



# PTO GRASS COLLECTION SYSTEM

**MODEL# 23120909**



## **FastCat Pro H-Series**



# **OPERATOR'S MANUAL**

**ASSEMBLY • OPERATION • MAINTENANCE**

# RESIDENTIAL BAGGING SYSTEM

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### SAFETY

1. Read the operator's manual carefully and familiarize yourself with the proper use of your attachment. Do not allow anyone who is not acquainted with the Safety Instructions to use your attachment.
2. Know the controls and how to stop quickly. READ THE OPERATOR'S MANUAL!
3. Do not allow children to operate the vehicle. Do not allow adults to operate it without proper instruction.
4. Be especially watchful of children and pets darting into the area while operating.
5. Keep your eyes and mind on your unit while mowing or operating your attachment. Don't let others distract you.
6. Do not attempt to operate your unit or mower when not in the driver's seat.
7. Always stop unit when emptying the container.
8. Stop unit, shut off deck attachment, set parking brake, shut off mower engine and remove spark plug wire before removing clogs, removing or replacing hose, boot, blower cone, or performing any maintenance.
9. Mow across the face of slopes (not steeper than 10 degrees); never up and down the face.
10. It is recommended that the container be kept only half full when negotiating any slopes. Start mowing on slopes when the container is empty.
11. Inspect your lawn and remove any foreign objects before mowing. Never deliberately run the mower across any foreign object.
12. Wear ear protection if the noise level is offensive.
13. Wear eye protection to prevent debris from damaging your eyes.

# SAFETY

**WARNING!** **NEVER** operate the mower unless the discharge guard and either the deflector assembly or the vacuum collector adapter are fastened securely in place.

**WARNING!** Do not work around the mower deck boot or the blower area until you are certain that the mower blades and the blower impeller have stopped rotating.

**WARNING!** To avoid serious injury, perform maintenance on the vacuum collector; **ONLY AFTER STOPPING THE MOWER'S ENGINE AND WAITING FOR ALL MOVING PARTS TO COME TO A COMPLETE STOP.** Set the parking brake. Always remove the ignition key before beginning maintenance.

**WARNING!** For your own personal safety, **ALWAYS** mow **ACROSS** the face of slopes and **NEVER UP and DOWN** the face. **NEVER** attempt to mow excessively steep slopes, and use caution when turning on any slope.

## Safety Alert Symbol



This Safety Alert Symbol means: **“ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!”**

This symbol is used to call attention to safety precautions that should be followed by the operator to avoid accidents. When you see this symbol, carefully read the message that follows and heed its advice. Failure to comply with safety precautions could result in death or serious bodily injury.

## Safety Signs

The signal words **DANGER**, **WARNING**, and **CAUTION** are used on the equipment safety signs. These words are intended to alert the viewer to the existence and the degree of hazard seriousness.



White letters on **RED**

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



Black letters on **ORANGE**

This signal word indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

This signal word indicates a potentially hazardous situation exist which, if not avoided, will result in minor or moderate injury.

It may also be used to alert against unsafe practices.

# PECO LIMITED WARRANTY FOR NEW PRODUCTS

## A. WHAT IS UNDER WARRANTY?

PECO extends the following warranties to the original purchaser of each new PECO consumer product subject to the following limitations.

- 1. PRODUCT WARRANTY:** Any part of any consumer product, which is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as PECO elects, without charge for parts or labor, if the defect appears within 12 months from the date of delivery of the product to the original purchaser.

**ALL DEFECTIVE PARTS MUST BE RETURNED TO PECO FOR INSPECTION TO DETERMINE VALIDITY OF WARRANTY CLAIMS.** Freight and mailing will be borne by the customer.

- 2. PARTS REPLACED DURING WARRANTY:** Any new PECO part which is furnished in performance of this warranty and is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as PECO elects, without charge if the defect appears within 90 days from the date of installation of such part or before the expiration of the original warranty period, whichever is later.

