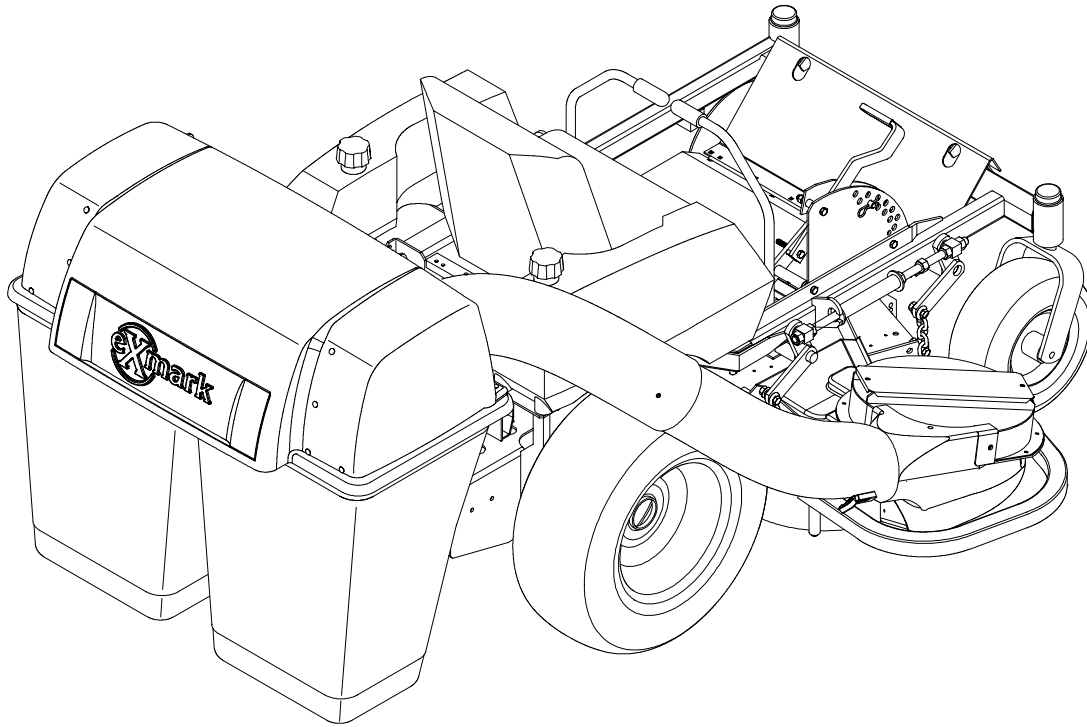


For Serial Nos.
220,000 & Higher



ULTRA VAC™

CONGRATULATIONS on the purchase of your new Exmark equipment. This product has been carefully designed and manufactured to give you a maximum amount of dependability and years of trouble-free operation.

If additional information is needed, or should you require trained mechanic service, contact your authorized Exmark equipment dealer or distributor.

If you need to order replacement parts from your dealer, always give the model number and serial number of your equipment as well as the part number, description and quantity of the part needed.

The Serial No. plate is located on the rear of the blower assembly.


For ease of ordering and reference, we suggest that you record the information requested in the following identification table.

Model No. _____

Serial number _____

Date Purchased _____

Paste Label From
Literature Packet Here

 WARNING
POTENTIAL HAZARD <ul style="list-style-type: none">◆ This product is a piece of power equipment.
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Failure to follow safe operating practices can result in serious operator injury or even death.
HOW TO AVOID THE HAZARD <ul style="list-style-type: none">◆ Keep all shields, guards and safety devices (especially the grass discharge system) in place and in proper working condition.◆ Stop engine and remove spark plug wire(s) or remove key and wait for all moving parts to stop before adjusting, servicing, or performing maintenance.◆ If mower deck becomes clogged, stop engine and remove spark plug wire(s) or remove key and wait for all moving parts to stop before cleaning blockage.◆ Keep hands, feet and clothing away from power driven parts.◆ Keep off mower unless seat platform is provided.◆ Keep others off mower.

Exmark reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. Exmark, or its distributors and dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

EXMARK PARTS PLUS® PROGRAM

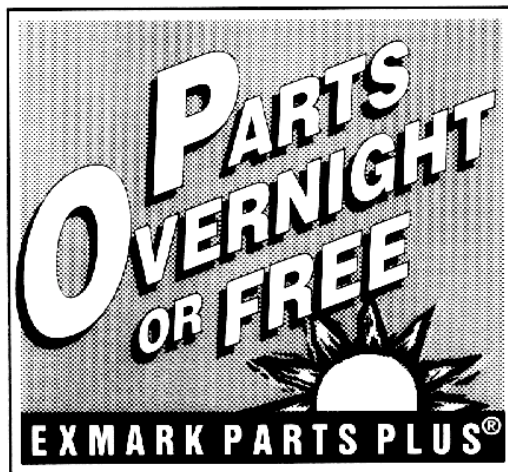
EFFECTIVE DATE: September 1, 1995

Program

If your Exmark dealer does not have the Exmark part in stock, Exmark will get the parts to the dealer the next business day or the part will be FREE* Guaranteed!!

How the Program Works

1. If dealer does not have part in stock for a "down" unit at the time of request by customer, the dealer contacts his distributor by 1:00 p.m., local time, and requests Exmark Parts Plus® shipment of six (6) line items or less.
2. Distributor ships part(s) to dealer or customer, as requested by dealer, same day, overnight UPS. Distributor bills dealer for part and freight charges where applicable.
3. If distributor does not have the part(s) in stock to satisfy Exmark Parts Plus® order, he contacts Exmark by 3:00 p.m., central time, with an Exmark Parts Plus® order of six (6) line items or less.
4. If order is received by 3:00 p.m. central time, Exmark ships part(s) direct to dealer or customer, as requested by distributor, same day, overnight UPS. Exmark bills the distributor for parts and shipping charges, where applicable.
5. The customer pays for the part and freight if it is shipped under the Exmark Parts Plus® and if it arrives in accordance to the program.
6. Who pays for the part and freight if it fails to arrive overnight in accordance to the program?
 - A. Under any circumstance the customer does not pay.
 - B. If the part does not arrive overnight due to:
 1. The dealer not submitting the Exmark Parts Plus® order to his Exmark distributor by 1:00 p.m., the dealer pays for the part and freight.
 2. The Distributor being unable to ship the part the same day or not submitting the Exmark Parts Plus® order to Exmark by 3:00 p.m., central time, the Distributor pays for the part and freight.
 3. Exmark being unable to ship the part and the Exmark parts order is received by 3:00 p.m., central time, Exmark pays for the part and freight.
 4. If the part does not arrive overnight due to the shipper (UPS), the shipper pays for the freight and Exmark pays for the part.



The following restrictions apply -- The Exmark Parts Plus® Program is available only through participating Exmark Dealers and applies only to orders submitted on this program Monday through Thursday. Parts Plus service is available only in the 48 contiguous United States. UPS has initiated a Saturday delivery program to many areas of the continental United States and can be requested for an overnight shipment on Friday to be delivered Saturday. The next day air charge, plus the Saturday delivery fee will be the responsibility of the purchaser. Exmark Mfg. will assume no responsibility for Saturday delivery shipments. To qualify, all Exmark Parts Plus® orders must be received by Exmark by 3:00 p.m., central time. Orders must be six (6) line items or less. Exclusions from the Exmark Parts Plus® Program are: Any wholegood or accessory in its entirety, engines and engine replacement parts, 5-speed Peerless transmissions and 5-speed transaxles, hydraulic or hydrostatic wheel motors, cutter decks and engine decks or any item exceeding United Parcel Service size and weight restrictions.

