

# DR® WALK-BEHIND LEAF AND LAWN VACUUM SAFETY & OPERATING INSTRUCTIONS



Model:  
PILOT XT  
PILOT XTSP

Serial No. \_\_\_\_\_

Order No. \_\_\_\_\_

DR Power Equipment  
Toll-free phone: 1-800-DR-OWNER (376-9637)  
Website: [www.DRpower.com](http://www.DRpower.com)

## **WARNING**

Read and understand this manual and all instructions before operating the DR WALK-BEHIND LEAF AND LAWN VACUUM.

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## Conventions used in this manual

### DANGER

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

### 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.

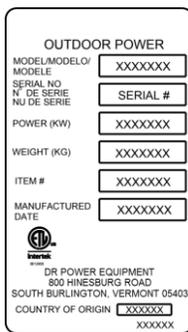


Figure 1

## Serial Number and Order Number

A Serial Number is used to identify your machine and is located on the Serial Number Label on your machine (**Figure 1**). An Order Number is used to check and maintain your order history and is located on the packing slip. For your convenience and ready reference, enter the Serial Number and Order Number in the space provided on the front cover of this manual.

## Additional Information and Potential Changes

DR Power Equipment 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.

## California Proposition 65

 **WARNING**  
**CANCER AND REPRODUCTIVE HARM - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)**

## Chapter 1: General Safety Rules

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### **! WARNING**

Read this safety & operating Instructions manual before you use the DR WALK-BEHIND LEAF AND LAWN VACUUM. Become familiar with the operation and service recommendations to ensure the best performance from your machine. If you have any questions or need assistance, please contact us at [www.DRpower.com](http://www.DRpower.com) or call toll-free 1-800-DR-OWNER (376-9637) and one of our Technical Support Representatives will be happy to help you.

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### **Labels**

Your DR WALK-BEHIND LEAF AND LAWN VACUUM carries prominent labels as reminders for its proper and safe use. Shown below are copies of all the Safety and Information labels that appear on the equipment. Take a moment to study them and make a note of their location on your DR WALK-BEHIND LEAF AND LAWN VACUUM as you set up and before you operate the unit. Replace damaged or missing safety and information labels immediately.

**WARNING: Check Oil  
Before Starting Engine**

#137581



#A0000330988

## Protecting Yourself and Those Around You

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### WARNING

This is a high-powered machine, with moving parts operating with high energy at high speeds. Use proper clothing and safety gear when operating this machine to prevent or minimize the risk of severe injury. 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 wear protective goggles or safety glasses with side shields while operating this vacuum system to protect your eyes from possible foreign objects thrown from the machine.
- Wear shoes with non-slip treads when using your DR Walk-Behind Leaf and Lawn Vacuum. If you have safety shoes, we recommend wearing them. Do not use the machine while barefoot or wearing open sandals.
- Avoid wearing loose clothing or jewelry, which can catch on the machine's moving parts.
- We recommend wearing gloves while using your DR Walk-Behind Leaf and Lawn Vacuum. Be sure your gloves fit properly and do not have loose cuffs or drawstrings.
- We recommend changing the debris bag after vacuuming grass and other debris and before using the system to vacuum material that may be used for compost or mulch.
- Wear long pants while operating the machine.
- Use Hearing 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 vacuum. Allow only responsible individuals who are familiar with these rules of safe operation to use your machine.
- Never place your hands, feet, or any part of your body near or under any moving part while the machine is running.
- Keep bystanders away from your work area at all times. Stop the engine when another person or pet approaches.
- Never use the machine with the collection bag removed.
- Clear the work area of objects such as rock, string-like material, wire, rope, or rags. Ingesting these objects into the vacuum 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 Walk-Behind Leaf and Lawn Vacuum. This includes all shields and guards. Modifications to your machine could cause personal injuries and property damage and will void your warranty.
- Inspect the Bag before each use and if worn or damaged, replace before using machine.

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## Safety for Children and Pets

### WARNING

Tragic accidents can occur if the operator is not alert to the presence of children. Children are often attracted to the machine and the vacuuming activity. **Never** assume that children will remain where you last saw them.

- Keep children out of the work area and under the watchful care of a responsible adult.
  - Be alert and always turn off the DR Walk-Behind Leaf and Lawn Vacuum engine if children or pets enter the work area.
  - Before, and while moving backwards, look behind, and **down** for small children and pets.
  - Never allow children to operate the vacuum.
  - Use extra care when approaching blind corners, shrubs, trees, or other objects that may obscure your vision.
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## Safety with Gasoline-Powered Machines

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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:

- Never operate the engine with the air cleaner or cover over the carburetor air-intake removed, except for adjustment. Removal of such parts could create a fire hazard. Do not use flammable solutions to clean air filter.
  - Never run the engine in an enclosed area or without proper ventilation as the exhaust from the engine contains carbon monoxide, which is an odorless, tasteless, and deadly poisonous gas.
  - 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 and empty the debris bag before storing the DR Walk-Behind Leaf and Lawn Vacuum in any enclosure. Remember, decomposing material generates heat and could start a fire. Never store the machine with gas in the tank or a fuel container, near an open flame or spark such as a water heater.
  - Never make adjustments or repairs with the engine running. Disconnect the spark plug wire and keep the wire away from the spark plug to prevent accidental starting.
  - Never check for an ignition spark with the spark plug or spark plug wire removed. Use an approved spark tester.
  - Never tamper with safety devices. Check their proper operation regularly.
  - Never change the engine governor settings or modify the engine speed. Modifications will void your warranty.
  - To reduce fire hazard, keep the engine and muffler area free of debris build-up such as leaves, grass, Oil, grease, or any other combustible material. Clean the engine area after each use.
  - Never operate the engine without the muffler. Inspect the muffler periodically and replace if necessary. If equipped with a muffler deflector, inspect the deflector periodically and replace if necessary.
  - The muffler and engine become very hot and can cause a severe burn; do not touch.
  - Always check fuel lines and fittings frequently for cracks or leaks, replace if necessary.
  - Replace rubber fuel lines and grommets when worn or damaged and after 5 years of use.
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## Safety on Slopes

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### **WARNING**

Slopes are a major factor related to slip and fall accidents, which can result in severe injury. All slopes require caution. If you feel uneasy on a slope, do not vacuum it. Always take the following precautions when using this machine on slopes:

#### **Always:**

- Vacuum across the face of slopes; never up and down. Exercise extreme caution when changing direction on slopes.
- Remove objects such as stones, wire, rope, or rags.
- Watch for holes, ruts, or bumps in the landscape.

#### **Never:**

- **Never** vacuum near drop-offs, ditches, or embankments; you could lose your footing or balance.
  - **Never** vacuum on slopes greater than 20 degrees, or any excessively steep slopes.
  - **Never** vacuum on wet, or slippery slopes; reduced traction could result in slipping.
  - **Never** park the vacuum on a steep grade or slope.
-

## General Safety

### **WARNING**

Operating this Vacuum safely is necessary 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 vacuum:

- Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people, their property, and themselves.
- Your DR Walk-Behind Leaf and Lawn Vacuum is a powerful tool. Exercise extreme caution at all times. The design of this machine is to vacuum debris. Do not use it for any other purpose.
- Know how to stop the vacuum quickly.
- Never allow people or pets to ride on the DR Walk-Behind Leaf and Lawn Vacuum.
- Never start the engine without the Hose fully inserted and secured at both ends.
- Never attempt to remove the Debris Bag while the DR Walk-Behind Leaf and Lawn Vacuum engine is running. Debris may exit at high velocity out of the openings created in the seams as you unlatch the debris bag.
- Remove or empty the debris bag after each use to prevent spontaneous combustion due to decaying material. **DO NOT STORE DEBRIS BAGS INDOORS.**
- Do not vacuum in sandy areas where you will vacuum large quantities of sand.
- Never operate the vacuum near hot or burning debris
- Never operate the vacuum near toxic or explosive materials.
- Never operate the vacuum near campfire sites. Even seemingly extinguished fires may retain hot embers and coals.
- If the machine should start making an unusual noise or vibration, stop the engine and wait five minutes to cool. Vibration is generally a warning of trouble. Disconnect the spark plug wire and inspect for clogging, damaged, or worn impeller, loose impeller bolt, or loose engine mounting bolts. Clean and repair and/or replace damaged parts.
- Always shut off the DR Walk-Behind Leaf and Lawn Vacuum engine, wait five minutes to cool, and disconnect the spark plug wire before attempting to clear any obstructions.
- Always keep the equipment in a good safe operating condition. Always make sure that nuts and bolts are tight and nothing is damaged.
- Use the DR Walk-Behind Leaf and Lawn Vacuum only in daylight.
- While using the vacuum, 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 leave the machine unattended with the engine running.
- Do not operate the machine when under the influence of alcohol, drugs, or medication.
- See manufacturer's instructions for proper operation and installation of accessories. Only use accessories approved by DR

### **A Note to All Users**

Under California law, and the laws of some other states, you are not permitted to operate an internal combustion Engine using hydrocarbon fuels without an Engine spark arrester. This also applies to operation on US Forest Lands. All DR Walk-Behind Leaf and Lawn Vacuums shipped are provided with spark arresters. Failure of the owner or operator to maintain this equipment in compliance with state regulations is a misdemeanor under California law and may be in violation of other state and/or federal regulations. Contact your State Park Association or the appropriate state organization for specific information in your area.

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 Lawn Vacuum in a safe manner. Contact us at [www.DRpower.com](http://www.DRpower.com) or call 1 (800) DR-owner (376-9637) for assistance.

## Chapter 2: Setting Up The DR® WALK-BEHIND LEAF AND LAWN VACUUM

It may be helpful to familiarize yourself with the controls and features of your DR WALK-BEHIND LEAF AND LAWN VACUUM as shown in Figures 2a and 2b before beginning these procedures. If you have any questions at all, please feel free to contact us at [www.DRpower.com](http://www.DRpower.com).

