	180	203.4	244.1	220	264	298.3	358.0
3/4	19.05	150	185	203.3	250.7	270	324	366.1	439.3	390	456	515.3	618.3
7/8	22.23	160	200	216.8	271.0	400	480	542.4	650.9	600	720	813.6	976.3
1	25.40	250	300	338.8	406.5	580	696	786.5	943.8	900	1080	1220.4	1464.5
1 1/8	25.58	-	-	-	-	800	880	1084.8	1193.3	1280	1440	1735.7	1952.6
1 1/4	31.75	-	-	-	-	1120	1240	1518.7	1681.4	1820	2000	2467.9	2712.0
1 3/8	34.93	-	-	-	-	1460	1680	1979.8	2278.1	2380	2720	3227.3	3688.3
1 1/2	38.10	-	-	-	-	1940	2200	2630.6	2983.2	3160	3560	4285.0	4827.4

### METRIC BOLT TORQUE SPECIFICATIONS

<b>Size of screw</b>	<b>Grade No.</b>	<b>Pitch (mm)</b>	<b>Coarse thread</b>				<b>Fine Thread</b>				
			<b>Pounds-Foot</b>		<b>Newtons-Meter</b>		<b>Pitch (mm)</b>	<b>Pounds-Foot</b>		<b>Newtons-Meter</b>	
			<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>		<b>MIN.</b>	<b>MAX.</b>	<b>MIN.</b>	<b>MAX.</b>
M6	4T 	1.0	3.6	5.8	4.9	7.9	-	-	-	-	
	7T 		5.8	9.4	7.9	12.7	-	-	-	-	
	8T 		7.2	10	9.8	13.6	-	-	-	-	
M8	4T 	1.25	7.2	14	9.8	19.0	12	17	16.3	23.0	
	7T 		17	22	23	29.8	19	27	25.7	36.6	
	8T 		20	26	27.1	35.2	22	31	29.8	42	
M10	4T 	1.5	20	25	27.1	33.9	20	29	27.1	39.3	
	7T 		34	40	46.1	54.2	35	47	47.4	63.7	
	8T 		38	46	51.5	62.3	40	52	54.2	70.5	
M12	4T 	1.75	28	34	37.9	46.1	31	41	42	55.6	
	7T 		51	59	69.1	79.9	56	68	75.9	92.1	
	8T 		57	66	77.2	89.4	62	75	84	101.6	
M14	4T 	2.0	49	56	66.4	75.9	52	64	70.5	86.7	
	7T 		81	93	109.8	126	90	106	122	143.6	
	8T 		96	109	130.1	147.7	107	124	145	168	
M16	4T 	2.0	67	77	90.8	104.3	69	83	93.5	112.5	
	7T 		116	130	157.2	176.2	120	138	162.6	187	
	8T 		129	145	174.8	196.5	140	158	189.7	214.1	
M18	4T 	2.0	88	100	119.2	136	100	117	136	158.5	
	7T 		150	168	203.3	227.6	177	199	239.8	269.6	
	8T 		175	194	237.1	262.9	202	231	273.7	313	
M20	4T 	2.5	108	130	146.3	176.2	132	150	178.9	203.3	
	7T 		186	205	252	277.8	206	242	279.1	327.9	
	8T 		213	249	288.6	337.4	246	289	333.3	391.6	

## Removing and Replacing the Drive Chain

Replace the Drive Chain when the distance between the sections of the Chain is less than 2" (*Figure 15*).

### **! WARNING!**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION: STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

*NOTE: A spring-loaded Tensioner maintains the chain tension on your DR SNOW THROWER ATTACHMENT. With this system, no tensioning adjustment is required.*

### **! NOTICE!**

**USE ONLY A DR CHAIN ON YOUR MACHINE. THE CHAIN HAS BEEN THOROUGHLY TESTED AND PROVEN FOR MANY HOURS OF USE.**

#### Tools and Supplies Needed:

- 1/2" Wrench
  - Blade Screwdriver
  - Pliers
  - Chain Saw Bar and Chain Oil
1. Using a 1/2" Wrench, unbolt the Chain Cover (*Figure 15*) and remove it.
  2. Locate and remove the Master Connecting Link in the chain by first removing the Lock Clip with a Blade Screwdriver and Pliers (*Figure 16*). You will need to lift one side and rotate the Clip to get it off the Master Link. Next, remove the Side Plate. Then remove the Master Chain Link and remove the Chain.
  3. Check the Chain Tensioner for wear (*Figure 15*) and replace it if necessary.
  4. Install the new chain around the Drive Sprocket and the Auger Sprocket (*Figure 15*).
  5. Pull the Chain Tensioner (*Figure 15*) up and away from the Chain to release tension on the Chain and reinstall the Master Chain Link, as shown in *Figure 16*, in the new Chain.
- Tip:** It is easier to install the Master Link on the Auger Sprocket to hold the chain ends in place.
6. Release the Chain Tensioner onto the new Chain and lubricate the Chain with Chain Saw Lubricant.
  7. Reinstall the Chain Cover.