Due to UPS restrictions, aerosol spray paint is considered a hazardous material and cannot be shipped via UPS next day or Second Day Air.

Exmark Manufacturing stocks a limited supply of parts for transaxles, pumps and wheel motors. These parts can be ordered for Next Day Air shipment but will not be guaranteed per the Parts Plus Program.

OPERATOR'S MANUAL

This manual contains assembly, operating, maintenance, adjustment and safety instructions for your Exmark Ultra Vac.

BEFORE OPERATING YOUR ULTRA VAC, CAREFULLY READ AND UNDERSTAND THIS MANUAL AND THE OPERATOR'S MANUAL FOR YOUR LAZER HP MOWER IN THEIR ENTIRETY.

By following the operating, maintenance and safety instructions, you will prolong the life of your Ultra Vac, maintain its maximum efficiency and promote safe operation.

If additional information is needed, or should you require trained mechanic service, contact your authorized Exmark equipment dealer or distributor.

All Exmark equipment dealers and distributors are kept informed of the latest methods of servicing and are equipped to provide prompt and efficient service in the field or at their service stations. They carry ample stock of service parts or can secure them promptly for you from the factory.


All Exmark parts are thoroughly tested and inspected before leaving the factory, however, attention is required on your part if you are to obtain the fullest measure of satisfaction and performance.

TABLE OF CONTENTS

<u>Description</u>	<u>Page</u>
1. Safety	
1.1 Safety Alert Symbol	6
1.2 Training	6
1.3 Preparation	6-7
1.4 Safety Signs	7
2. Specifications	
2.1 Model Number	7
2.2 Dimensions	8
2.3 Bagging System	8
3. Assembly Instructions	
3.1 Assembly Diagram	9
3.2 Install Drive Kit	10
3.3 Install Hood Assembly and Bags	10
3.4 Assemble Tubes	10
3.5 Install Blower Assembly	10-11
4. Operation	
4.1 Pre-Start	11
4.2 Mowing	11-12
4.3 Bagger Removal for Side Discharge	12
4.4 Transporting	12-14
5. Maintenance	
5.1 Periodic Maintenance	14
6. Parts Lists	
6.1 Decals	15
6.2 Blower Assembly	16-17
6.3 Hood and Bag Assembly	18-19
6.4 Drive Kit Assembly	20
6.5 Adapter Kit 103-0328	20
7. Warranty	21-22

1. SAFETY

1.1 SAFETY ALERT SYMBOL

THIS SAFETY ALERT SYMBOL  IS USED BOTH IN THIS MANUAL AND ON THE MACHINE TO IDENTIFY IMPORTANT SAFETY MESSAGES WHICH MUST BE FOLLOWED TO AVOID ACCIDENTS. THIS ALERT SYMBOL MEANS:

**ATTENTION! BECOME ALERT!
YOUR SAFETY IS INVOLVED!**

The safety alert symbol appears above information which alerts you of unsafe actions or situations and will be followed by the word **DANGER**, **WARNING**, or **CAUTION**.

When used with the word DANGER: IT DENOTES THAT AN EXTREME HAZARD EXISTS WHICH WOULD RESULT IN HIGH PROBABILITY OF DEATH OR IRREPARABLE INJURY IF PROPER PRECAUTIONS ARE NOT TAKEN.

When used with the word WARNING: IT DENOTES THAT A HAZARD EXISTS WHICH CAN RESULT IN INJURY OR DEATH IF PROPER PRECAUTIONS ARE NOT TAKEN.


When used with the word CAUTION: IT DENOTES A REMINDER OF SAFETY PRACTICES OR DIRECTS ATTENTION TO UNSAFE PRACTICES WHICH COULD RESULT IN PERSONAL INJURY IF PROPER PRECAUTIONS ARE NOT TAKEN.

1.2 TRAINING

- 1.2.1 Regard the Exmark Ultra Vac as a piece of power equipment and teach this regard to all who operate this unit.
- 1.2.2 Before operating your Ultra Vac, carefully read and understand this manual and the operator's manual for your Lazer HP in their entirety.
- 1.2.3 Read the instructions carefully. Familiarize yourself with the controls and the proper use of the equipment.
- 1.2.4 Never allow children, teenagers, or people unfamiliar with these instructions to use the equipment.
- 1.2.5 Avoid mowing while people, especially children, or pets, are nearby. Keep in mind that the operator or user is responsible for accidents or hazards occurring to other people or their property.

1.3 PREPARATION

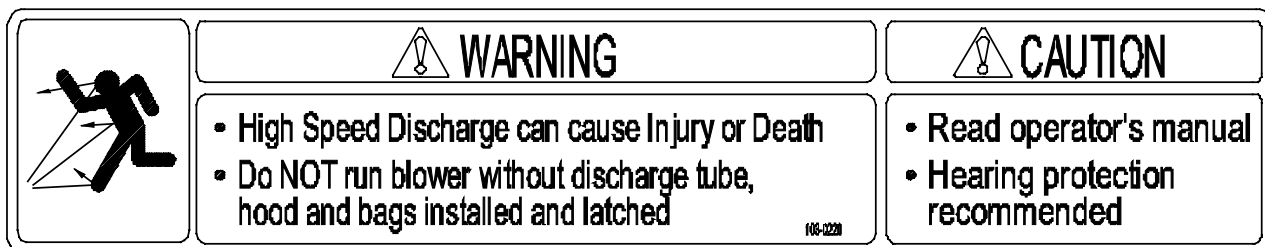
- 1.3.1 The use of personal protective equipment, such as (but not limited to) protection for the eyes, ears, feet and head is recommended.

 CAUTION
POTENTIAL HAZARD <ul style="list-style-type: none">◆ This machine produces sound levels in excess of 85 dBA at the operator's ear when in operation.
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Exposure to sound levels of 85 dBA or above for extended periods of time can cause hearing loss.
HOW TO AVOID THE HAZARD <ul style="list-style-type: none">◆ Wear hearing protection when operating this machine.

- 1.3.2 While mowing, always wear substantial footwear and long trousers. Do not operate equipment when barefoot or when wearing open sandals.
- 1.3.3 Thoroughly inspect the area where the equipment is to be used and remove all stones, sticks, wires, bones and other foreign objects which may cause personal injury to the operator or bystanders or damage the equipment.

1.4 SAFETY SIGNS

- 1.4.1 Keep all safety signs legible. Remove all grease, dirt and debris from safety signs and instructional labels.
- 1.4.2 Safety signs must be replaced if they are missing or illegible.
- 1.4.3 When new components are installed, be sure that current safety signs are affixed to the replaced components.
- 1.4.4 New safety signs may be obtained from your authorized Exmark equipment dealer or distributor or from Exmark Mfg. Co. Inc.
- 1.4.5 Safety signs may be affixed by peeling off the backing to expose the adhesive surface. Apply only to a clean, dry surface. Smooth to remove any air bubbles.
- 1.4.6 Familiarize yourself with the following safety signs and instruction labels. They are critical to the safe operation of your Exmark commercial mower.