### DR WALK-BEHIND LEAF AND LAWN VACUUM PILOT XT and XTSP Controls and Features

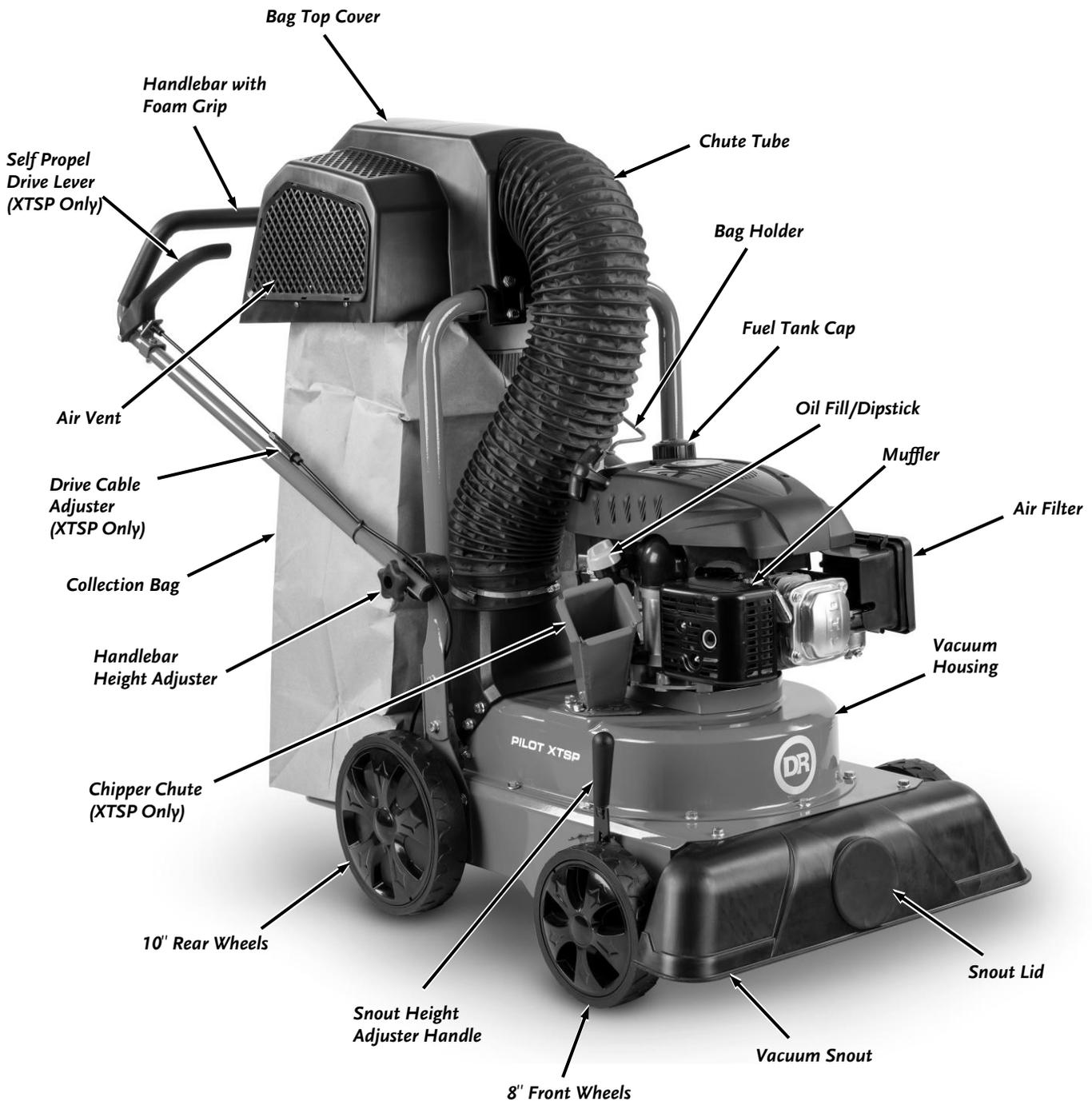


Figure 2

## Specifications

	PILOT XT	PILOT XTSP (electric start)
Engine	DR	
HP	6 HP	
Fuel Tank Capacity	1.0 L	
Engine Oil Capacity	0.5 Liters (16.9 oz)	
Engine Oil Type	SAE 30W HD	
Impeller Drive Method	Direct Drive	
Clearing Width	24"	
Chipper Knife Material	N/A	Hardened Tool Steel
Chipping Capacity	N/A	1.5" Dia.
Height Adjustment Range	1" to 4" (4 positions)	
Collection Bag Type	Paper or Canvas	
Collection Bag Volume	3.8 cu ft (3 Bushel)	
Collection Bag Weight Capacity	50 lbs	
Leaf Reduction	10:1	
Handlebar Height	Adjustable from 32" to 42"	
Front Wheel Size	8" x 2"	
Rear Wheel Size	10" x 2"	
Spare Bag Carrier	1 Carrier included (10 Bag Capacity), 2nd Carrier Optional (for 20 Bag total Capacity)	
Drive	Push	Transmission, Flex Speed Cone Clutch
Speeds	N/A	Reverse: N/A, Forward: Max 2.0 mph
Battery	N/A	12V, 2.3AH
Machine Dimensions	26"W x 42"H x 52"L	
Machine Weight	105 Lbs	120 Lbs

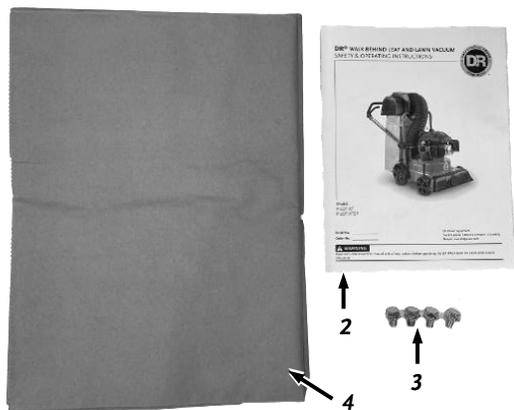


Figure 3

### Parts Supplied (Figure 3 and list below):

Item #	Description	Qty
1	Walk-Behind Leaf Vacuum	1
2	Product Package (User Manuals and Hardware)	1
3	A0000330868 - Bolt, Flange, 5/16-18 X 1/2"	4
4	A0000330872 - Bag, Paper, 5 Pack	1

Compare the contents of the Shipping Crate, with the Parts Supplied list above. If you have any questions, please contact us at [www.DRpower.com](http://www.DRpower.com) or call 1-800-DR-OWNER (376-9637) for assistance.

## Assembling the DR WALK-BEHIND LEAF AND LAWN VACUUM

**Note:** Assembly should be done on a clean, level surface.

### Tools Needed:

- 1/2" Wrench
1. Remove the machine from the pallet and place it on a clean, level surface for assembly (**Figure 4**).
  2. For the Pilot XT: Remove the Upper Handlebar and place it to the side. For the Pilot XTSP: Rotate the Upper Handlebar and set it on the ground behind the machine (Note: The Drive Cable comes attached to the Upper Handlebar)
  3. Rotate the Lower Handlebar upright, align the mounting holes, and install the four 5/16-18 X 1/2" Bolts by hand (**Figure 5**).
  4. Tighten the four Lower Handlebar Bolts using a 1/2" Wrench
  5. Rotate the Bag Support Platform down (**Figure 6**).
  6. Remove the knobs from each side of the Lower Handlebar.
  7. Install the Upper Handlebar onto the Lower Handlebar, and loosely reattach the Knobs to retain the Upper Handlebar.
  8. Adjust the Upper Handlebar to the preferred working height, then tighten down the Knobs to lock the Upper Handlebar in place. (**Figure 7**).
  9. Slowly pull the pull start cord out, lace the cord through the Wire Recoil Holder, then slowly release the pull start cord (**Figure 8**).



Figure 4

Upper Handlebar

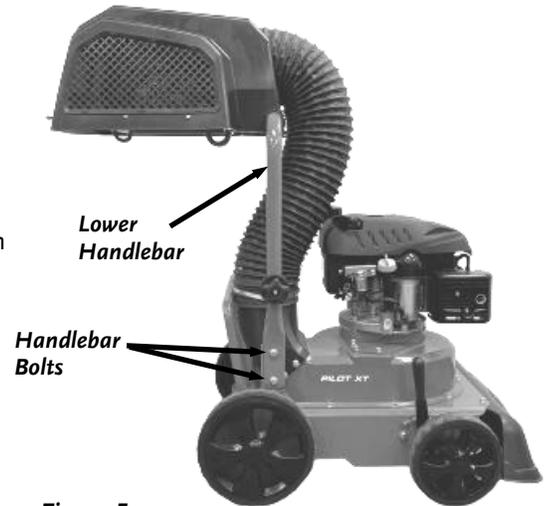


Figure 5

Lower Handlebar

Handlebar Bolts



Figure 6

Bag Support Platform



Figure 7

Knob



Figure 8

Wire Recoil Holder

## Adding the Engine Oil and Gasoline

### NOTICE

- You must add Oil before starting the Engine. This machine is shipped without Oil. Traces of Oil may be in the reservoir from factory testing, but you must add Oil before starting the Engine. Fill the reservoir slowly, checking the level frequently to avoid overfilling.
- The Engine needs to be on a level surface or overfilling could occur which could damage the Engine during use.
- The Dipstick should not be screwed down to ensure an accurate Oil level reading.

**Note:** Use only the recommended high detergent Oil. Other types of Oil could cause problems operating your machine. Please refer to your Engine Owner's Manual for detailed Oil information.

Engine Oil Type	SAE 30W HD
Engine Oil Capacity	0.5 Liters (16.9 oz)
Fuel Capacity	Unleaded gasoline; 1.0L

### Adding Engine Oil:

1. Ensure the machine is on a flat surface and locate the Height Adjust Lever to level the Frame and Engine (**Figure 9**).
2. Remove the Oil Fill/Dipstick and add an initial quantity of the Oil recommended by the Engine Manufacturer (refer to your Engine Owner's Manual for recommended quantities) and wait one minute for the Oil to settle (**Figure 10**).
3. Insert the Dipstick, but do not screw it down. Remove the Dipstick to check the Oil level.
4. Continue adding a few ounces of Oil at a time, rechecking the Dipstick until the Oil reaches the fill mark (**Figure 11**). Be careful not to overfill.
5. Replace the Dipstick and screw all the way down when full.

### Adding Gasoline

1. Remove the Fuel Tank Cap from the Fuel Tank (**Figure 12**).
2. Fill the Fuel Tank with fresh, clean Unleaded Gasoline to 1 inch below the bottom of the filler neck to provide space for any fuel expansion.

**Note:** It may be helpful to use a clean Funnel when adding fuel to the Fuel Tank

3. Reinstall the Fuel Fill Cap securely and wipe up any spilled gasoline.



Figure 9

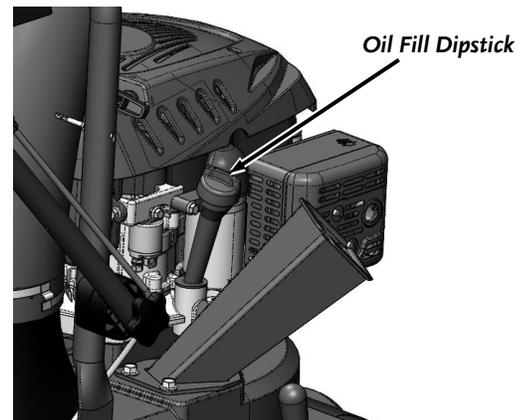


Figure 10

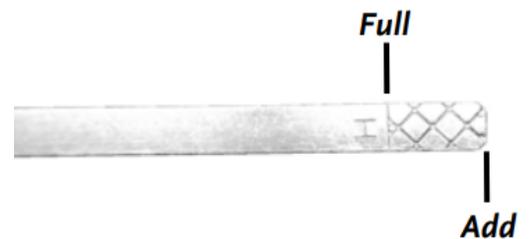


Figure 11

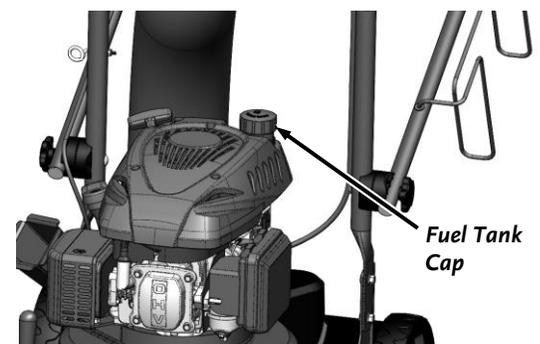


Figure 12

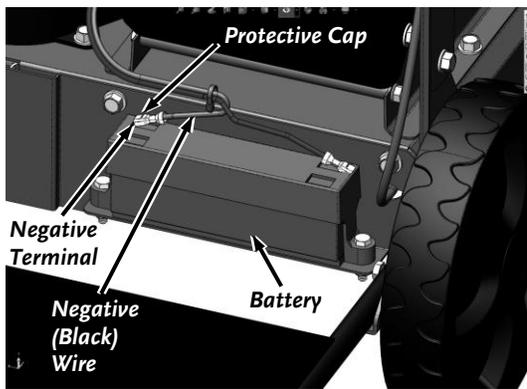


Figure 13

### Connecting the Battery Wire (Electric Start Models)

We ship all Electric-Starting DR WALK-BEHIND LEAF AND LAWN VACUUMS with the Black Negative Battery Wire disconnected. This prevents the Battery from discharging during shipment. You must connect the Battery wire before using your machine.