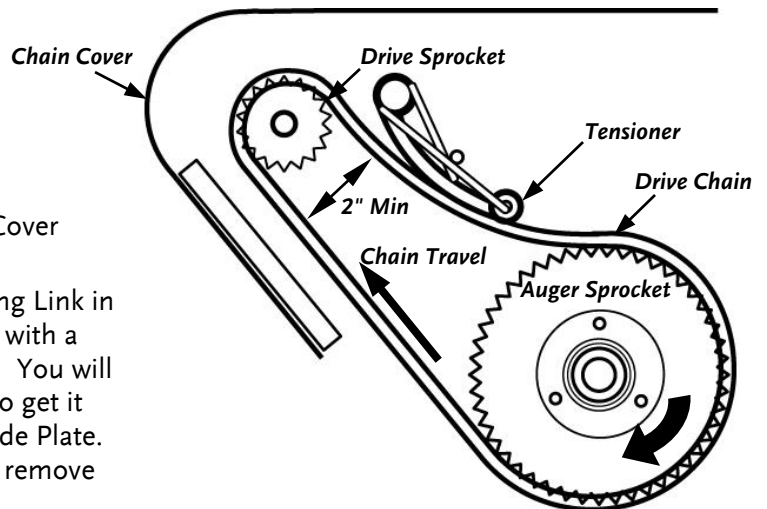


Figure 15

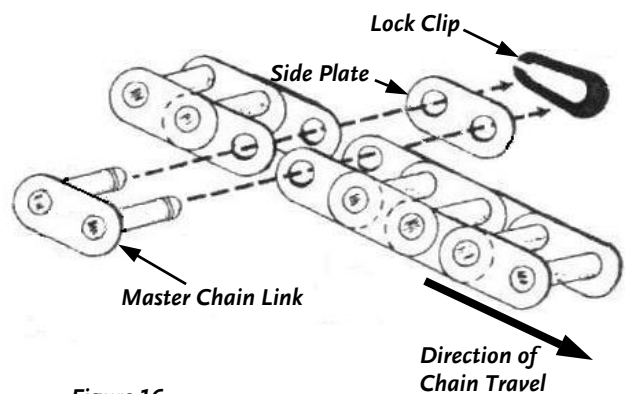


Figure 16

## Removing and Replacing the Drive Belt

- Check the Belt for proper orientation and wear (**Figure 17**) after the first four (4) hours of operation.
- Check the Belt for wear when replacing the Shear-Bolt.
- Replace the Belt if you notice reduced performance and/or Belt slippage.

### **! WARNING!**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION: STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

#### Tool Needed:

- 1/2" Wrench or Socket
- 9/16" Box Wrench

1. Using a 1/2" Wrench or Socket, remove the four (4) Bolts that retain the Belt Cover (**Figure 6** on page 13) and remove the Cover.
2. Using a 9/16" Box Wrench on the Tension Pulley Nut (**Figure 7** on page 13), pull on the Wrench to release the tension and remove the old Belt from the Pulleys (**Figure 8** on page 13).
3. Locate the new Drive Belt and install it on the Engine Pulley below the Power Unit (**Figure 6** on page 13).
4. Using a 9/16" Box Wrench on the Tension Pulley Nut (**Figure 7** on page 13), pull on the Wrench to release the tension to install the Belt on the Tensioner Pulley (**Figure 8** on page 13). Make sure that the V-Belt is not twisted and fits into the V-groove on the Pulley.

**NOTE:** Make sure that you position the Belt away from any protrusions.

5. Route the V-belt around the Drive Pulley, Tension Pulley, and Idler Pulley (**Figure 8** on page 13), and then ease the Tension Pulley back into position with the Wrench.
6. Reinstall the Belt Cover and secure in place using the four (4) Belt Cover Retaining Bolts. Tighten the Bolts using a 1/2" Wrench or Socket (**Figure 6** on page 13).