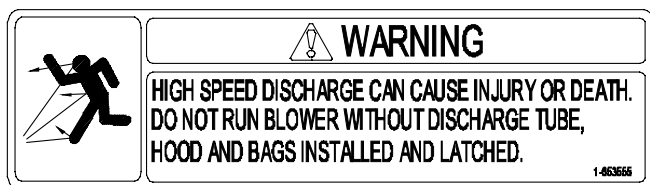
PART NO. 103-0220

LOCATION: Side of Blower Housing (2 Places)



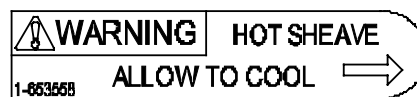
PART NO. 653554

LOCATION: Rear of Bags



PART NO. 1-653555

LOCATION: Top of Blower



PART NO. 1-653558

LOCATION: Top of Idler Arm

2. SPECIFICATIONS

2.1 MODEL NUMBER:

LHPUV4448

- Use with drive kit: 44" deck – 1-651361
 48" deck – 1-651359 (Lazer HP Serial Nos. below 203,376)
 48" deck – 1-651360 (Lazer HP Serial Nos. 203,376 & higher)

Note: Lazer HP model LHP4818KC Serial Nos. below 176621 will also require adapter kit 130-0328

LHPUV52

- Use with drive kit: 52" deck – 1-651360

2.2 DIMENSIONS

2.2.1 Overall unit length w/ UltraVac

2.2.2 Overall unit width w/ UltraVac

44" deck	48" deck	52" deck
91.76" (233.07 cm)	91.76" (233.07 cm)	93.00" (236.22 cm)
58.47" (148.51 cm)	61.73" (156.79 cm)	66.47" (168.83 cm)

2.3 BAGGING SYSTEM

2.3.1 Weight: 110 lbs. (50 kg)

2.3.2 Collections bins: 2 commercial grade, cloth mesh bags with reinforced bottoms.
Capacity: 8 bushels (two 4-bushel bags)

2.3.3 Dump Mechanism: Manual lift off

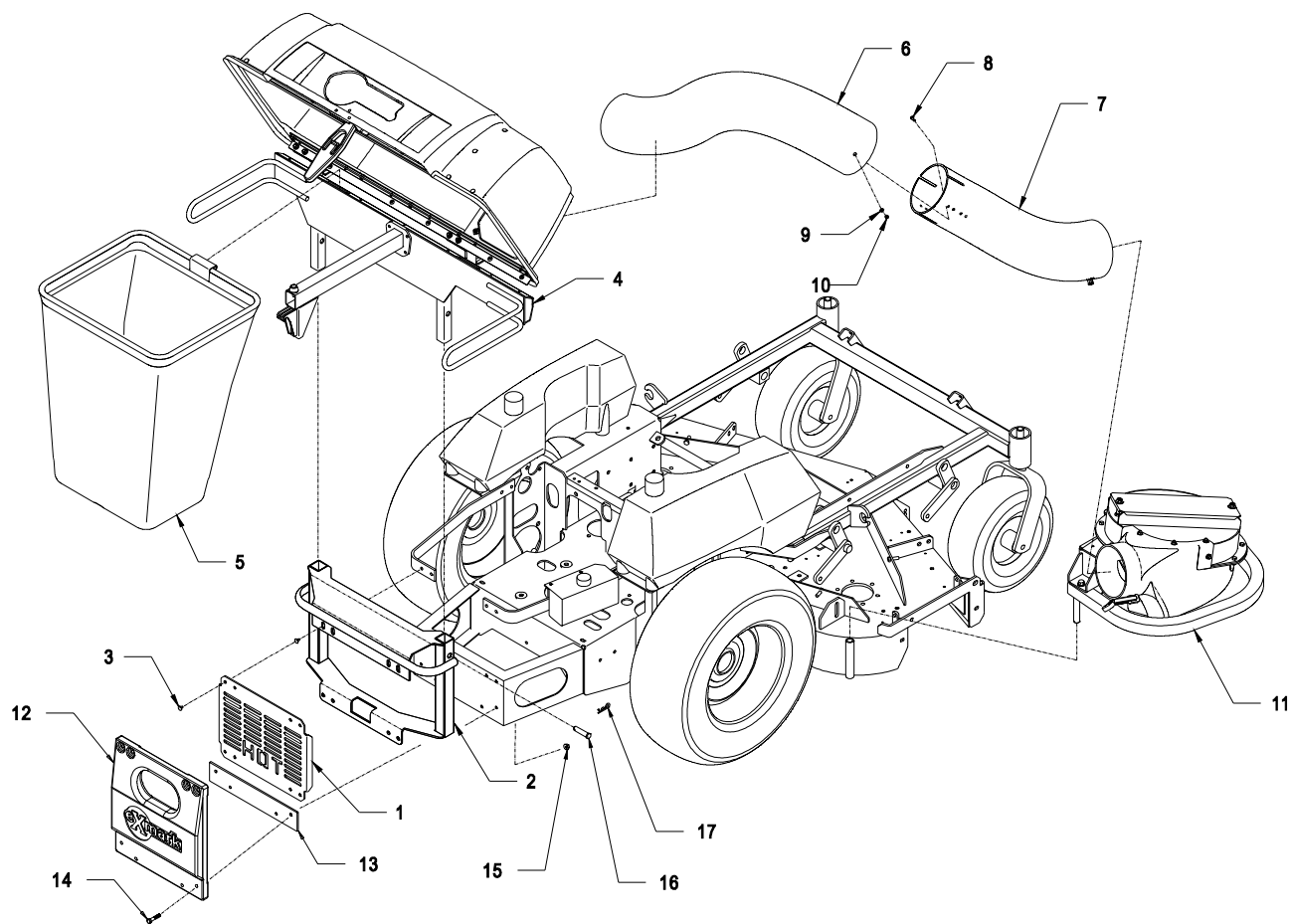
2.3.4 Blower tube: 6" diameter, fixed, abrasion resistant molded polyethylene

2.3.5 Impeller: 5-bladed, 7-gauge abrasion resistant steel, with vertical axis.
Impeller bearings: 1" (2.54 cm) sealed "non-greaseable bearings"

3. ASSEMBLY INSTRUCTIONS

3.1 ASSEMBLY DIAGRAM

Ref. No.	Qty	Description
1	Ref	Engine Guard 44,48 only
2	1	Bagger Mount Weldment
3	8	5/16 – 18 X 1.00 Hex Head Screw
4	1	Hood Assembly
5	2	Bag Assembly
6	1	Upper Tube
7	1	Lower Tube Assembly
8	3	#10 – 24 X .75 Truss Head Screw
9	3	#10 Flat Washer
10	3	#10 – 24 Nyloc Nut
11	1	Blower Assembly
12	Ref	Rear Weight 52 only
13	Ref	Spacer 52 only
14	8	5/16 – 18 X 1.75 Hex Head Screw
15	4	5/16-18 x 18 Whizlock Nut
16	2	Clevis Pin
17	2	Hair Pin



3.2 INSTALL DRIVE KIT

1. Install drive kit (PN 1-651361, 1-651360, or 1-651359 depending on deck size) per the instructions included in the kit.