1. Locate the Negative Terminal on the Battery. (**Figure 13**)
2. Remove the protective Cap that comes on the Battery Terminals for shipping.
3. Insert the Negative Wire Connector onto the Negative Terminal of the Battery.

### **!** WARNING

Never start the Engine without the Collection Bag attached firmly to the Discharge Chute and Outlet Hose.



Figure 14

### Installing the Collection Bag

### **!** WARNING

Inspect each bag before use. Don't use a bag with a tear or wet spot. Using a wet or torn bag could lead to bag failure during operation

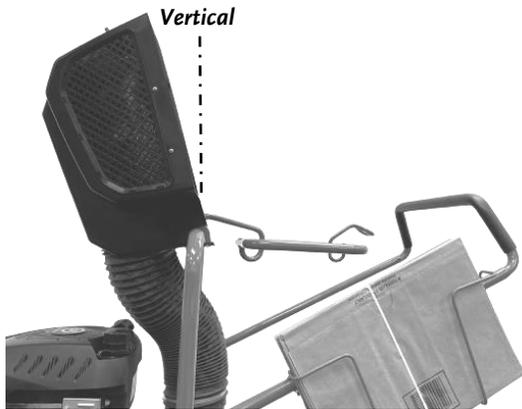


Figure 15

1. Locate the Cover Latch Handle (**Figure 14**), then lift the handle to open the Bag Top Cover. Lift the Bag Top Cover just past vertical where the Bag Top Cover will stay up by itself. (**Figure 15**).
2. Unfurl the bag until it can stand on its own.
3. Position the top of the bag around the outside of the Bag Clamping Ring while allowing the bag to stand on the Bag Support Platform. (**Figure 16**).
4. Fold the Bag edges over and into the Bag Clamping Ring and crimp the Bag around the Bag Clamping Ring. (**Figure 17**).
5. Close the Bag Top Cover and ensure the Latch is secured. (**Figure 18**).

**Note:** The machine will not turn on if the Bag Top Cover isn't secured completely.

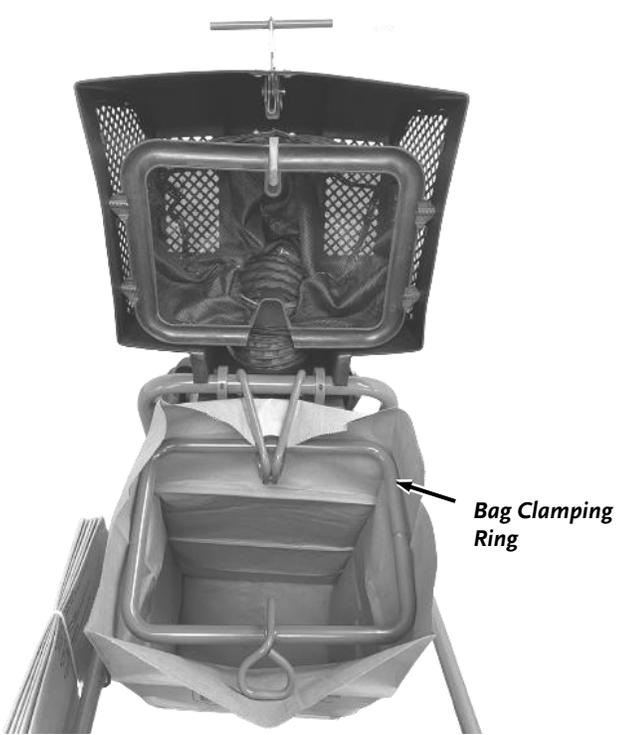


Figure 16



Figure 17



Figure 18

## Emptying/Replacing the Collection Bag

The Debris bags can be reused if they are in good condition. Do not reuse if there are tears or overly wet/soiled areas.

- Replace or empty the Bag as soon as it is full (check by feeling sides of Bag). Overfilling the bag will cause the vacuuming performance to decrease or stop completely and could lead to clogging of the discharge tube, snout, or both.
- Empty or remove the Bag completely BEFORE storing the machine to prevent premature deterioration of the Bag caused from rotting debris and the possibility of a fire occurring as a result of heat generated by decomposing debris.

### Emptying the Collection Bag:

6. Shut off the Engine and wait for all moving parts come to a complete stop.
7. Lift the Latch Handle and open the Bag Top Cover to its resting position. **(Figure 19).**
8. Unwrap the top of the Collection Bag from the Bag Clamping Ring. **(Figure 20).**
9. Pull the bottom of the bag off the Bag Support Platform. **(Figure 21).**
10. Either move the machine forward or continue pulling the bag until it is out from under the handlebar.
11. Empty the Bag for reuse, or fold over the top of the Bag for disposal.



Figure 19



Figure 20



Figure 21

## Chapter 3: Operating the DR WALK-BEHIND LEAF AND LAWN VACUUM

It may be helpful to better familiarize yourself with the features of your DR WALK-BEHIND LEAF AND LAWN VACUUM by reviewing **Figure 2** in Chapter 2 before beginning the steps outlined in this chapter. Always refer to the Engine manual for more specific Engine information.

### Starting the Engine (Manual Start)

1. Press the On/Off Switch to the ON position (**Figure 22**).
2. Slowly pull the Starter Cord until you feel resistance, then pull quickly. Once the Engine starts, release the Cord and it will recoil back into position.

### Starting the Engine (Electric Start)

1. Press and hold the Ignition Switch to the start position until the Engine starts and then release (**Figure 23**). The Switch will go back to the central run position and the Engine will continue to run.

### Stopping the Engine

2. Press the On/Off Switch to the OFF position (**Figure 22 and Figure 23**).

### Operating the Drive System (Self Propel Models)

#### TO TRAVEL FORWARD

1. Start the machine and slowly pull the Self Propel Drive Lever toward the Handlebar Grip and hold for maximum speed as needed (**Figure 24**).

Note: You can vary the speed of the machine by the position of the Drive Lever. Pulling the Drive Lever fully against the Handlebar Grip produces the maximum travel speed. Slowly releasing the Drive Lever will produce lower speeds until the Lever is fully released to stop forward travel.

#### TO STOP TRAVEL FORWARD

1. Fully release the Drive Lever (**Figure 24**).

### Wheel Drive Operating Tips

- Never go up or down a slope at an angle as the machine may become unstable and tip over. If the machine does tip over, immediately shut down the Engine and move the machine to stable ground. Check the machine for damage.

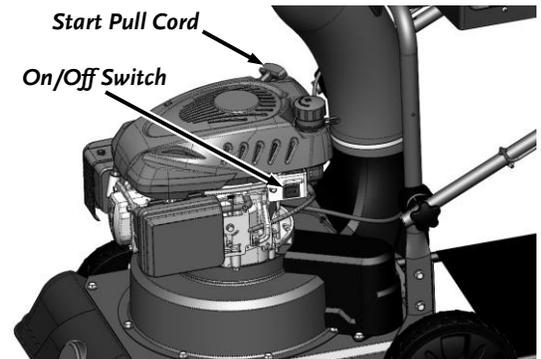


Figure 22

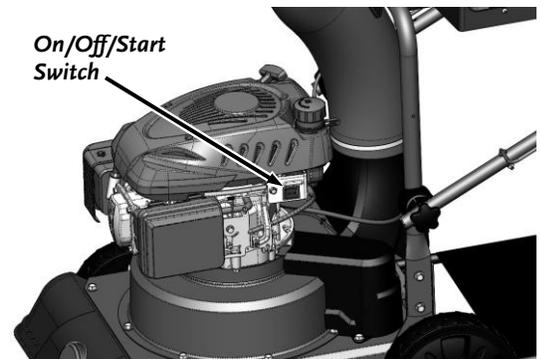


Figure 23

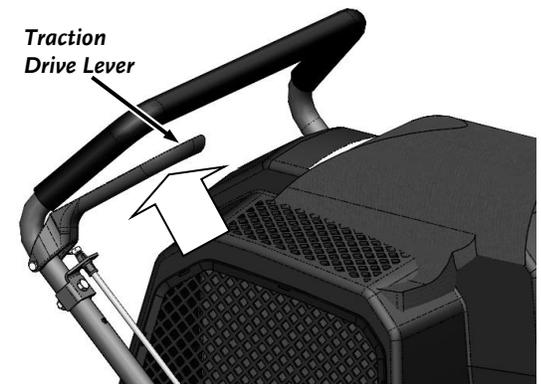


Figure 24

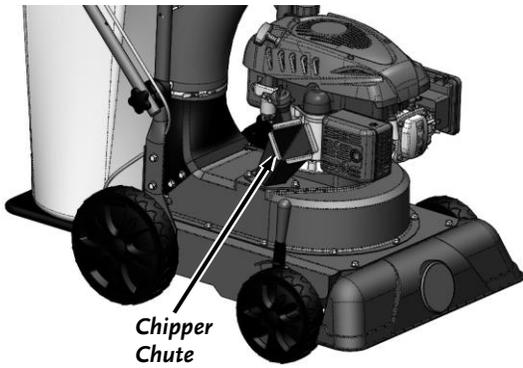


Figure 25

## Using the Chipper Chute

The Chipper can chip twigs and branches ranging in size up to 1.5" in diameter. Cut your materials into manageable lengths before feeding them into the Chipper Hopper. The revolving Chipper Knife mounted on a Rotor, turns branches fed into the Hopper into "chips".

- Be sure that the collection bag is in place and has enough room for the new debris before chipping.
- Always wear safety goggles, gloves, and hearing protection when chipping.
- Start the Engine on level ground.
- Keep a moderate feed rate to prevent overloading the machine.
- Use common sense when using the chipper. Learn to recognize the

change in sound when the Engine is overloading. Pull back on the material you are chipping if overloading should occur.

- Green or dry branches chip easily and soft wood will chip easier than hard wood.
- Use caution with small diameter green saplings and branches less than 1" in diameter. Chip these grouped or bundled together to provide support for each other. If the material is 1" or larger, feed only one at a time into the Chipper Chute.
- Some side shoots or side branches may have to be trimmed from the main stalk before chipping.
- Short stubs of branches may be pushed through the Chipper section with the next branch. NEVER ALLOW YOUR HANDS TO ENTER THE CHIPPER CHUTE. If necessary, push the material further down with a long stick or branch.
- When chipping branches occasionally a "tail" will be left at the end of the branch (usually green wood), which increases in length as you chip and eventually wraps around the shaft. To avoid this, slowly turn the branch as you feed it into the Chipper tube. This will also improve the chipping performance.
- When chipping, frequently empty the Collection Bag to make it easier because of the weight of the accumulative chips.
- If the machine does not chip well, the Chipper Knife may need to be replaced.