## B. SECURING WARRANTY ADJUSTMENTS.

Call PECO for Return Authorization. Damaged or broken parts other than engines or batteries, must be returned to New PECO, Inc. 100 Airport Road, Arden, NC 28704 before any warranty adjustment can be authorized. At the time of requesting warranty adjustment, the purchaser must present evidence of the date of delivery of the product. The purchaser shall pay any charge for the product to and from Arden, NC.

## C. ITEMS NOT COVERED BY PECO WARRANTY.

Engines and batteries attached to PECO products are covered under a separate warranty by the respective manufacturer.

## D. UNAPPROVED ALTERATION OR MODIFICATION.

All obligations of New PECO, Inc. under this warranty shall be terminated if products are altered or modified in ways not approved by New PECO, Inc.

## E. ACCIDENTS AND NORMAL MAINTENANCE.

The warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper use or abuse of products. The cost of normal maintenance and normal replacement of service items such as belts, cutting blades, hoses, etc., which are not defective shall be paid for by the purchaser.

## F. NO REPRESENTATIONS ADDITIONAL WARRANTIES, DISCLAIMER.

Neither New PECO, Inc. nor any company affiliated with it makes any warranties, representations or promises as to the quality of performance of its products other than those set forth herein. Except as described above, New PECO, Inc. makes no other warranties **AND SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY.**

## G. ANY MACHINE USED FOR RENTAL PURPOSES ARE GUARANTEED FOR 45 DAYS FROM DATE OF ORIGINAL SALE ONLY.

## H. REMEDIED EXCLUSIVE.

The only remedies the purchaser has in connection with the breach or performance of any warranty on New PECO, Inc. consumer products are set forth above. In no event will PECO be liable for special incidental or consequential damages.

## 1. NO SERVICE CENTER WARRANTY.

The selling Service Center makes no warranty on his own on any item warranted by New PECO, Inc. unless he delivers to purchaser a separate written warranty certificate specifically warranting the item. The dealer has no authority to make any representation or promise on behalf of PECO or to modify the terms of this warranty in any way.



## Section I

### INTRODUCTION & DESCRIPTION

#### 1-1 Introduction

Your grass collection system has been designed to give you a low maintenance, simple, and effective way to collect the grass clippings from your mower. This manual is provided to give you the necessary instructions to properly mount and operate the collection system on your mower. Please read this manual thoroughly. Understand what each control is for and how to use it. Observe all safety decal precautions on the machine and noted throughout the manual.

**NOTE:** All references made to right, left, front, rear, top or bottom are as viewed from the normal operator's position on the mower.

#### 1-2 Description

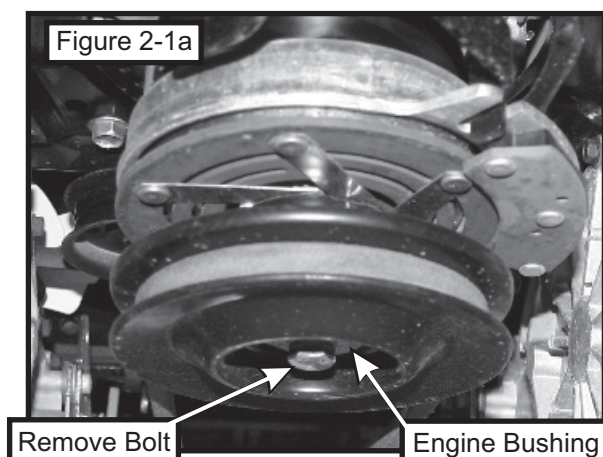
The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves in pre-season and post-season clean-up. The blower, mounted on the right side of the unit, uses a belt and gearbox system from the engine PTO shaft. Drive train protection comes through belt slippage. The blower draws grass clippings from the discharge area of the cutting deck back to the (2) - 3.3 cubic foot collection bags P#(G0002) at the rear portion of the mower frame. The operator can engage the blower with a spring-lock engagement handle on the right side of the unit. Once the bags are full with clippings, they can be easily released for dumping.