3.3 INSTALL HOOD ASSEMBLY AND BAGS

44 and 48 inch units (52 inch units skip to step 3)

Note: When installing Ultra Vac on Lazer HP model LHP4818KC with serial number below 176621, refer to additional instructions included in adapter kit 103-0328 required for those units.

1. Remove and discard the (8) bolts that retain the "HOT" engine guard shield (Item 1). Keep the nuts for use in Step 2.
2. Install the Bagger Mount Weldment (Item 2) and engine guard shield using the 5/16-18 x 1 Screws provided (Item 3) and whizlock nuts removed in step 1. – continue at step 6.

52 inch units

3. Remove and discard the (8) bolts that retain the rear weight (Item 12). Keep the whizlock nuts for use in step 5.
4. Install the Bagger Mount Weldment (Item 2) to the rear of the frame using (4) 5/16 – 18 X1.00 screws (Item 3) and (4) 5/16 – 18 whizlock nuts (Item 15). Use only the bottom four holes on the Bagger Mount Weldment
5. Install the Rear Weight (Item 12) and spacer (Item 13) from the drive kit using the (8) 5/16 – 18 X1.75 screws (Item 14) and whizlock nuts removed in step 3.

All units

6. Slide tube ends of Hood Assembly (Item 4) into the tubes of the mount weldment. Install (2) clevis pins (Item 16) through holes in tubes. Retain with (2) Hair Pins (Item 17).
7. Hang the (2) Bag Assemblies (Item 5) from the slots in the Bagger Upright. Close and latch hood.

3.4 ASSEMBLE TUBES

Note: When installing Ultra Vac on Lazer HP model LHP4818KC with serial number below 176621, refer to additional instructions included in adapter kit 103-0328 required for those units.

1. Assemble the Upper (Item 6) and Lower (Item 7) Tubes using the (3) #10-24 x .75 Truss head Screws (Item 8), (3) #10 washers (Item 9), and (3) #10-24 Nyloc Nuts (Item 10). Screw head should be installed to the inside of the tube to provide minimum obstruction to flow. Make sure the hole with the arrow on the Upper Tube aligns with the dimple in the Lower Tube to place the turnout on the Upper Tube in the correct position.

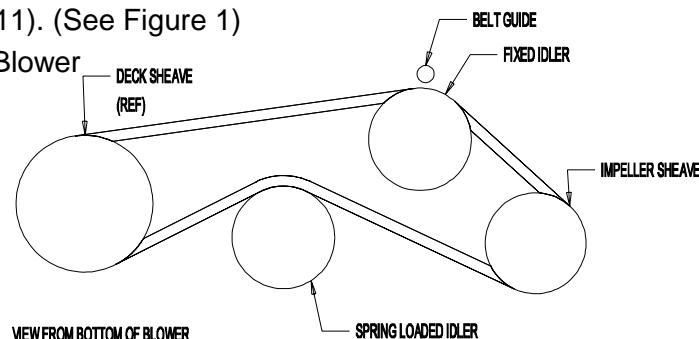
For units with a 44" deck: Slide Upper Tube over Lower Tube until edge of Upper Tube matches up with dimple in Lower Tube labeled 44.

For units with a 48" & 52" deck: Slide Upper Tube over Lower Tube until edge of Upper Tube matches up with dimple in Lower Tube labeled 48, 52.

3.5 INSTALL BLOWER ASSEMBLY

1. Remove the belt guide on the blower (Item 11). (See Figure 1)
2. Install the belt (from the Drive Kit) onto the Blower Assembly (Item 11) as shown.


**FIGURE 1
BELT ROUTING**




3. Reinstall the belt guide removed in Step 1.
4. Remove Discharge chute by pulling the hairpin and chute pivot pin (from the Drive Kit installed in section 3.2).
5. Remove the Belt Cover on the right side of the deck. Install the Blower by inserting the mounting pin into the tube welded to the rear corner of the deck. Pivot the blower until the

front pin engages the slot in the deck. Adjust the position of the front pin if necessary to engage the slot. Use the latch to lock the blower in this position. Adjust tension on latch to draw blower up to deck, yet allow release by hand.

6. Pull the idler release handle and install the belt in the upper groove of the deck sheave.
7. Install the Belt Cover using the two knobs. Install the discharge tube assembly by slipping the upper end into the hood, then sliding the lower end over the blower discharge opening. Use the latch to retain the lower end to the blower.

 WARNING
POTENTIAL HAZARD <ul style="list-style-type: none">◆ An uncovered discharge opening will allow objects to be thrown in operator's or bystander's direction. Also, contact with blade could occur.
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Thrown objects or blade contact can cause serious injury or kill you or bystanders.
HOW TO AVOID THE HAZARD <ul style="list-style-type: none">◆ Never operate mower unless discharge chute or entire grass collection system is installed.

 DANGER
POTENTIAL HAZARD <ul style="list-style-type: none">◆ There are rotating blades in the blower and under the mower deck.
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Blade contact can cause serious operator or bystander injury or even death.
HOW TO AVOID THE HAZARD <ul style="list-style-type: none">◆ Keep hands and feet out of blower openings and out from under the mower or mower deck.◆ Shut off the deck drive, stop the engine, and wait for all moving parts to stop before clearing obstructions.

4. OPERATION:

4.1 PRE-START

1. Ensure the blower, belt cover, bags, tube and hood are in good condition, properly attached, and latched.


4.2 MOWING

1. Blower operates when deck drive is engaged.
2. To remove the bags, shut off deck drive and stop the engine. Open the hood and remove the bags by lifting up on the rear of the bag, then unhooking the front clip. Empty bags by inverting them.
3. Reinstall bags, close and latch the hood before continuing mowing.

4.3 BAGGER REMOVAL FOR SIDE DISCHARGE:

1. Shut off the deck drive, stop engine, remove key and wait for all moving parts to stop.

2. Remove the discharge tube by releasing the latch at the blower. Slide the tube off the blower outlet and remove the upper end from the hood.
3. Remove the Belt cover by loosening the (2) knobs.

 CAUTION	
POTENTIAL HAZARD <ul style="list-style-type: none">◆ The deck sheave will become very hot	
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Touching a hot deck sheave can cause severe burns.	
HOW TO AVOID THE HAZARD <ul style="list-style-type: none">◆ Allow the deck sheave to cool completely before removing the belt.	

4. Pull the idler release handle and remove the belt from the deck sheave.
5. Unlatch the front end of the blower. Pivot the blower back and lift it off the deck.
6. Install the discharge chute using the chute pivot pin and hairpin (See Figure 2).