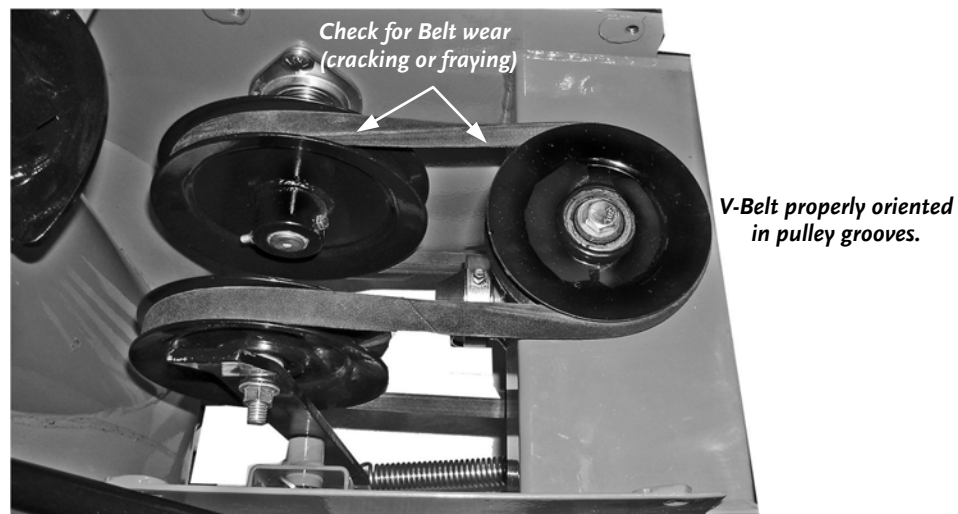


Figure 17



## Replacing the Shear-Bolt

If you should strike a foreign object (wood, stone, curbing, etc.) there is a safety Shear-Bolt in the Auger Drive System that will break, stopping the Auger from turning. When replacing the Shear-Bolt, also check the Drive Belt for wear. See page 28.

### **! WARNING!**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION: STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

#### Tools Needed:

- 1/2" Wrench or Socket
  - 5/16" Wrench or Socket (2-places)
1. To replace the Shear-Bolt, remove the four (4) Bolts using a 1/2" Wrench or Socket that retain the Belt Cover and remove the Cover (**Figure 18**).
  2. Remove any debris from the Shear-Bolt holes located in the Pulley Hub and Auger Drive Shaft (**Figure 18**).
  3. Align the Shear-Bolt hole in the Pulley with the Shear-Bolt hole in the Auger Drive Shaft and insert the new Shear-Bolt (**Figure 18**). Install the supplied Nut on the Shear-Bolt with two (2) 5/16" Wrenches or Sockets until the Nut just touches the Hub and then back the Nut off 1/2 turn. The Shear-Bolt will fail prematurely if over tightened.
  4. Reinstall the Belt Cover and secure with the four (4) Bolts.