## Using the Vacuum

- Before leaves drop, mow your lawn to the shortest recommended height. Your DR WALK-BEHIND LEAF AND LAWN VACUUM will perform better on short grass.
- The DR WALK-BEHIND LEAF AND LAWN VACUUM is designed to be used frequently during periods when leaves are dropping. It is not recommended to let leaves get 4", or deeper.
- The drier the leaves the better.
- The thicker the leaf layer the slower you should proceed. If leaves are wet or matted down use light pressure on the Drive Lever and it may be necessary to fluff up leaves before using the vac. If the snout clogs, try going at a slower speed.
- Snout height is critical. The snout should be positioned just above the leaf layer to allow proper vacuuming. As a general reference, the front of the snout should scrape the top of the grass.
- You should avoid vacuuming twigs and branches into the snout. This will cause clogging. Twigs and branches should be processed through the Chipper Chute.
- Avoid overfilling the Vacuum Snout, this will cause clogging.
- Vacuuming wet and soggy material will also cause clogging. A steady pace with a smaller flow of materials provides the most effective results.
- Avoid clogging when vacuuming loose, stringy material such as hay or pine straw, by picking up a small amount at a time. Check and empty the Collection Bag frequently.
- Avoid vacuuming in sandy areas, as this will cause excessive wear.
- Use care when vacuuming near plantings, ornamentals, mulches.
- Use extra caution when vacuuming around stone and gravel.

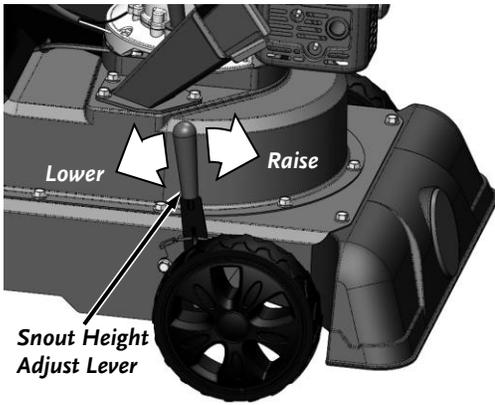


Figure 26

## Adjusting the Vacuum Snout Height

### **! CAUTION**

The machine may try to fall to the lowest Snout height setting when the Height Adjust Handle is moved out of the slot.

The height of the Vacuum Snout can be adjusted to allow you to vary the suction to meet the surface conditions.

- For short turf with light leaf fall, the Snout should be lowered closer to the surface.
- For long turf and heavy leaf fall, the Snout should be raised above the debris.
- For moving the machine long distances, you will avoid damage to the snout by raising the Snout to the highest setting.

1. **To raise the Snout:** Pull the Height Adjust Handle out of the slot and move it forward to the next desired slot (**Figure 26**).
2. **To lower the Snout:** Pull the Height Adjust Handle out of the slot and move it rearward to the next desired slot.

### **! WARNING**

Before performing any maintenance procedure or inspection, stop the Engine, wait for all moving parts to come to a complete stop and wait five minutes to allow all parts to cool. Disconnect the Spark Plug Wire, keeping it away from the Spark Plug.

## Clearing the Machine of Debris Clogs

A clog in the machine can cause the vacuuming, shredding, and chipping operations to decrease or even stop completely. If clogging occurs, check (and clean if necessary) the following areas. Tools needed:

- 1/2" Wrench
- Stick

1. Make sure the machine is off and the Impeller has stopped spinning.
2. Remove any material left in the Chipper Hopper with a stick (XTSP Models).
3. Lift the Bag Cover Latch to open the Cover fully.
4. Check that the Collection Bag is not overfilled. Empty the Bag if Full.
5. Check the end of the Hose for debris buildup inside the Bag Top Cover. Remove any buildup and close the Cover. If you found and removed debris from the Bag Top Cover, you can try turning the machine on to see if the clog is cleared, or if the machine will be able to clear the remaining clog itself. If you find the machine is still clogged, turn the machine off and make sure the Impeller has stopped spinning before continuing on to step 6.
6. Remove the four Bolts that secure the Outlet Tube to the Impeller using a 1/2" Wrench (**Figure 27**). Remove the Outlet Tube from the Impeller Housing.
7. Remove any clogged debris from the Hose and Impeller Housing.
8. Reinstall the Outlet Tube and fasten it to the Impeller housing with the four bolts.
9. Tilt the machine back and insert Blocks under the front Wheels to gain access to the Snout opening.

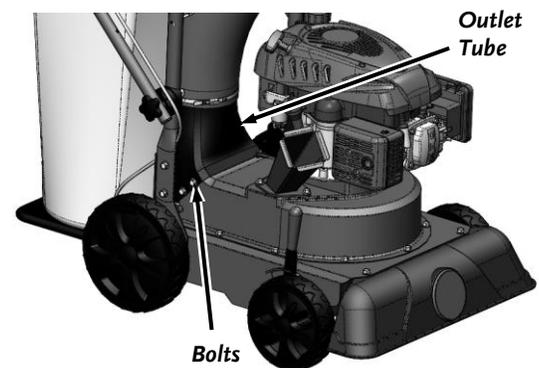


Figure 27

10. Clear any debris from the Snout opening.

**Extra Debris buildup under impeller**

**⚠ CAUTION**

Use caution if you need to tip the machine back more than 20 degrees. This could potentially lead to gas spilling from the machine.

If there is excess buildup of debris in the Impeller area.

1. Remove the five Bolts underneath the Vacuum Snout and two Bolts on top that secure the Snout to the Frame using a 1/2" Wrench (**Figure 28**). Remove the Snout.
2. Remove any clogged debris using a stick.
3. Reinstall the Snout, securing with five Bolts on bottom and two on top using a 1/2" Wrench.

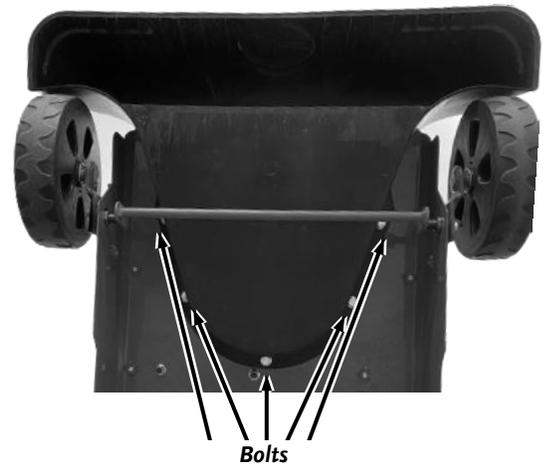


Figure 28

**Chapter 4: Maintaining the DR WALK-BEHIND LEAF AND LAWN VACUUM**

Regular maintenance is the way to ensure the best performance and long life of your machine. Please refer to this manual and the Engine Manufacturer's Owner's Manual for maintenance procedures. Service intervals listed in the checklist below supersede those listed in the Engine Manufacturer's Owner's Manual.

**⚠ WARNING**

Before performing any maintenance procedure or inspection, stop the Engine and wait five minutes to allow all parts to cool. Disconnect the Spark Plug Wire, keeping it away from the Spark Plug.

**Regular Maintenance Checklist**

PROCEDURE	BEFORE EACH	EVERY 25 HOURS	EVERY 50 HOURS
Check Engine Oil Level	▲		
Check Fuel Level	▲		
Check General Equipment Condition	▲		
Visually inspect Collection Bag for rips, tears, wet/soiled areas, and proper installation.	▲		
Visually inspect Knife (XTSP model) for damage and sharpness	▲		
Check for clogs and debris build up	▲		
Clean Engine Exterior & Cooling Fins	▲		
Clean Engine Air Filter		▲	
Change Engine Oil	1 <sup>st</sup> time 5 hours	▲	
Replace Drive Belt			▲
Replace Spark Plug			▲
Replace Air Filter			▲

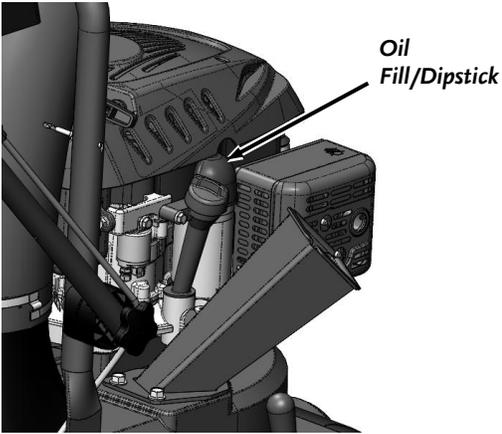


Figure 36

## Changing The Engine Oil

### Tools and Supplies Needed:

- Engine Oil (see your Engine Manual for Oil specifications)
- Oil Extractor\*
- Small Funnel
- Rags

\*The Engine does not have a Drain Plug. An Oil Extractor can be used to remove Oil. Visit our website to purchase an Oil Extractor.

**Note:** Remove the Oil when the Engine is warm. Warm Oil siphons quicker and more completely.

1. Remove the Engine Oil Fill/Dipstick. **(Figure 36).**
2. Use an Oil Extractor to remove the Oil from the Engine.
3. Initially add 14 oz. of Oil (type recommended by the Engine Manufacturer) into the Oil Fill and wait one minute for the Oil to settle.
4. Check the Dipstick and continue adding a few ounces of Oil at a time, rechecking the Dipstick until the Oil reaches the fill mark. Be careful not to overfill.

## Bag Maintenance

- Store bags in a dry area.

### **WARNING**

Inspect each bag before use. Don't use a bag with a tear or wet spot. Using a wet or torn bag could lead to bag failure during operation.

## Adjusting the Traction Drive Cable (Model XTSP)

**Note:** When properly adjusted, tension on the Traction Drive Lever should increase when the Lever is about parallel to (almost touching) the Handlebar Grip.

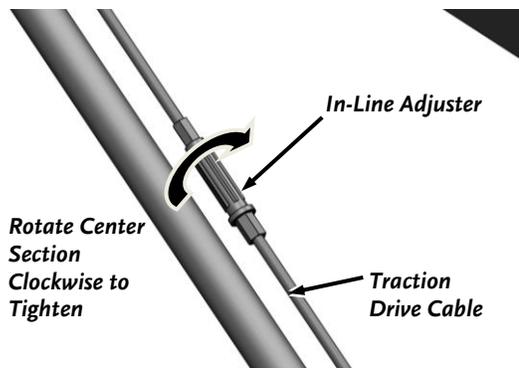


Figure 37

1. Locate the Traction Drive Cable along the Right Side of the Handlebar **(Figure 37)**. There is an In-Line Adjuster to change the length of the Cable.
2. Rotate the center portion of the In-Line Adjuster clockwise while holding the ends stationary to expand the In-Line Adjuster and remove slack from the Cable.

## Removing/Replacing the Chipper Knife (PILOT XTSP)

The PILOT XTSP model is shipped with a sharp Chipper Knife and, depending upon material being chipped, will remain acceptably sharp for 40 plus hours. When you notice diminished feeding, it is time to replace the knife. You may also choose to have the knife sharpened instead as described on the next page.