## Section II

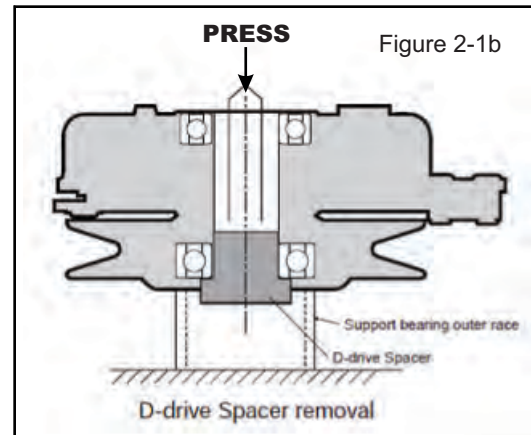
### INSTALLATION FOR USE

#### 2-1 Preparation Of Mower

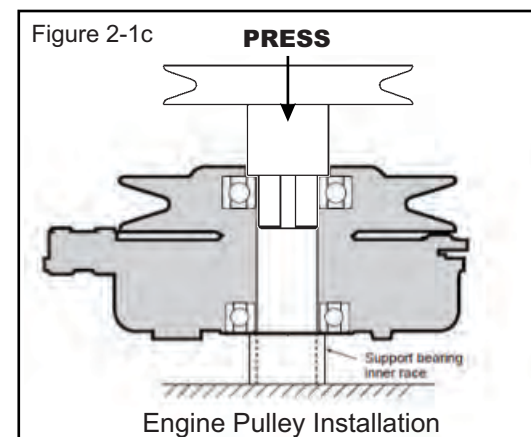
From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Refer to Figure 2-1a.



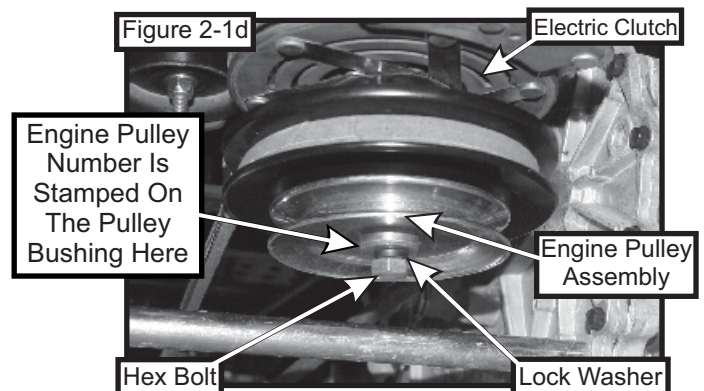
Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer to Figure 2-1b.



The engine pulley assembly must be installed using an arbor press or equivalent. Upon Installation, opposite bearing inner race must be supported or bearing damage may occur. Refer to Figure 2-1c.

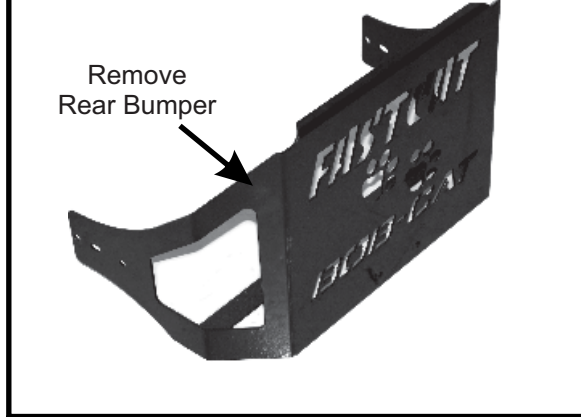


Use engine pulley assembly #2 P#(A0419). Fasten the engine pulley to the electric clutch assembly using (1) 7/16" hi-collar lock washer P#(K0140) and (1) 7/16"-20 x 3-3/4" HHCS P#(K0350) as shown in Figure 2-1d. The added pulley will power the collection system. Torque the bolt to 55 ft./lbs. Re-connect the wiring harness to the electric clutch.