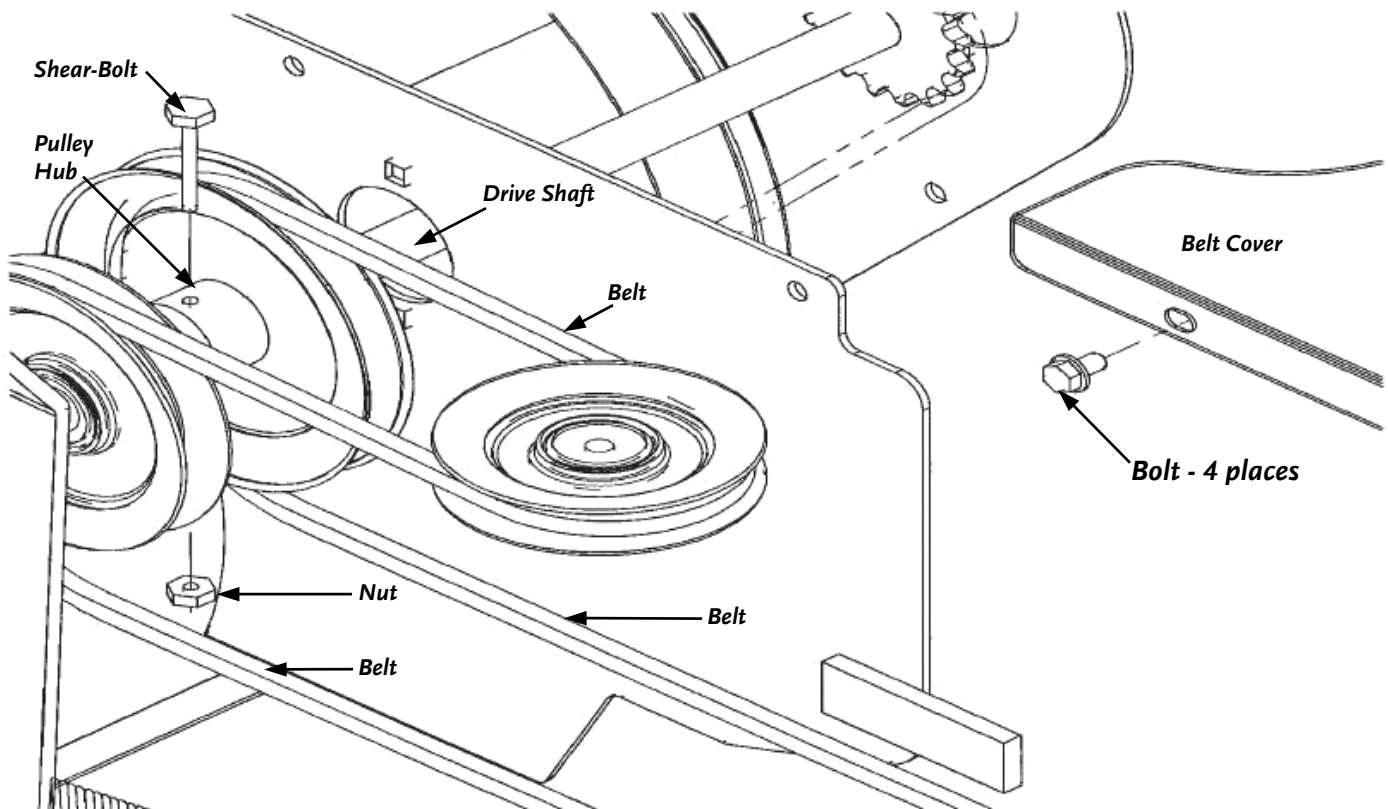


Figure 18

CALL TOLL FREE 1-800-DR-OWNER

## Lubrication

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### **WARNING!**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION: STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

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Lubricate the Auger Drive Chain with Chain Saw Bar & Chain Lubricant every 2 hours of operation and after each use.

## End of Season and Storage

Before storing your DR SNOW THROWER ATTACHMENT, you should take certain precautions to protect it from deterioration.

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### **WARNING!**

**IF THE DR SNOW THROWER ATTACHMENT WILL BE STORED WHILE ATTACHED TO THE POWER UNIT, AND BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION: SET THE PARKING BRAKE, AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

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- Wipe down and dry the Snow Thrower to remove any moisture and dirt that may have accumulated, especially in and around the Discharge Chute.
- Release the tension from the Drive Belt Idler Pulley and check the Drive Belt for wear. Leave the tension off the Belt for storage.
- Make any necessary repairs or adjustments.
- Repaint all parts and areas where the paint has worn or peeled.
- Lubricate the Auger Drive Chain with Chain Saw Bar & Chain Lubricant.
- Apply a spray type oil film (general purpose lubricate) to the Worm Gear and the surface of the Gear Teeth on the Discharge Chute Flange (**Figure 9** on page 14) and turn the Rotation Handle back and forth a couple of times to work in the oil. Then apply the same oil liberally to all surfaces to protect against rust.
- Store the DR SNOW THROWER ATTACHMENT in a dry location.

# TROUBLESHOOTING

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

## Troubleshooting Table

**! WARNING!**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION WHILE THE SNOW THROWER IS ATTACHED TO THE POWER UNIT: STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

<i>SYMPTOM</i>	<i>POSSIBLE CAUSE</i>
<i>No auger operation.</i>	<ul style="list-style-type: none"> <li>⇒ The PTO (Blade Drive) Lever is not engaged. Push the Lever forward or pull UP on the Blade Control Knob.</li> <li>⇒ The Snow Thrower Drive Belt is broken or fell off the pulleys. Check the routing of the Belt and replace or reinstall the Drive Belt. See page 28.</li> <li>⇒ The Shear-Bolt is broken; replace the Shear-Bolt. See page 29.</li> <li>⇒ The Drive Chain is broken or has fallen off the Drive Sprockets due to wear. Replace the Drive Chain. See page 27.</li> <li>⇒ If the problem persists, call <b>1-800-DR-OWNER (376-9637)</b> for assistance.</li> </ul>
<i>The Deflector Chute will not rotate.</i>	<ul style="list-style-type: none"> <li>⇒ Snow and ice may have accumulated in the rotating mechanism. Remove the accumulated snow and ice.</li> <li>⇒ The Cotter Pin or Hairpin Clip may have fallen off the Rotating Handle. Replace the Pin or Clip. See <b>Figure 9</b> on page 14.</li> <li>⇒ If the problem persists, call <b>1-800-DR-OWNER (376-9637)</b> for assistance.</li> </ul>
<i>The Drive Belt frays or rolls over the Drive Pulley.</i>	<ul style="list-style-type: none"> <li>⇒ The Drive Pulley groove probably has a nick in it. File off any nicks on the Pulley.</li> <li>⇒ Check the Drive Belt for wear and hard spots. The Drive Belt is probably stretched; replace it. See page 28.</li> <li>⇒ Check the routing of the Belt to make sure that it is away from any protrusions.</li> <li>⇒ If the Drive Belt still rolls off the Drive Pulley, call <b>1-800-DR-OWNER (376-9637)</b> for assistance.</li> </ul>
<i>The Cutting Edge of the Snow Thrower is digging into the ground surface.</i>	<ul style="list-style-type: none"> <li>⇒ Adjust or replace the Skid Shoes. See page 20.</li> <li>⇒ If the problem persists, call <b>1-800-DR-OWNER (376-9637)</b> for assistance.</li> </ul>