### Tools and Supplies Needed:

- 1/2" Wrench
- 7/16" Wrench
- Awl
- 4mm Allen Wrench

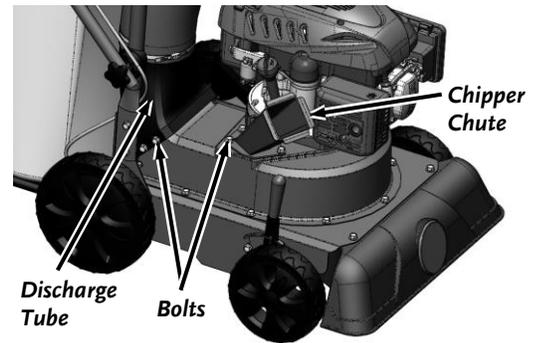


Figure 38

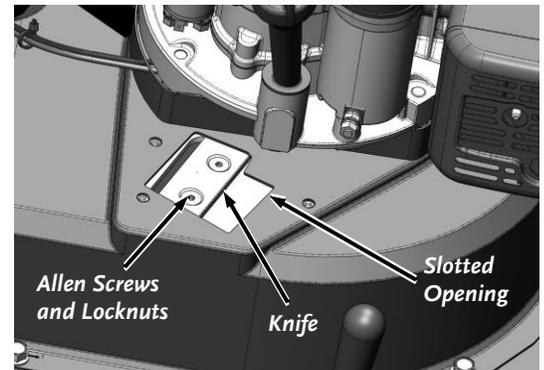


Figure 39

## ⚠ WARNING

Before performing any maintenance procedure or inspection, stop the Engine, wait for all moving parts to come to a complete stop and wait five minutes to allow all parts to cool. Disconnect the Spark Plug Wire, keeping it away from the Spark Plug.

1. Remove the three Bolts that secure the Chipper Chute to the Housing using a 1/2" Wrench (**Figure 38**). Remove the Discharge Chute from the Frame and set it aside to gain access inside the Impeller Housing.
2. Remove the four Bolts securing the Discharge Chute to the Frame using a 1/2" Wrench.
3. Clean out the Allen Screws using an Awl.
4. Hold the Allen Screw from turning using a 4mm Allen Wrench as you remove the Locknut from the underside of the Impeller using a 7/16" Wrench. Remove the second Bolt and Lock Nut to remove the Knife.
5. Visually inspect the Knife mounting surface and be sure it is clean. Metal burrs may need filing so the Knife mounts flush against the Flywheel.
6. Install a new or sharpened Knife with the sharp edge toward the Slotted Opening (**Figure 39**). Install in reverse order of removal, inserting the Screws first.

**Note:** It is important that you use the new Allen Screws and Lock Nuts provided with each new Chipper Knife.

7. Reinstall the Outlet Tube and Chipper Chute.

## Replacing the Drive Belt (PILOT XTSP)

### Tools and Supplies needed:

- 1/2" Wrench
- Pliers
- Diagonal Cutting Pliers

1. Locate a clean flat surface to work on.
2. Remove the two Bolts that Secure the Belt Cover to the Frame using a 1/2" wrench (**Figure 40**). Remove the Belt Cover.
3. Look closely at the Belt to find a small black arrow (**Figure 41**). The black arrow shows the direction of rotation. The arrow would be pointing left when viewed from the left side of the machine. The new Belt will need to be installed in the same direction for the Belt to work properly.

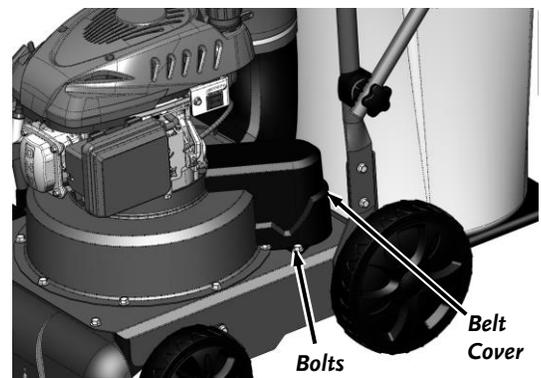


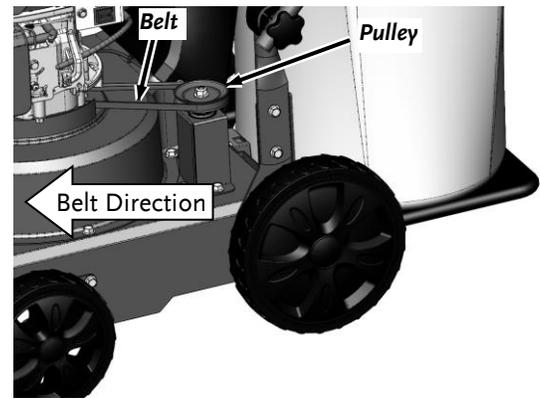
Figure 40

**Note:** Another way to quickly tell what direction the Belt should be assembled is to see what direction the “V” shaped opening is pointing. The “V” is pointing right when viewed from the left side of the machine.

4. Cut the old Belt to be replaced using Diagonal Cutters or equivalent and remove Belt from the Pulleys.

**Note:** You may want to practice assembling the Linked Belt out of the machine before it is placed inside where there is limited access. See the following section “Assembling the Belt Links”.

5. Before connecting the belt into a loop, route the belt around the pulley under the engine. Make sure the black arrow marked on the belt is pointing left when viewed from the left side of the machine.
6. Assemble the belt links together to form a continuous belt.
7. Roll the belt over the Pulley as you turn the Pulley until the Belt falls fully into the groove of the Pulley. Check that the Belt is seated in the grooves of the Drive and Impeller Pulley’s
8. Replace the Belt Cover and the two Bolts using a 1/2” wrench.



**Figure 41**

## Assembling the Belt Links

This section explains the assembly of the Belt Links and is for reference when installing the Belt onto the machine.

The Belt can be assembled by hand but if you are having difficulty twisting the Tabs, Needle Nose Pliers can be used. Be careful not to damage the Tabs when using the Pliers.

1. Turn the Belt inside out so the inside Tabs are facing out (**Figure 42**).
2. Twist the Tab end sideways and insert it through the two Slots until it comes out the other side (**Figure 43**).
3. Twist the end of the Tab to lock it into position (**Figure 44**).
4. Twist the second Tab sideways and insert it into the slot of the single Link at the end.
5. Twist the Tab back to the locking position (**Figure 45**).
6. Flip the Belt back to be right side out (**Figure 46**).

**Note:** The Belt must be disassembled before it can be installed around the Engine Pulley.

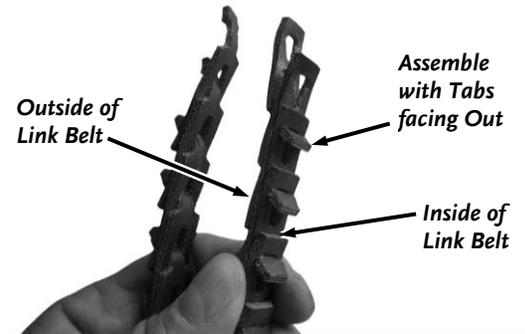


Figure 42

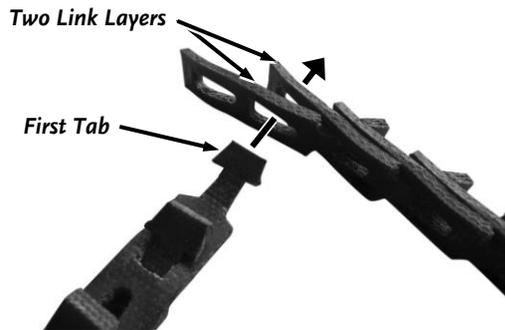


Figure 43

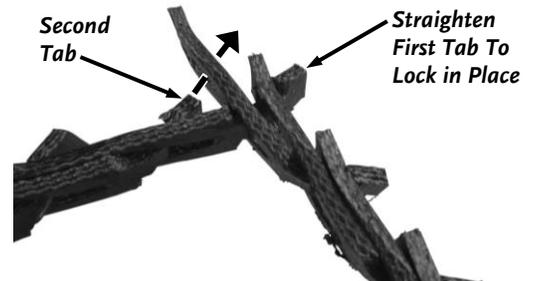


Figure 44

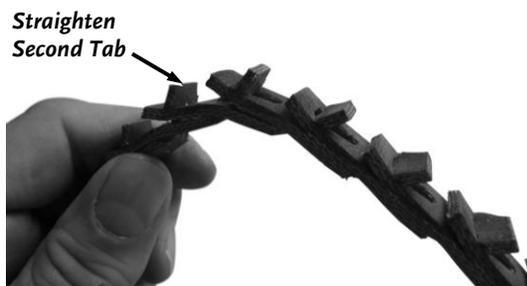


Figure 45



Figure 46

## **Battery Care (Electric Start Models)**

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

- Do not allow the Battery charge to get too low. If the machine is not used, charge the Battery every 4 – 6 weeks. Operate the Engine for at least 45 minutes to maintain proper Battery charge.
- Store an unused Battery in a dry area that does not freeze.
- Do not charge an already charged Battery. In theory, you cannot overcharge our Battery with a trickle Charger; however, when a Battery is fully charged and the Charger is still on, it generates heat that could be harmful to the Battery. A fully charged Battery will read 12V-13.2V with a Voltmeter.
- Do not continue to crank the Engine when the Battery charge is low.

## **Disposing of the Battery Responsibly**

The Battery is a sealed lead-acid Battery. Recycle or dispose of it in an environmentally sound way.

- Do not dispose of a lead-acid Battery in a fire; the Battery may explode or leak.
- Do not dispose of a lead-acid Battery in your regular, household trash. Law in most areas prohibits incinerating, disposing in a landfill, or mixing a sealed lead-acid Battery with household trash.

## **Charging the Battery**

Operate the Engine for at least 45 minutes to maintain proper Battery charge. If the Battery loses its charge, you'll need to use a trickle Charger (like the DR Battery Charger) to recharge it. The Charger should have an output of 12 volts at no more than 2 amps.

- At 1 amp, you may have to charge the Battery for as long as 48 hours.
- At 2 amps, you may have to charge the Battery for as long as 24 hours.

**Note:** *The charging system of a running Engine is designed to maintain a Battery's present charge. Starting a machine that has a significantly discharged or dead Battery using the Recoil Starter or Jumper Cables will not recharge the Battery.*

To connect a Battery Charger to your DR WALK-BEHIND LEAF AND LAWN VACUUM, follow the steps listed below.

1. Detach the two (2) Battery wires going to the Battery on your DR WALK-BEHIND LEAF AND LAWN VACUUM.
2. Attach the black (-) Battery Charger wire to the Battery Negative (-) Terminal and attach the red (+) Battery Charger wire to the Battery Positive (+) Terminal.
3. Plug the Battery Charger into an outlet.

---

### **NOTICE**

When you are finished charging the Battery; disconnect the Charger from the outlet first, then disconnect the Battery Charger wires from the Battery. If you leave the battery charger wires connected to the Battery, the Battery will discharge itself back into the Charger.

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## **Recycling a Used Battery**

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### **NOTICE**

Please dispose of used Batteries responsibly, according to your local hazardous materials regulations. Never throw away used Batteries in your household trash.

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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 Web site of Earth 911 for more information [[www.earth911.org](http://www.earth911.org)].

For a fee, you can recycle your Batteries with the International Metals Reclamation Company. Visit them at [www.inmetco.com](http://www.inmetco.com) for Battery Recycling and contact info.

To learn more about hazardous waste recycling, visit the Web site for Battery Council International [[www.batterycouncil.org](http://www.batterycouncil.org)] or for the Environmental Protection Agency [[www.epa.gov](http://www.epa.gov)].

## Chapter 5: Troubleshooting

Most problems are easy to fix. Consult the Troubleshooting Table below for common problems and their solutions. If you continue to experience problems, contact us at [www.DRpower.com](http://www.DRpower.com) or call toll-free 1-800-DR-OWNER (376-9637) for support.