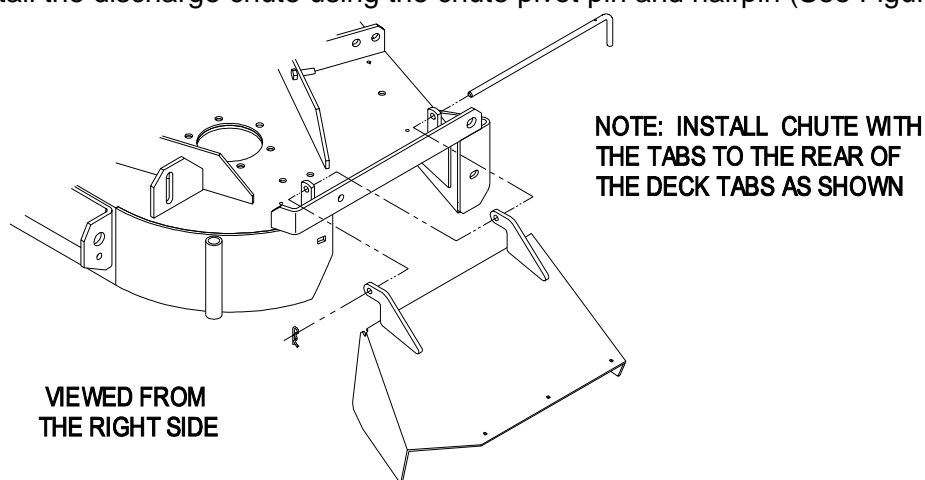


FIGURE 2
DISCHARGE CHUTE INSTALLATION

7. Install the belt cover and tighten the (2) knobs.
8. Remove the hair pins and clevis pins from the tubes of the mount weldment.
9. Lift the bag and hood assembly off the mount.

The machine can now be used for side discharge mowing.

4.4 TRANSPORTING

- 4.4.1 Transporting a Unit: Use a heavy-duty trailer or truck to transport the machine. Lock brake and block wheels. Securely fasten the machine to the trailer or truck with straps, chains, cable, or ropes. Be sure that the trailer or truck has all necessary lighting and marking as required by law.

Secure a trailer with a safety chain.

 CAUTION	
POTENTIAL HAZARD <ul style="list-style-type: none">◆ This unit does not have proper turn signals, lights, reflective markings, or a slow moving vehicle emblem. These items are required to drive on a public street or roadway.	

WHAT CAN HAPPEN

- ◆ Driving on a street or roadway without such equipment is dangerous and can lead to accidents causing personal injury.
- ◆ Driving on a street or roadway without such equipment may also be a violation of State laws and the operator may be subject to traffic tickets and/or fines.

HOW TO AVOID THE HAZARD

- ◆ Do not drive a unit on a public street or roadway.



WARNING

POTENTIAL HAZARD

- ◆ Loading a unit on a trailer or truck increases the possibility of backward tip-over.

WHAT CAN HAPPEN

- ◆ Backward tip-over of the unit could cause serious injury or death.

HOW TO AVOID THE HAZARD

- ◆ Use extreme caution when operating a unit on a ramp.
- ◆ Use only a single, full width ramp; DO NOT use individual ramps for each side of the unit.
- ◆ If individual ramps must be used, use enough ramps to create an unbroken ramp surface wider than the unit.
- ◆ DO NOT exceed a 15° angle between ramp and ground or between ramp and trailer or truck.
- ◆ Avoid sudden acceleration while driving unit up a ramp to avoid tipping backward.
- ◆ Avoid sudden deceleration while backing unit down a ramp to avoid tipping backward.

4.4.2 Loading a Unit: **Empty grass bags before attempting to load unit on trailer or truck.**

Use extreme caution when loading units on trailers or trucks. One full width ramp that is wide enough to extend beyond the rear tires is required instead of individual ramps for each side of the unit. The lower rear section of the tractor frame extends back between the rear wheels and serves as a stop for tipping backward. Having a full width ramp provides a surface for the frame members to contact if the unit starts to tip backward. If it is not possible to use one full width ramp, use enough individual ramps to simulate a full width continuous ramp.

Ramp should be long enough so that the angles between the ramp and the ground and the ramp and the trailer or truck do not exceed 15°. A steeper angle may cause mower deck components to get caught as the unit moves from ramp to trailer or truck. Steeper angles may also cause the unit to tip backward. If loading on or near a slope, position the trailer or truck so it is on the down side of the slope and the ramp extends up the slope. This will minimize the ramp angle. The trailer or truck should be as level as possible.

DO NOT attempt to turn the unit while on the ramp, you may lose control and drive off the side.

Avoid sudden acceleration when driving up a ramp and sudden deceleration when backing down a ramp. Both maneuvers can cause the unit to tip backward.

5. MAINTENANCE:

5.1 PERIODIC MAINTENANCE

IMPORTANT: Before conducting any maintenance, shut off deck drive, stop the engine, remove the key, and wait for all moving parts to stop.

5.1.1 Blower Housing/Impeller.

Service Interval: Daily.

Inspect for wear or damage daily. Replace or repair worn parts as needed.


5.1.2 Idler Bushings.

Service Interval: 25 Hours.

Lubricate with 1-2 pumps of SAE No. 2 multi-purpose grease.

5.1.3 Bags.

Service Interval: Daily.

 WARNING
POTENTIAL HAZARD <ul style="list-style-type: none">◆ Under normal use the bag will deteriorate and wear. Objects could exit a worn bag at high speeds.
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Thrown objects can cause serious injury or kill you or bystanders.
HOW TO AVOID THE HAZARD <ul style="list-style-type: none">◆ Check bag frequently for tears and holes. Replace worn bag.

5.1.4 Belts.

Service Interval: 50 Hours.

Inspect the belt for damage or wear. Replace with the belt with one of the following.


44" deck – PN 1-653332

48" deck – PN 1-653333

52" deck – PN 1-653438

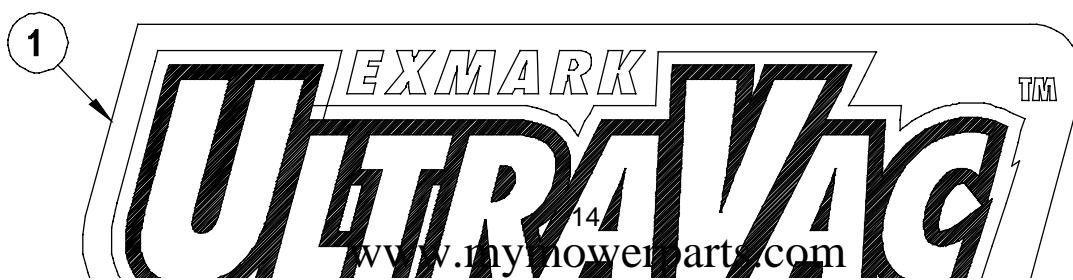
5.1.5 Clean muffler and rear frame area.

Service Interval: Daily

 WARNING
POTENTIAL HAZARD <ul style="list-style-type: none">◆ Muffler gets very hot.
WHAT CAN HAPPEN <ul style="list-style-type: none">◆ Excessive debris accumulated in the muffler area could catch fire causing property damage and potentially injuring you or others.