## PARTS LISTS, SCHEMATIC DIAGRAMS AND WARRANTY

### Parts List - Main Body, 30" DR SNOW THROWER ATTACHMENT

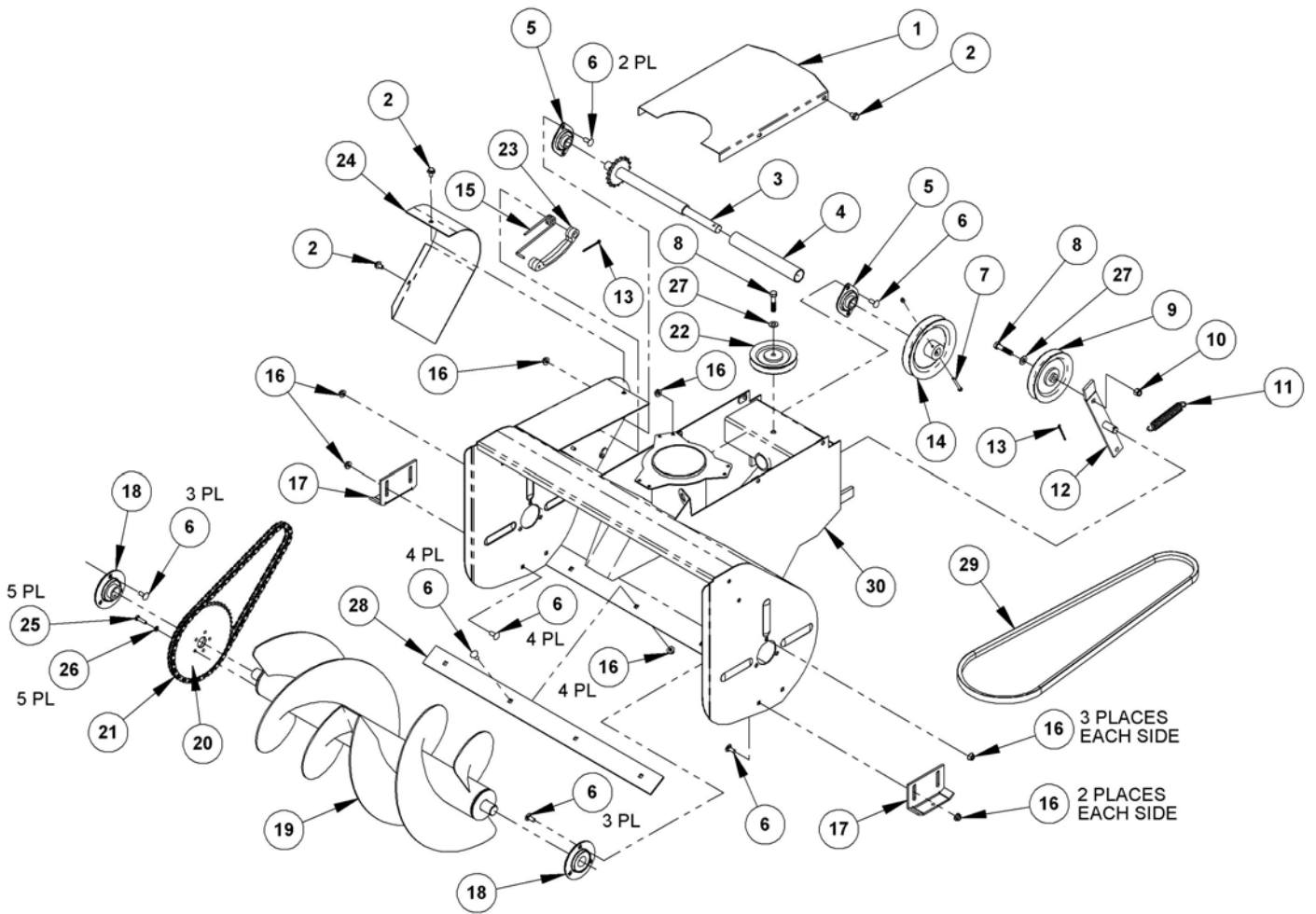
**NOTE:** Part numbers listed are available through Country Home Products, Inc.