### **WARNING**

Before performing any maintenance procedure or inspection, stop the Engine and wait five minutes to allow all parts to cool. Disconnect the Spark Plug Wire, keeping it away from the Spark Plug.

### Troubleshooting Table

SYMPTOM	POSSIBLE CAUSE; CORRECTIVE ACTION
<i>Engine fails to start</i>	<ul style="list-style-type: none"> <li>⇒ On/Off switch in OFF position; Move On/Off Switch to ON position.</li> <li>⇒ Bag Top Cover not fully closed; Check that the bag is installed properly and not preventing Bag top cover from closing and locking fully.</li> <li>⇒ Fuel Tank empty; Fill Tank with clean, fresh fuel.</li> <li>⇒ Spark Plug wire disconnected; Connect Wire to Spark Plug.</li> <li>⇒ Faulty Spark Plug; Clean, adjust gap or replace the Spark Plug.</li> </ul>
<i>Loss of power, operation erratic</i>	<ul style="list-style-type: none"> <li>⇒ Spark Plug Wire loose; Connect and tighten Spark Plug Wire.</li> <li>⇒ Blocked fuel line or stale fuel; Clean fuel line; fill tank with clean, fresh gasoline.</li> <li>⇒ Water or dirt in fuel system; Disconnect fuel line at carburetor to drain fuel tank.</li> <li>⇒ Carburetor out of adjustment; contact us at <a href="http://www.DRpower.com">www.DRpower.com</a> or call 1-800-DR-OWNER (376-9637) for assistance.</li> <li>⇒ Dirty air cleaner; Clean or replace air filter.</li> </ul>
<i>Engine overheats</i>	<ul style="list-style-type: none"> <li>⇒ Carburetor not adjusted properly; contact us at <a href="http://www.DRpower.com">www.DRpower.com</a> or call 1-800-DR-OWNER (376-9637) for assistance.</li> <li>⇒ Engine Oil level low; Fill crankcase with proper Oil.</li> <li>⇒ Internal Engine cooling fan not working properly due to debris buildup over Engine crank cover; Clean debris away from Engine crank cover for improved air circulation.</li> </ul>
<i>Unit does not discharge into bag</i>	<ul style="list-style-type: none"> <li>⇒ Discharge Hose clogged; Stop Engine immediately and disconnect spark plug wire. Clean inside of blower housing. See “MAINTENANCE” section of this manual.</li> <li>⇒ Foreign object lodged in Impeller; Stop Engine immediately and disconnect Spark Plug wire. Remove lodged object.</li> </ul>
<i>Excessive vibration.</i>	<ul style="list-style-type: none"> <li>⇒ Loose parts or damaged Impeller assembly; Stop Engine immediately and disconnect Spark Plug wire. Tighten all Bolts &amp; Nuts. Make all necessary repairs. If vibration continues, contact us at <a href="http://www.DRpower.com">www.DRpower.com</a> or call 1-800-DR-OWNER (376-9637) for assistance.</li> </ul>
<i>Chipper does not work (XTSP Model)</i>	<ul style="list-style-type: none"> <li>⇒ Solid object jammed in unit; Check &amp; remove any obstruction.</li> <li>⇒ Broken or missing Chipper Knife; Replace Knife.</li> </ul>
<i>Poor chipping performance (XTSP Model)</i>	<ul style="list-style-type: none"> <li>⇒ Dull Chipper Knife; Replace Knife.</li> <li>⇒ Engine not reaching full RPM; contact us at <a href="http://www.DRpower.com">www.DRpower.com</a> or call 1-800-DR-OWNER (376-9637) for assistance.</li> <li>⇒ Excessively worn Engine shaft bearings; contact us at <a href="http://www.DRpower.com">www.DRpower.com</a> or call 1-800-DR-OWNER (376-9637) for assistance.</li> <li>⇒ Loose mounting Bolt on Impeller assembly; Tighten bolt.</li> </ul>
<i>Loss of vacuum</i>	<ul style="list-style-type: none"> <li>⇒ Vacuum Snout clogged; Remove &amp; clean.</li> <li>⇒ Collection Bag full; Empty full bag and replace the bag or remove the full bag and replace with a new empty bag.</li> <li>⇒ Discharge Hose clogged; Clean Hose.</li> <li>⇒ Processing chamber clogged; Remove Vacuum Snout to clean chamber.</li> <li>⇒ Engine not reaching full RPM; contact us at <a href="http://www.DRpower.com">www.DRpower.com</a> or call 1-800-DR-OWNER (376-9637) for assistance.</li> </ul>

### ***Troubleshooting Table (Continued)***

<b>SYMPTOM</b>	<b>POSSIBLE CAUSE; CORRECTIVE ACTION</b>
<i>Debris build-up in Vacuuming/Chipper Housing</i>	⇒ Vacuuming too fast; Clean out housing and vacuum at slower speed.
<i>Loss of traction (XTSP Model)</i>	⇒ Drive Engagement Cable Loose; Adjust Drive Engagement cable. ⇒ Stretched or broken Drive Belt; Replace Belt.
<i>Wheels do not stop when Drive Engagement Lever is released</i>	⇒ Drive Engagement Cable out of adjustment; Adjust cable.



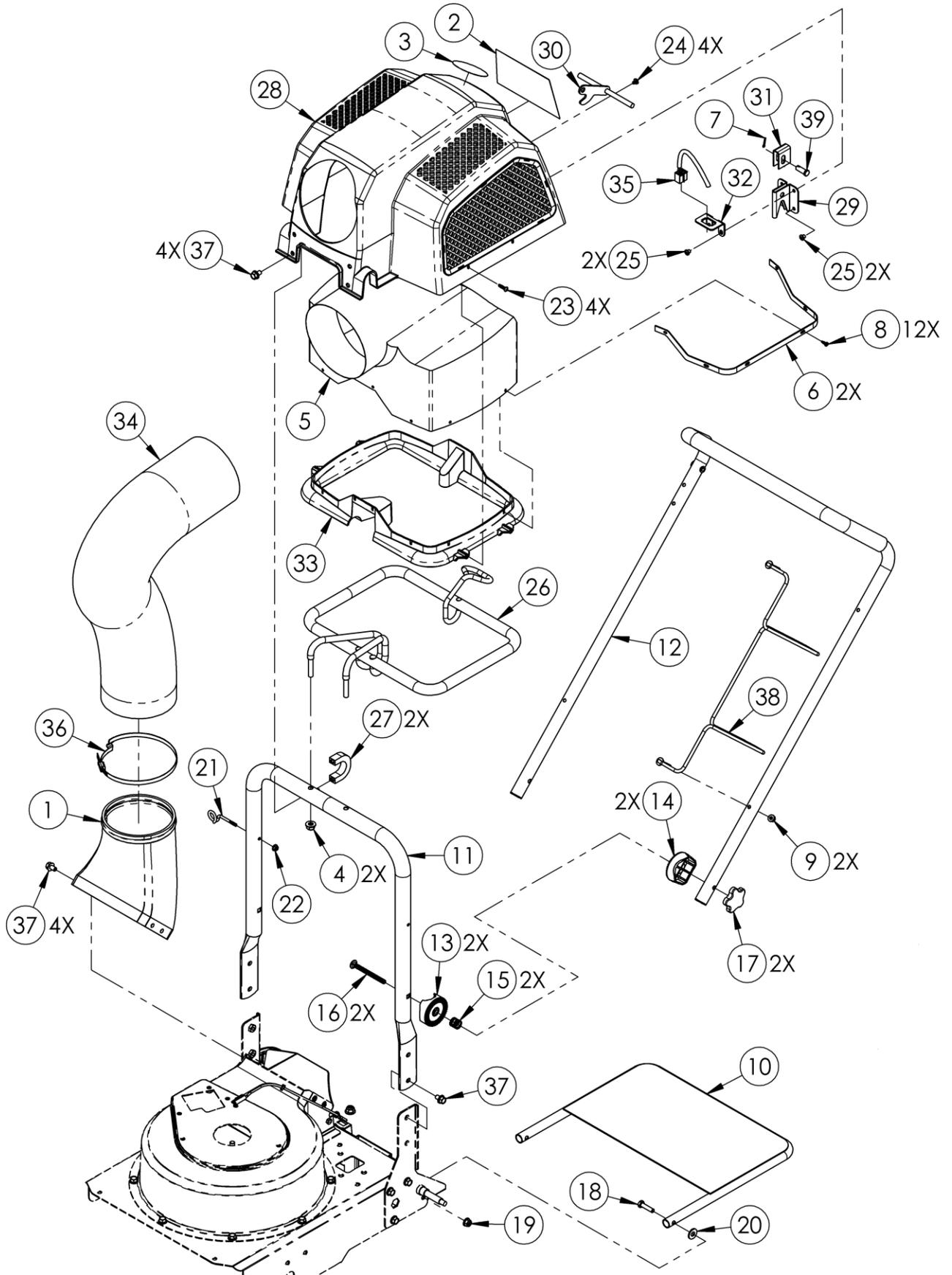
## Chapter 6: Parts Lists and Schematic Diagrams

### Parts List –Handlebar and Bagger Assembly (XT Model)

*Note: Part numbers listed are available through DR Power Equipment.*

Ref#	Part#	Description	Ref#	Part#	Description
1	A0000330797	Tube, Exhaust	22	350381	Nut, Nylon Lock, Flange, 10-24, ZP
2	A0000330988	Label, SLV-Instructions	23	A0000330878	Screw, RHTF,-10-14 X .75", ZP
3	A0000330989	Label, SLV-DR Logo Cover	24	A0000330874	Bolt, Barrel Male, -10-24 X 5/16", ZP
4	333331	Nut, Nylon Lock, Flanged, 3/8-16	25	A0000330875	Bolt, Barrel Female, 10-24 X 1/4", ZP
5	A0000330841	Bag, Cloth Lid	26	A0000330926	Ring, Bag Clamping
6	A0000330800	Clamp, Bag Top	27	A0000330822	Clamp, Lid Hinge
7	276761	Pin, Cotter, 3/32" X 1/2", ZP	28	A0000330896	Cover w/Labels, Bag Top
8	A0000330877	Screw, RHDS,-8-18 X .5", ZP	29	A0000330949	Latch, Body
9	333311	Nut, Nylon Lock, Flanged, 1/4-20	30	A0000330950	Handle, Latch
10	A0000330818	Platform, Bag Support	31	A0000330852	Bracket, OPC Contact
11	A0000330819	Handlebar, Lower	32	A0000330853	Bracket, Switch
12	A0000330820	Handlebar, Upper	33	A0000330799	Seal, Bag Top
13	A0000032880	Adjuster, Handlebar, 1.25" Tube	34	A0000330825	Tube, Chute
14	A0000330861	Adjuster, Handlebar, 1.00" Tube	35	A0000330838	Wire Harness, OPC
15	143931	Spring, C, .720" OD .063" Wire 0.63", ZP	36	A0000330881	Clamp, Hose Bridge, 6"
16	A0000222872	Bolt, Carriage, -5/16-18 X 3-1/2", ZP	37	A0000330868	Bolt, Hex, Flanged, 5/16-18 X 1/2", ZP
17	311121	Knob, 2.25" Dia, 516-18 Insert	38	A0001435741	Rack-Bag
18	123361	Bolt, HCS, 5/16-18 X 1-1/4", GR5, ZP	39	A0000330900	Pin, Clevis, 3/8" X 1"
19	333321	Nut, Nylon Lock, Flanged, 5/16-18	Not Shown		
20	112411	Washer, Flat, 5/16", USS	A0000330872	Bags, Paper, 5 Pack	
21	A0000655096	Recoil Holder, Wire Form			