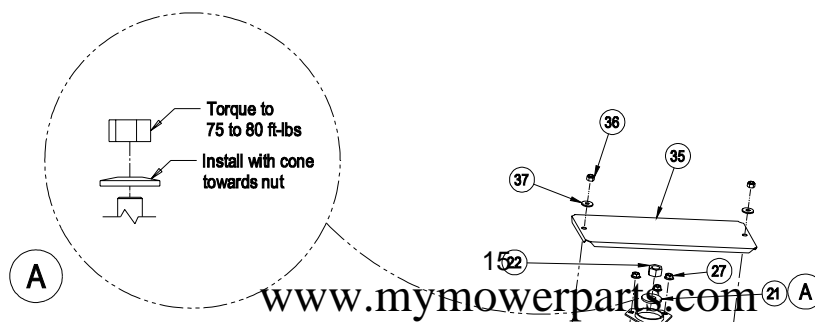
6. PARTS LISTS

6.1 DECALS



Ref. No.	Part No.	Description	Qty. Req'd.
1	1-653557	Decal, Ultra Vac.....	1
2	103-0220	Decal, Warning Impeller.....	2
3	1-653558	Decal, Hot Sheave.....	1
4	1-653555	Decal, Warning Discharge.....	1
5	1-653546	Decal, Exmark.....	1
6	373066	Decal, Patent Pending.....	1

6.2 BLOWER ASSEMBLY



6.2 BLOWER ASSEMBLY (cont.)

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1▽	1-652340-03	Blower mount wldmt 44", 48".1	1	33	103-0126	Bushing, Locator.....	1
▽	1-652444-03	Blower mount wldmt 52".....	1	34	3257-32	5/8x3/16 #61 Woodruff key	1
2	1-652351-03	Impeller wldmt.....	1	35	1-654560	Cover, bearing (1-653485) with decals	1
3	1-653346	Bearing, SPH. OD	2	36	3296-29	5/16-18 nyloc nut	2
4	513013	Housing, flange	4	37	3256-3	5/16x7/8 OD flat washer	2
5◆	103-1047	Sheave, blower	1				

6	1-654459	Upper housing weldment (1-652345) with decals..... 1	38	3274-18	5/16-18x1.25 Soc. Hd Screw.... 1
7	1-653331	Spring, idler..... 1	39	1-803075	#10-24x.75 CRTH Screw..... 3
8	3290-357	3/8-16 whizlock nut 8	40	1-809112	#10-24 whizlock nut..... 3
9	323-7	3/8-16 x 1.25 screw 1	41	1-803076	1/4-20x.75 CRTH Screw..... 2
10	323-11	3/8-16 x 2.25 screw 3	42	323-9	3/8-16 X 1.75 Screw..... 1
11	323-12	3/8-16 x 2.50 screw 2	43	353050	Pin, Grass Catcher 1
12	3256-4	Flat washer -.438x1.00x.083 4	44	806323	Roll Pin 1
13	1-653356	Chute, blower..... 1	45	1-653596-03	Plate, Blower Backing..... 1
14	353054	Latch, grass catcher 1	46	811006	Zerk, 1/8 – 28 straight..... 1
15	3296-39	3/8-16 nyloc nut 1	47	3256-24	3/8 Flat washer 1
16	1-653322	Idler, inside..... 1	48	1-653443-03	Plate, Filler 52" only..... 1
17	103-0130	Bushing, idler pivot..... 1	49	114439	Pop Rivet 52" only..... 2
18	1-653352-01	Bumper 1	50	3217-6	5/16-18 nut 1
19	1-654559	Idler Assy with bushings, zerk, and decal 1	51	1-653310	Idler, Flat..... 1
20	3230-18	5/16-18 x .62 carriage bolt 6	52	1-653367	Hub 1
21	513208	Spring - disk..... 1	53	323-8	3/8 – 16 X 1.50 screw..... 1
22	3219-6	5/8-18 nut..... 1	54	1-653600	Bearing 2
23	3220-5	1/2-20 Jam nut..... 1	55	1-653407	Tube, lower..... 1
24	513435	Spring - disk..... 1	56	1-653406	Tube, upper 44",48"..... 1
25	1-653365	Spacer..... 1		1-653540	Tube, upper 52"..... 1•
26	1-653366	Hub 1	57	1-653429	Latch Assy (Latch & Catch) 1
27	32128-20	5-16-18 whizlock nut..... 6	58	3296-2	#10-24 Nyloc Nut..... 3
28	3290-500	#10-24x.62 CRPH Screw..... 2	59	3256-14	#10 Flat Washer 3
29	321-3	1/4-20x.62 Hex SCREW 8	60	3290-500	#10-24 x .62 CRPH Screw 4
30	32128-33	1/4-20 whizlock nut 15		103-0401	Blower Assy, 44/48 (includes items 1-54) 1
31	303334	5/16 Spring disk washer..... 1		103-0400	Blower Assy, 52 (includes items 1-54) 1
32	3229-11	1/4-20x.62 Carr. bolt RHSN..... 5			

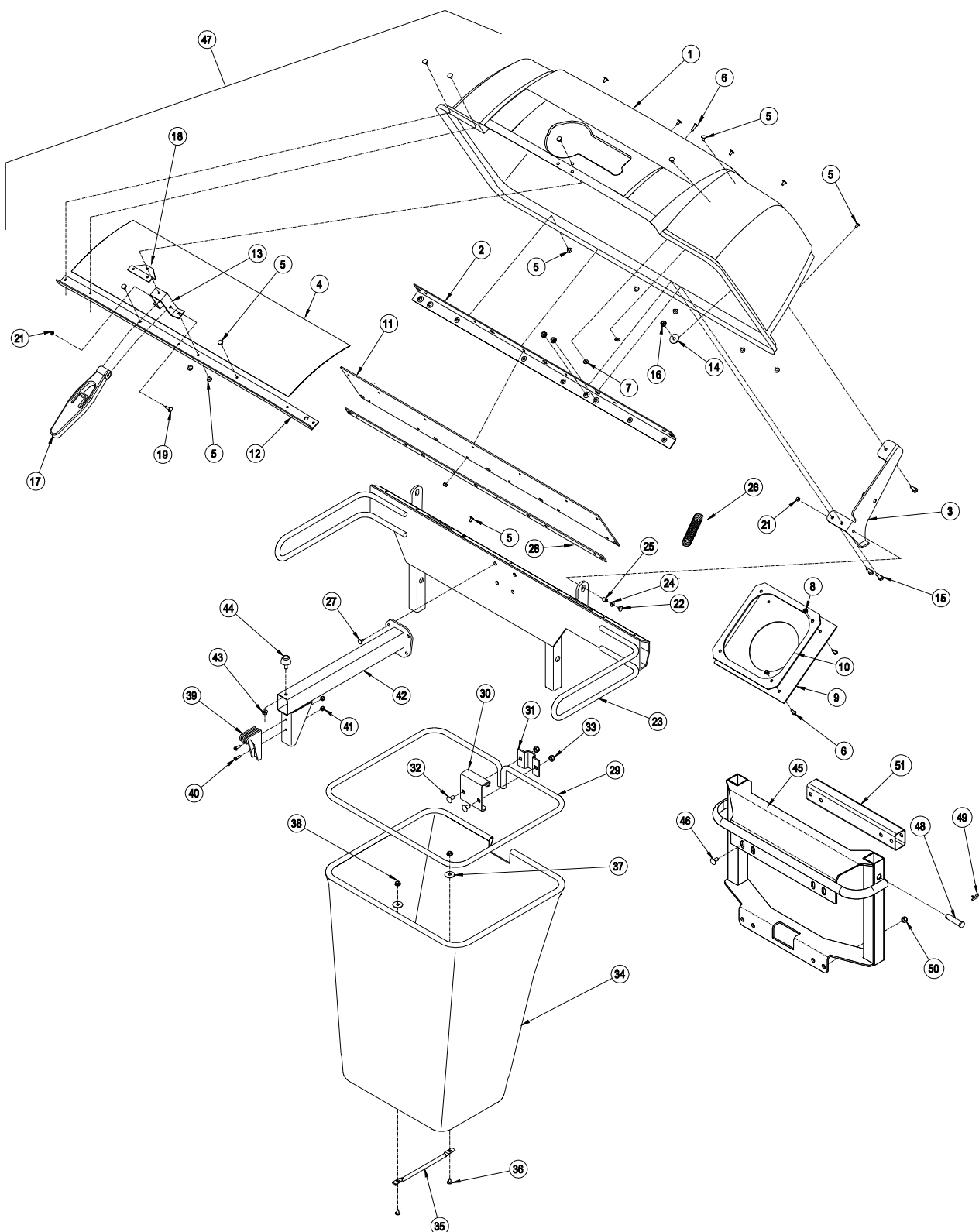
- ◆ Use antiseize on bore of sheave.