Ref#	Part#	Description	Ref#	Part#	Description
01	181221	Cover, Belt and Pulley	18	186621	Bearing, with Flange, 1"
02	186701	Bolt, Serrated Flange, 5/16"-18 x 1/2" Gr5 zp	19	181181	Auger
03	181191	Shaft, Auger Drive	20	189641	Sprocket, 40 x 1/2" pitch, 48 teeth
04	181201	Sleeve, Shaft Guard	21	186581	Chain, #40, 82 links including the Master Link
05	186631	Bearing, with Flange, 3/4"	22	186641	Pulley, Idler, 4-1/4"
06	145291	Bolt, Carriage, 5/16"-18 x 3/4"	23	181251	Tensioner, Chain
07	158961	Bolt, Shear with Nut	24	181211	Guard, Drive Shaft
08	123341	Bolt, Hex, 3/8" NC x1-3/4" Gr5 zp	25	111491	Bolt, 1/4"-20 x 1", HCS, Gr5, zp
09	186651	Pulley, Idler, Spring Tension	26	101811	Washer, Lock, 1/4", Split, zp
10	110751	Nut, Nylon Lock, 3/8"-16	27	121701	Washer, Flat, 3/8", Narrow, zp, ANSI
11	158991	Spring, Extension	28	181171	Blade
12	181241	Bar, Tension, Pulley	29	186591	V-Belt, B78, 5/8" x 80.8"
13	186561	Pin, Cotter, 1/8 x 1 3/4"	30	181161	Frame, Main
14	186661	Pulley, 6.0", V-Belt			
15	186601	Spring, Torsion			
16	106681	Nut, 5/16"-18, Flanged			
17	181231	Skid Shoe			

**Not Illustrated:**

215101	Label, Warning, Operation
215111	Label, Danger, Hands
215121	Label, Auger
215131	Label, Warning, Lubrication
215141	Label, Danger, Belt Drive

**Schematic - Main Body, 30" DR SNOW THROWER ATTACHMENT**

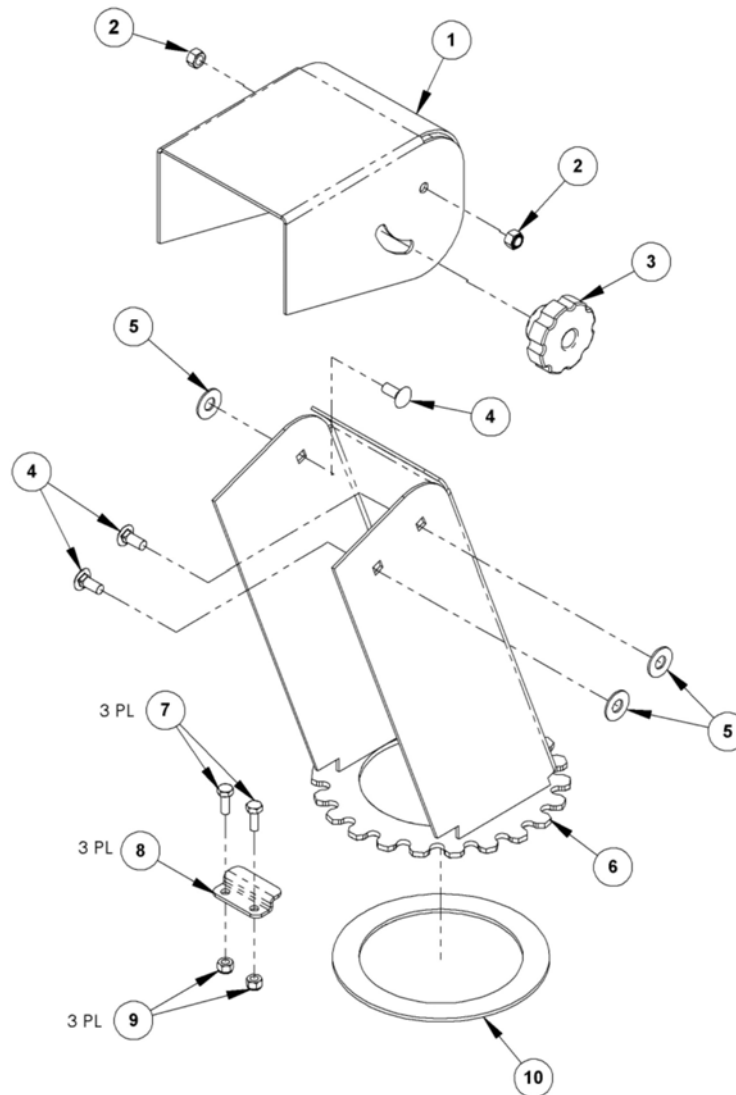


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## Parts List and Schematic - Chute with Deflector

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

Ref#	Part#	Description
01	181271	Deflector
02	110761	Nut, Nylon Lock, 5/16"-18
03	143661	Knob, Flush Nut, Handlebar
04	145291	Bolt, Carriage, 5/16"-18 x 3/4"
05	186691	Washer, Chute
06	181261	Base, Chute
07	119831	Bolt, 1/4"-20 x 3/4", HCS
08	181281	Plate, Retaining
09	110731	Nut, Nylon Lock, 1/4"-20
10	189691	Washer, Chute Base