**Schematic – Pro Handlebar and Bagger Assembly (XT Model)**

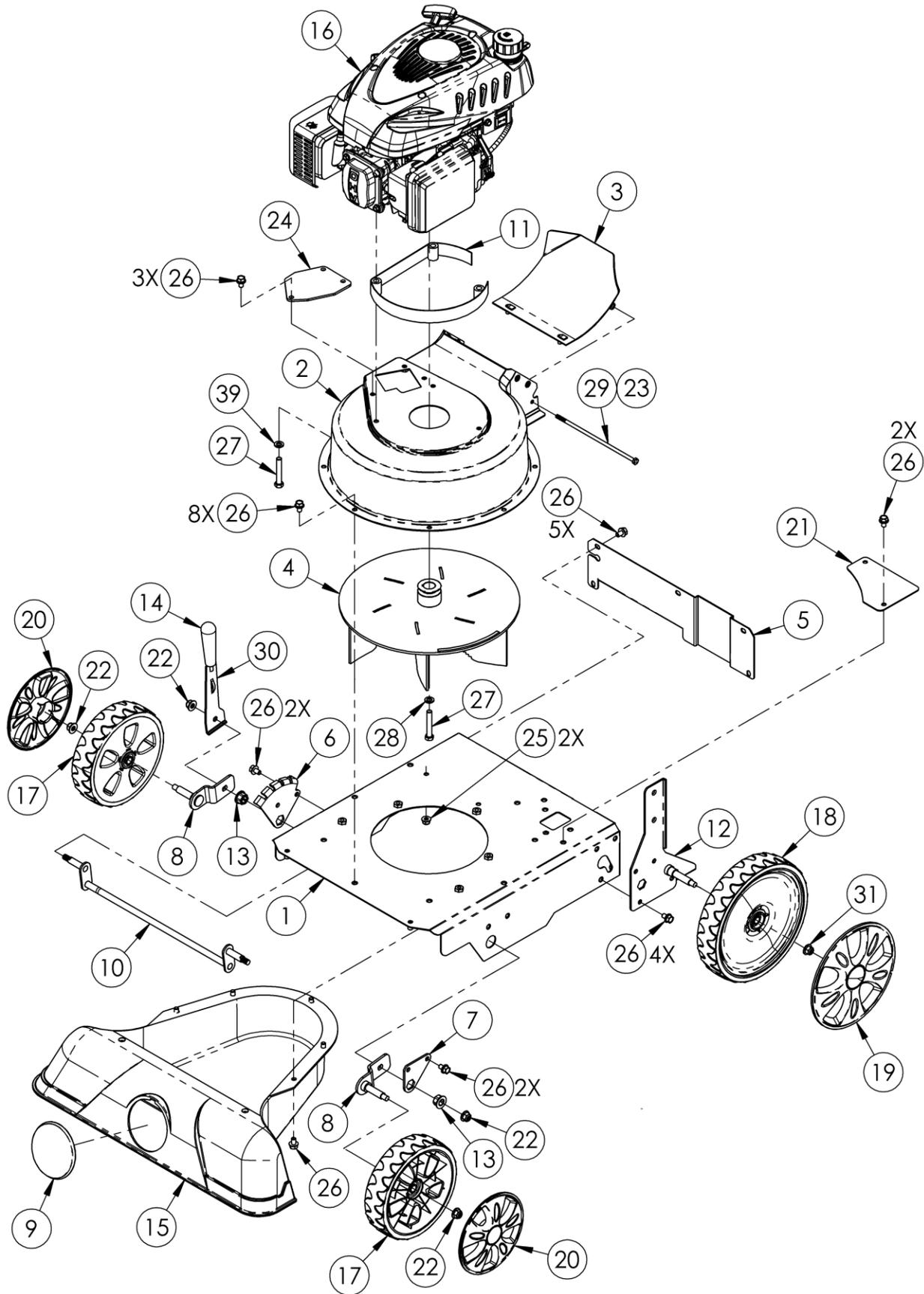


## Parts List – Drive Assembly (XT Model)

**Note:** Part numbers listed are available through DR Power Equipment.

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>	<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
1	A0000330802	Frame	17	A0000330843	Wheel, 8"
2	A0000331003	Housing, Impeller	18	A0000330831	Wheel, 10"
3	A0000330904	Shield, Deflector	19	A0000330832	Cover, Wheel, 10"
4	A0000330806	Impeller, without Knife	20	A0000330844	Cover, Wheel, 8"
5	A0000330860	Panel, Back	21	A0001427178	Cover, Push
6	A0000330914	Plate, Bear Claw	22	333331	Nut, Nylon Lock, Flanged, 3/8-16
7	A0000330915	Plate, Front Axle Mount	23	333311	Nut, Nylon Lock, Flanged, 1/4-20
8	A0000330813	Mount, Front Wheel	24	A0000330809	Cover, Chipper
9	A0000330829	Plug, Snout	25	333321	Nut, Nylon Lock, Flanged, 5/16-18
10	A0000330812	Axle, Front	26	A0000330868	Bolt, Hex Flanged, 5/16-18 X 1/2", ZP
11	A0000330811	Spacer, Engine, Push	27	188821	Bolt, HCS, 3/8-24 X 2 1/4", GR8, ZP
12	A0000330823	Plate, Left, Rear Axle	28	180811	Washer, Lock Split, 3/8"
	A0000330824	Plate, Right, Rear Axle	29	A0000330876	Bolt, Hex, 1/4-20 X 8.25", ZP
13	A0000330858	Bushing, Axle	30	A0000330816	Lever, Height Adjust
14	396181	Knob, Tapered, Plastic			
15	A0000330807	Snout			
16	A0000330894	Engine w/Labels, DR, 7.6GTQ, M/S, RV170			

**Schematic – Drive Assembly (XT Model)**

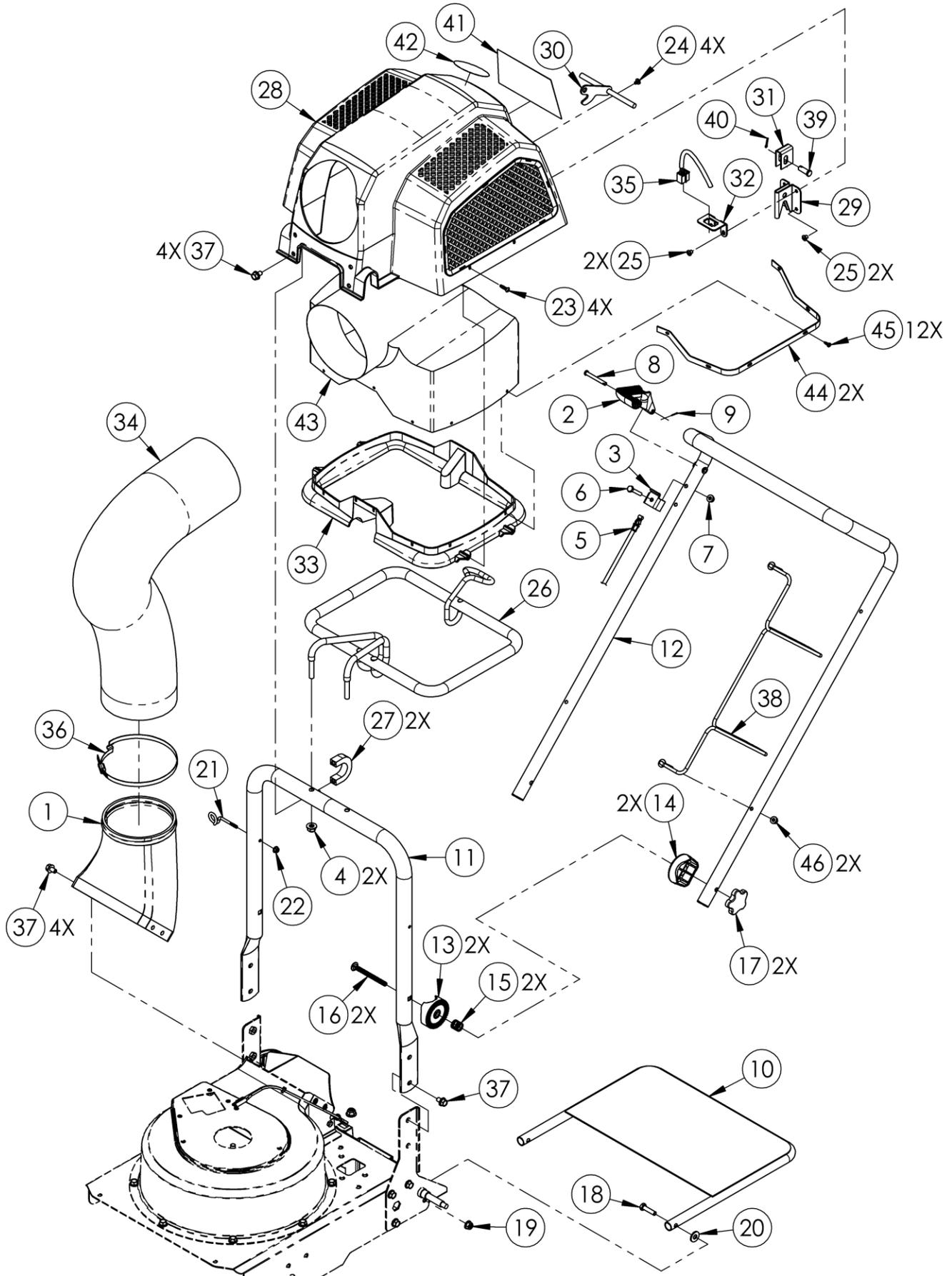


## Parts List –Handlebar and Bagger Assembly (XTSP Model)

**Note:** Part numbers listed are available through DR Power Equipment.

<u>Ref#</u>	<u>Part#</u>	<u>Description</u>	<u>Ref#</u>	<u>Part#</u>	<u>Description</u>
1	A0000330797	Tube, Exhaust	25	A0000330875	Bolt, Barrel Female, 10-24 X 1/4", ZP
2	395721	Lever, Self Propel Drive	26	A0000330926	Ring, Bag Clamping
3	A0000330821	Bracket, SP Cable	27	A0000330822	Clamp, Lid Hinge
4	333331	Nut, Nylon Lock, Flanged, 3/8-16	28	A0000330896	Cover w/Labels, Bag Top
5	A0000330842	Cable, Traction Drive	29	A0000330949	Latch, Body
6	101451	Bolt, HSC, 1/4-20 X 1-1/2" GR5, ZP	30	A0000330950	Handle, Latch
7	333311	Nut, Nylon Lock, Flanged, 1/4-20	31	A0000330852	Bracket, OPC Contact
8	A0000052276	Pin, Clevis, 1/4 X 2-1/8", ZP	32	A0000330853	Bracket, Switch
9	109751	Cotter Pin, 1/16" X 1/2", ZP	33	A0000330799	Seal, Bag Top
10	A0000330818	Platform, Bag Support	34	A0000330825	Tube, Chute
11	A0000330819	Handlebar, Lower	35	A0000330838	Wire Harness, OPC
12	A0000330820	Handlebar, Upper	36	A0000330881	Clamp, Hose Bridge, 6"
13	A0000032880	Adjuster, Handlebar, 1.25" Tube	37	A0000330868	Bolt, Hex, Flanged, 5/16-18 X 1/2", ZP
14	A0000330861	Adjuster, Handlebar, 1.00" Tube	38	A0001435741	Rack-Bag
15	143931	Spring, C, .720" OD .063" Wire, 0.63", ZP	39	A0000330900	Pin, Clevis, 3/8" X 1"
16	A0000222872	Bolt, Carriage,-5/16-18 X 3-1/2", ZP	40	276761	Pin, Cotter, 3/32" X 1/2", ZP
17	311121	Knob, 2.25" Dia, 516-18 Insert	41	A0000330988	Label, SLV-Instructions
18	123361	Bolt, HCS, 5/16-18 X 1-1/4", GR5, ZP	42	A0000330989	Label, SLV-DR Logo Cover
19	333321	Nut, Nylon Lock, Flanged, 5/16-18	43	A0000330841	Bag, Cloth Lid
20	112411	Washer, Flat, 5/16", USS	44	A0000330800	Clamp, Bag Top
21	A0000655096	Recoil Holder, Wire Form	45	A0000330877	Screw, RHDS,-8-18 X .5", ZP
22	350381	Nut, Nylon Lock, Flange, 10-24, ZP	46	A0000330987	Label, SLV, EZ Bagger
23	A0000330878	Screw, RHTE,-10-14 X .75", ZP	<b><u>Not Shown</u></b>		
24	A0000330874	Bolt, Barrel Male,-10-24 X 5/16", ZP		A0000330872	Bags, Paper, 5 Pack