Exmark red touch up spray paint - P/N 850337

- ▽ Includes items 43 and 44

- Also used in Adapter Kit 103-0328 on 48" deck Lazer HP model LHP4818KC Serial Number 176621 and below.

6.3 HOOD AND BAG ASSEMBLY



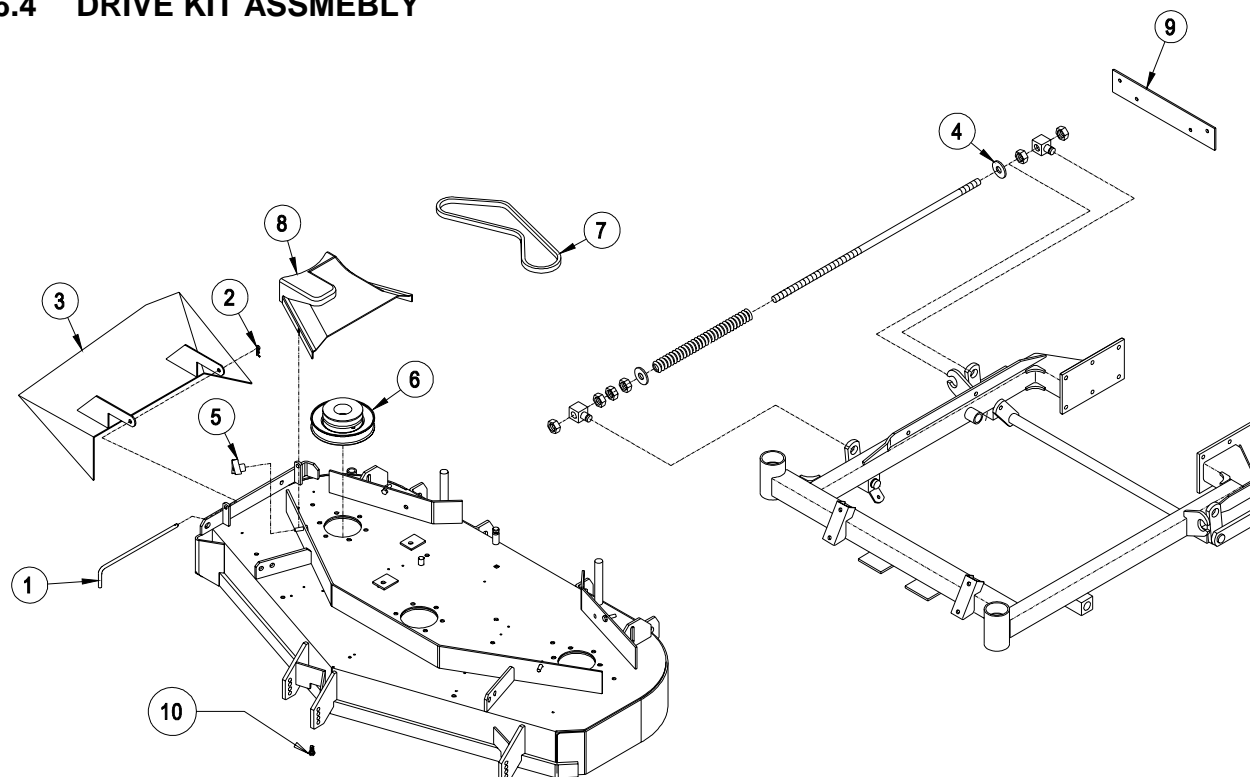
6.3 HOOD AND BAG ASSEMBLY (cont.)

Ref. No.	Part No.	Description	Qty. Req'd.	Ref. No.	Part No.	Description	Qty. Req'd.
1	1-653396	Hood.....	1	28	1-653528-03	Plate, backing	1
2	1-653397-03	Stiffener, bagger top.....	1	29	1-653529-03	Frame, bag	1
3	1-652395-03	Hinge wldmt.....	2	30	114973-03	Hanger, bag	1
4	114967	Screen	1	31	114974-03	Clamp	1
5	114439	3/16x.5 Pop rivet	38	32	3230-1	5/16-18x.75 Carriage bolt	2
6	1-803075	#10-24x.75 CRTH Screw	10	33	3296-29	5/16-18 nyloc nut	2
7	3256-14	.219x.500x.049 Flat washer ..	14	34	1-654389	Cloth bag	1
8	3296-2	#10-24 nyloc nut	10	35	1-653566	Bag handle.....	1
9	1-653561	Seal, chute	1	36	3229-1	1/4-20x.75 Carriage bolt	2
10	1-653598-03	Clamp, seal	1	37	653036	Washer .344x1.75x.062 pltd...	2
11	1-653425	Seal	1	38	3296-42	1/4-20 nyloc nut	2
12	1-653400-03	Support, screen	1	39	1-653404	Catch	1
13	1-653519	Mount, latch.....	1	40	3290-500	#10-24x.625 CRPH Screw.....	2
14	653036	Washer .344x1.75x.062 pltd .	2	41	1-809112	#10-24 whizlock nut	2
15	321-4	1/4-20x.75 Hex Head Screw .	6	42	1-652414-03	Bag support wldmt.....	1
16	32128-33	1/4-20 whizlock nut.....	6	43	32128-33	1/4-20 whizlock nut	1
17	1-653403	Latch.....	1	44	523420	Bumper	1
18	1-653535	Latch reinforcement	1	45	1-652308-03	Bagger mount weldment.....	1
19	321-11	1/4-20x2.0 Hex Head Screw .	1	46	322-5	5/16-18x1 Screw 44", 48" only	8
21	3296-42	1/4-20 nyloc nut	3		322-9	5/16-18x1.75 Screw 52" only .	8
22	321-6	1/4-20x1.00 Hex Head Screw	2		322-12	5/16-18x2.50 Screw.....	8•
23	1-652305-03	Bagger upright wldmt	1	47◆	1-654597	Hood assembly – service only	1
24	3256-2	Flat washer .312x.734x.065...	2	48	808289	Clevis Pin	2
25	633545	Spacer	2	49	806005	Hair Pin	2
26	1-653544	Spring	2	50	32128-20	5/16-18x1 whizlock nut 52"only	4
27	322-2	5/16-18x.62 Hex Hd Screw	4	51	103-0325-03	Tube, Spacer	2•

◆ Includes items 1,2,4,7,12,13,18 riveted together and Decal

- Used in Adapter Kit 103-0328 for Lazer HP model LHP4818KC below Serial Number 176621 only