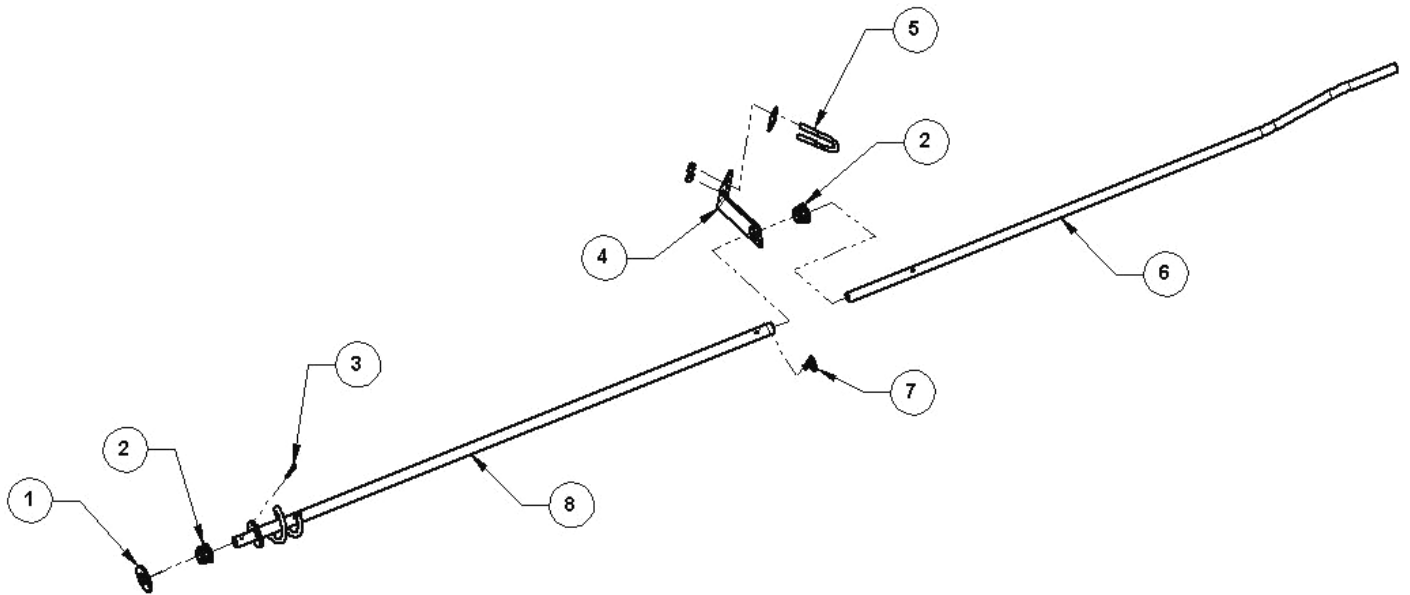


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## Parts List and Schematic - Manual Chute Rotation System

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

Ref#	Part#	Description
01	191021	Washer, Worm Shaft
02	158901	Bushing, Worm Shaft
03	186561	Pin, Cotter, 1/8" x 1-3/4"
04	181621	Bracket, Worm Shaft
05	204041	U-Bolt Assembly
06	181311	Handle, Chute Rotation
07	186671	Cotter, Hair Pin
08	181321	Shaft, Worm