Remove the rear bumper shown in Figure 2-1e from the mower frame. Keep the hardware for use later in the installation.

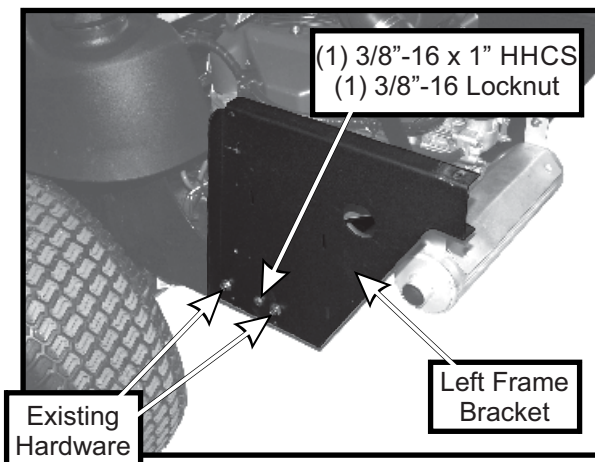
Figure 2-1e



## 2-2 Left and Right Frame Bracket Installation

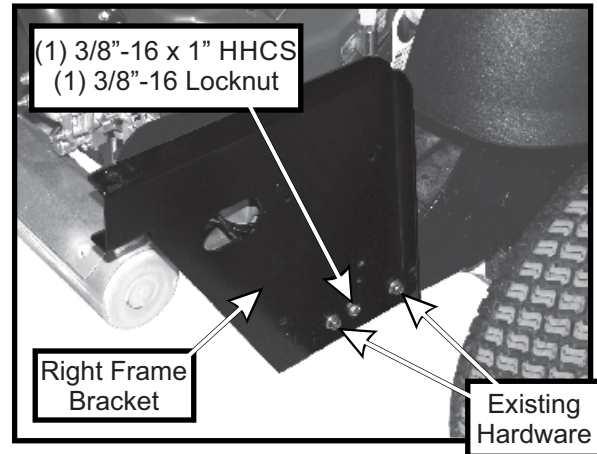
With the rear bumper removed, position the left frame bracket P#(B8138) as shown in Figure 2-2a. Secure the left frame bracket to the mower frame using (1) 3/8"-16 x 1" HHCS P#(K1191), (1) 3/8"-16 nylon flange locknut P#(K2038) and the existing hardware removed from the rear bumper.

Figure 2-2a



With the rear bumper removed, position the right frame bracket P#(B0746) as shown in Figure 2-2b. Secure the left frame bracket to the mower frame using (1) 3/8"-16 x 1" HHCS P#(K1191), (1) 3/8"-16 nylon flange locknut P#(K2038) and the existing hardware removed from the rear bumper.

Figure 2-2b



## 2-3 Lower Frame Assembly Installation

Position the lower frame assembly P#(A1091) as shown in Figure 2-3a. Secure the lower frame assembly to the left and right frame brackets, using (4) 5/16"-18 x 3/4" HHCS P#(K1153), (4) 1/4" flat washers P#(K0037) and (4) 5/16"-18 nylon flange locknuts P#(K2516). Refer to Figure 2-3b for reference.