6.4 DRIVE KIT ASSMEBLY



Ref. No.	Part No.	Description	Quantity Included in Each Kit			
			1-651359	1-651360	1-651361	1-651446
1	1-653363	Pin, Chute Pivot	1	1	1	1
2	806003	Pin, Hair	1	1	1	1
3	402106	Wld, Chute 48" SD	1			
4	805517	2.25 O.D. Washer	1			
5	523385	Knob, Belt Shield	2	2	2	2
6	1-653439	Sheave, Blower drive (52")				1
	1-653362	Sheave, Blower Drive (48")	1	1		
	1-653309	Sheave, Blower Drive (44")			1	
7	1-653438	Belt, Blower (52")				1
	1-653333	Belt, Blower (48")	1	1		
	1-653332	Belt, Blower (44")			1	
8	1-653325	Cover, Belt (44" and 48")	1	1	1	
	1-653553	Cover, Belt (52")				1
9	1-653532-03	Spacer, Counterweight				1
10	322-2	5/16-18x.62 Hex Head Screw	1	1	1	1

6.5 ADAPTER KIT 103-0328 For Lazer HP model LHP4818KC before serial number 176621.

Part No.	Description	Qty.
103-0325-03	Tube, Spacer	2
1-653540	Tube, Upper	1
322-12	5/16-18x2.50 Screw	8

7. WARRANTY

Limited Warranty

Exmark Commercial Turf Equipment

Exmark Mfg. Co. Inc. and its affiliate, Exmark Warranty Company, pursuant to an agreement between them, jointly warrant on the terms and conditions herein, that we will repair, replace or adjust any part manufactured by Exmark and found by us (in the exercise of our reasonable discretion) to be defective in factory material or workmanship.

This warranty is limited to one year from the date of original retail purchase (90 days for rental use) for any Exmark mower that is used for commercial or any other income producing purpose. The blade spindle assemblies will be warranted for three years, one year parts and labor with an additional two years parts only, from date of original retail purchase against defects in materials or workmanship. The hydrostatic traction drive system, excluding hoses, will be warranted for two full years from date of original retail purchase against defects in materials or workmanship. We will extend the Peerless 5-speed transmission manufacturer's warranty from 90 days to one year. Belts and tires are warranted for 90 days against defects in materials or workmanship.

The engine warranty is covered by its respective engine manufacturer. Please refer to the engine manufacturers warranty statement that is included in the literature packet. We are not authorized to handle warranty adjustments on engines. Engine warranties should be referred to the nearest authorized service outlet of the engine manufacturer.

This warranty extends only to the original retail purchaser of the equipment. This warranty may not be assigned or transferred without the prior express written consent of Exmark and Exmark Warranty Company. The warranty period commences upon the date of the original retail purchase.

The Exmark turf equipment, including any defective part, must be returned to an authorized Exmark service dealer within the warranty period. The warranty shall extend to the expense of repair or replacement (as determined by us) of the defective part, including labor. The warranty shall not extend to the expense of delivering the mower to the dealer for warranty work nor the expense of returning it back to the owner after repair or replacement. Our responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Exmark mower. Proof of purchase may be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an authorized Exmark service dealer.

This warranty extends only to turf equipment operated under normal conditions and properly serviced and maintained. The warranty expressly does not cover: (i) any damage or deterioration due to normal use, wear and tear, or exposure; (ii) normal maintenance services, such as oil change, cleaning, lubrication; adjustment; (iii) replacement of service items, such as oil, lubricants, spark plugs, or other items subject to normal service replacement; (iv) damage or defects arising out of or relating to misuse, neglect, alteration, negligence or accident; (v) repair or replacement arising from operation of or use of the turf equipment which is not in accordance with operating instructions as specified in the operator's manual or other operational instructions provided by Exmark; (vi) repair or replacement arising as a result of any operation from turf equipment that has been altered or modified so as to, in the determination of Exmark or Exmark Warranty Company, adversely affect the operation, performance or durability of the equipment or that has altered, modified or affected the turf equipment so as to change the intended use of the product; (vii) repair or replacement necessitated by use of parts, accessories or supplies, including gasoline, oil or lubricants, incompatible with the turf equipment or other than as recommended in the operator's manual or other operational instructions provided by Exmark; (viii) repairs or replacements resulting from parts or accessories which have adversely affected the operation, performance or durability of the turf equipment; or (ix) damage or defects due to or arising out of repair of turf equipment by person or persons other than an authorized Exmark service dealer or the installation of parts other than genuine Exmark or Exmark recommended parts. As a condition to this warranty, customer shall have read the operator's manual and shall have completed and returned to Exmark Warranty Company, within the prescribed time, the Exmark warranty registration.

The sole liability of Exmark and Exmark Warranty Company with respect to this warranty shall be repair and replacement as set forth herein. Neither Exmark nor Exmark Warranty Company shall have any liability for any other cost, loss or damage, including but not limited to, any incidental or consequential loss or damage. In particular, we shall have no liability or responsibility for: (i) expenses relating to gasoline, oil or lubricants; (ii) loss, cost or expense relating to transportation or delivery of turf equipment from the location of owner or location where used by owner to or from any authorized Exmark service dealer; (iii) travel time, overtime, after hours time or other extraordinary repair charges or charge relating to repairs or replacements outside of normal business hours at the place of business of the authorized Exmark service dealer; (iv) rental of like or similar replacement equipment during the period of any warranty, repair or replacement work; (v) any telephone or telegram charges or travel charges; (vi) loss or damage to person or property other than that covered by the terms of this warranty; (vii) any claims for lost revenue, lost profit or additional cost as a result of a claim of breach of warranty; or (viii) attorney's fees.

There are no representations or warranties which have been authorized and provided to the buyer of the turf equipment, other than as set forth in this warranty. Any and all statements or representations made by any seller of this equipment, including those set forth in any sales literature or made orally by any sales representative, are superseded by the terms of this warranty. Any affirmation of fact or promise made by Exmark, Exmark Warranty Company or any of their representatives to the buyer which relates to the goods that are the subject of this warranty shall not be regarded as part of the basis of the bargain and shall not be deemed to create any express warranty that such goods shall conform to the affirmation or promise.

THERE ARE NO UNDERSTANDINGS, AGREEMENTS, REPRESENTATIONS, OR WARRANTIES, EXPRESS OR IMPLIED (INCLUDING BUT NOT LIMITED TO ANY REGARDING THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), NOT SPECIFIED HEREIN, RESPECTING THE EQUIPMENT WHICH IS THE SUBJECT OF THIS WARRANTY.

This warranty applies to all Exmark turf equipment sold in the United States and Canada and intended to be used for commercial purposes.

SERVICE RECORD

[illegible]

**SEE EXMARK'S COMPLETE
LINE OF PRODUCTS FOR TURF CARE**

LAZER Z[®]

LAZER Z[®] HP

TURF RANGER[®]

TURF TRACER[®]

TURF TRACER[®] HP

VIKING HYDRO

METRO[®]

METRO[®] HP

SELF STEERING SULKY

ULTRA VAC[™]

GRASS CATCHER

MICRO-MULCH[™] ACCESSORY

©2000 EXMARK MFG. CO. INC.
INDUSTRIAL PARK BOX 808
BEATRICE, NE 68310



PART NO. 1-850656 REV B
(402) 223-6300
FAX (402) 223-5489

PRINTED IN U.S.A.