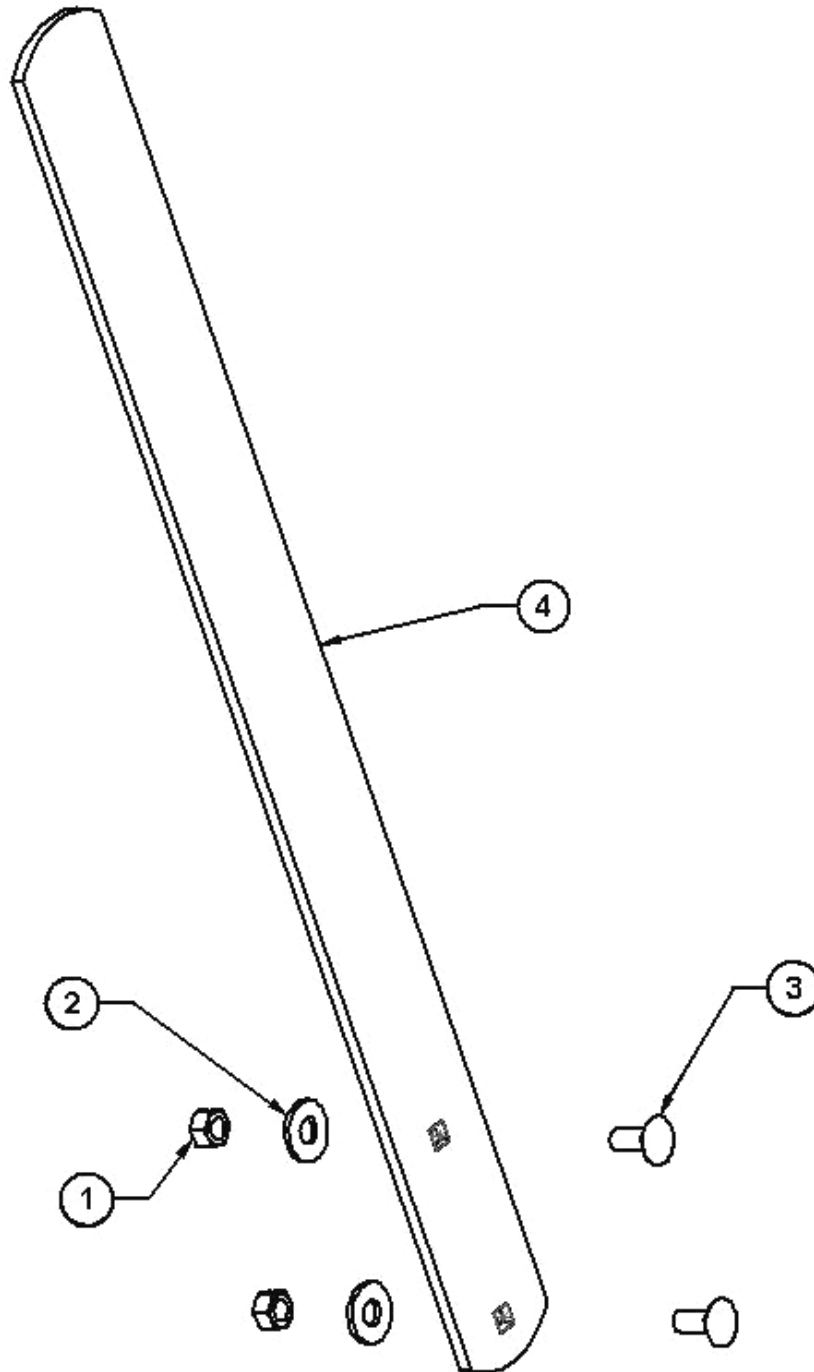


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## Parts List and Schematic - Optional Drift Cutter

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

Ref#	Part#	Description
01	110761	Nut, Nylon Lock, 5/16"-18
02	112411	Washer, Flat, 5/16" USS
03	145291	Bolt, Carriage, 5/16"-18 x 3/4"
04	179281	Plate, Drift Cutter



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**Notes**

**Notes**

# DR<sup>®</sup> SNOW THROWER ATTACHMENT



## 2-Year Limited Warranty

### Terms and Conditions

The DR<sup>®</sup> SNOW THROWER ATTACHMENT 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<sup>®</sup> Power Equipment) certifies that the DR<sup>®</sup> SNOW THROWER ATTACHMENT 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<sup>®</sup> SNOW THROWER ATTACHMENT 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 manufacturer's owner's manual. The warranty holder is responsible for replacement of normally wearing parts such as the Drive Belt, Bearings, Drive Chain, and Skid Shoes. 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<sup>®</sup> SNOW THROWER ATTACHMENT.

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 SNOW THROWER ATTACHMENT

To help maintain your DR SNOW THROWER ATTACHMENT for optimum performance, we recommend you follow this checklist each time you use your machine.

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### **WARNING!**

**BEFORE PERFORMING ANY MAINTENANCE PROCEDURE OR INSPECTION WHILE THE SNOW THROWER IS ATTACHED TO THE POWER UNIT: DISENGAGE THE DRIVE CLUTCH, STOP THE ENGINE, SET THE PARKING BRAKE, WAIT FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP AND DISCONNECT THE SPARK PLUG WIRE(S), KEEPING IT AWAY FROM THE SPARK PLUG(S).**

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- [ ] DISCHARGE CHUTE: Inspect the Chute for accumulated snow, ice or other debris.
- [ ] ROTATION SYSTEM: Inspect the Chute Rotation System to be sure that operates freely and does not travel beyond the safety limits. See **Figure 10** on page 14.
- [ ] DRIVE BELT: Check the condition of the Drive Belt for nicks and cuts. If you find the Belt worn or damaged, replace it with a new DR Snow Thrower Belt.
- [ ] SKID SHOES: Check the condition of the Skid Shoes and that they are properly adjusted for the operating surface. See page 20 for the adjustment procedure.
- [ ] GENERAL CONDITION: Check the general condition of the machine, e.g.; nuts, bolts, welds, etc.



DR® Power Equipment, A division of Country Home Products®

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

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