**Schematic – Pro Handlebar and Bagger Assembly (XTSP Model)**

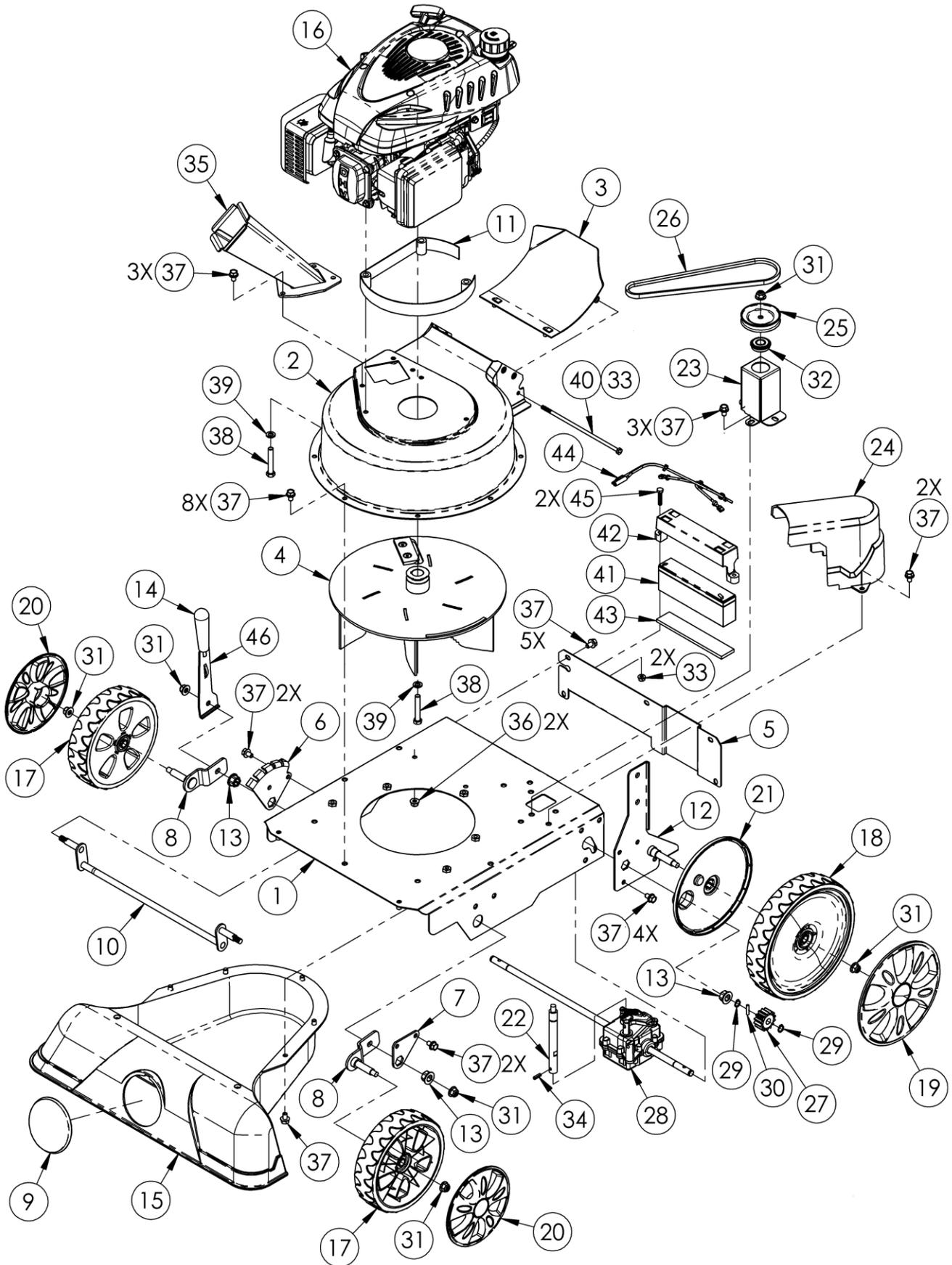


## Parts List – Drive Assembly (XTSP Model)

Note: Part numbers listed are available through DR Power Equipment.

Ref#	Part#	Description	Ref#	Part#	Description
1	A0000330802	Frame	25	A0000330855	Pulley, 3L V-Belt, 3.0" OD, .38" Shaft
2	A0000331003	Housing, Impeller	26	A0000330862	Belt, Linked, 3L
3	A0000330904	Shield, Deflector	27	422691	Gear, LH, SP
4	A0000330805	Impeller, with Knife	28	A0000330845	Transmission
5	A0000330860	Panel, Back	29	A0000923957	Ring, Retaining, 12mm
6	A0000330914	Plate, Bear Claw	30	A0000330898	Pin, 5mm Dia X 22mm Long
7	A0000330915	Plate, Front Axle Mount	31	333331	Nut, Nylon Lock, Flanged, 3/8-16
8	A0000330813	Mount, Front Wheel	32	A0000330883	Bearing, Flanged, 5/8" ID-1-3/8" OD
9	A0000330829	Plug, Snout	33	333311	Nut, Nylon Lock, Flanged, 1/4-20
10	A0000330812	Axle, Front	34	A0000330880	Pin, Roll, 5mm X 18mm, Plain35
11	A0000330810	Spacer, Engine, SP	35	A0000330808	Hopper, Chipper
12	A0000330823	Plate, Left, Rear Axle	36	333321	Nut, Nylon Lock, Flanged, 5/16-18
	A0000330824	Plate, Right, Rear Axle	37	A0000330868	Bolt, Hex Flanged, 5/16-18 X 1/2", ZP
13	A0000330858	Bushing, Axle	38	188821	Bolt, HCS, 3/8-24 X 2 1/4", GR8, ZP
14	396181	Knob, Tapered, Plastic	39	180811	Washer, Lock Split, 3/8"
15	A0000330807	Snout	40	A0000330876	Bolt, Hex, 1/4-20 X 8.25", ZP
16	A0000330895	Engine w/Labels, DR, 7.6GTQ, E/S, RV170	41	247491	Battery, 2.3Ah, 12V
17	A0000330843	Wheel, 8"	42	143851	Clamp, Battery
18	A0000330831	Wheel, 10"	43	143861	Pad, Battery, 1.38" X 7.0"
19	A0000330832	Cover, Wheel, 10"	44	A0000330839	Wire Harness, ES
20	A0000330844	Cover, Wheel, 8"	45	114681	Bolt, HCS, 1/4-20 X 1 1/4", GR5, ZP
21	422601	Cover, Inner, 10" Wheel	46	A0000330816	Lever, Height Adjust
22	A0000330856	Shaft, Pulley Riser	<b>Not Shown</b>		
23	A0000330854	Bracket, Transmission		A0000330992	Label, SLV, DR Logo, 3"
24	A0000330863	Cover, Belt		A0000330991	Label, SLV, Pilot XTSP
				137581	Label, Check Oil, 2.75" X .63"

**Schematic – Drive Assembly (XTSP Model)**



# DR® WALK-BEHIND LEAF AND

## 2-Year Limited Warranty

### Terms and Conditions



The DR® WALK-BEHIND LEAF AND LAWN VACUUM 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.

DR Power Equipment certifies that the DR® WALK-BEHIND LEAF AND LAWN VACUUM is fit for ordinary purposes for which a product of this type is used. DR Power Equipment 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® WALK-BEHIND LEAF AND LAWN VACUUM 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 manuals. The warranty holder is responsible for replacement of normally wearing parts such as the Belt, Filters, Chipper Knife, Battery and Spark Plug. Accessories to the machine are not covered by this warranty.

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

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

DR Power Equipment 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® WALK-BEHIND LEAF AND LAWN VACUUM.

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

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

**Notes:**

## **Daily Checklist for the DR WALK-BEHIND LEAF AND LAWN VACUUM**

To help maintain your DR WALK-BEHIND LEAF AND LAWN VACUUM 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, stop the engine and wait five minutes to allow all parts to cool. Disconnect the spark plug wire, keeping it away from the spark plug.

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- [ ] Check the Engine Oil level.
- [ ] Check Fuel Level.
- [ ] Check the general condition of the Vacuum, e.g.; Nuts, Bolts, welds, etc.
- [ ] Check that the Collection Bag is installed properly and not wet or damaged.
- [ ] Check for and clean accumulated debris in the Snout or Chipper Hopper
- [ ] Check and clean Engine Fins and controls of Debris.

### **End of Season and Storage**

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### **! WARNING**

Before performing any maintenance procedure or inspection, stop the engine and wait five minutes to allow all parts to cool. Remove the Key and disconnect the spark plug wire, keeping it away from the spark plug.

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- If your DR WALK-BEHIND LEAF AND LAWN VACUUM will be idle for more than 30 days, we recommend using a gas stabilizer. This will prevent sediment from gumming up the Carburetor. If there is dirt or moisture in the gas or tank, remove it by draining the tank. Completely fill the tank with fresh, unleaded gas and add the appropriate amount of stabilizer or gasoline additive. Run the Engine for a short time to allow the additive to circulate.
- Change Engine Oil.
- Clean dirt and debris from the Cylinder Head Cooling Fins, Impeller Housing, Debris Screen, and Muffler area of the Engine.
- Remove the Spark Plug and pour about 1 ounce of motor Oil into the Cylinder hole. Replace the Plug and pull the Recoil Starter Rope until you feel strong resistance. This will coat the piston and seat the valves to prevent moisture buildup.
- Empty and clean the Debris Bag and ensure it is dry. Remember, decomposing material generates heat and could start a fire.
- Clean or replace the Air Filter.
- Clean the exterior of the unit to remove all dirt, grease, and any other foreign material. To prevent rust, touch up paint surfaces that have been scratched or chipped.
- For Electric-Start models, store the Battery in a dry area that will not freeze. If you will not use the machine over a long period, charge the Battery every four to six weeks.
- If possible, store the machine in a dry, protected place. If it is necessary to store the machine outside, cover it with a protective material (especially the Engine and Housing).a0



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**800 HINESBURG ROAD, SOUTH BURLINGTON VERMONT 05403**