Figure 2-3a

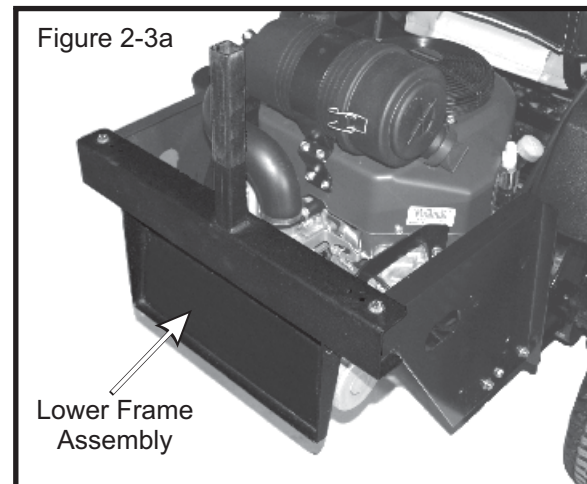
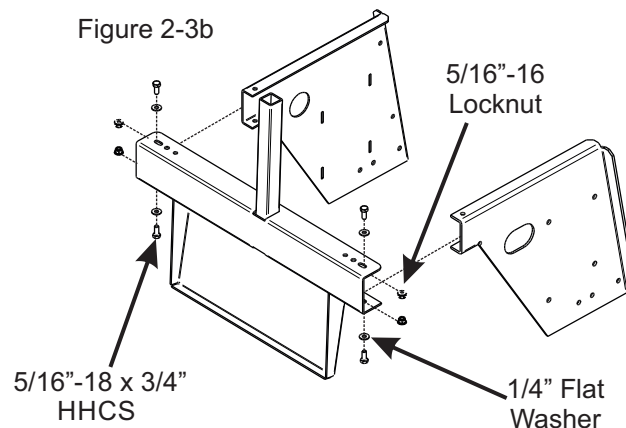


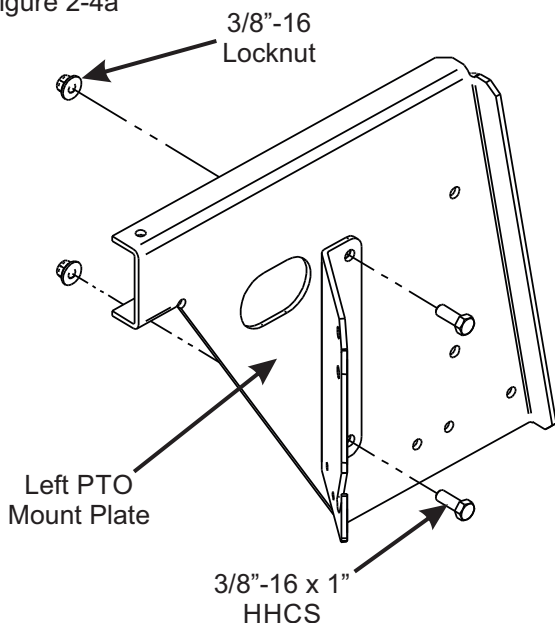
Figure 2-3b



## 2-4 PTO Mount Plate Component Installation

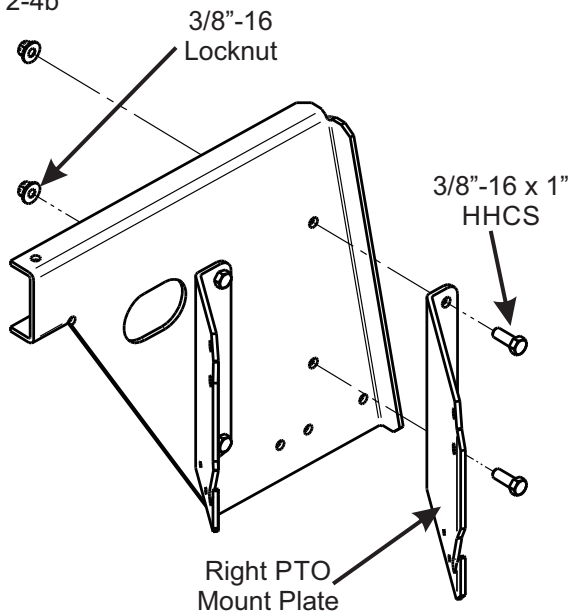
Fasten the left PTO mount plate P#(B0748) the right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Do not tighten the hardware. Refer to Figure 2-4a.

Figure 2-4a



Fasten the right PTO mount plate P#(B0747) to the right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Do not tighten the hardware. Refer to Figure 2-4b.

Figure 2-4b



Insert the PTO stop plate P#(B0733) between the left and right PTO mount plates as shown in Figure 2-4c. Secure the PTO stop plate to the left and right PTO mount plates using (4) 1/4"-20 x 3/4" HHCS P#(K1222) and (4) 1/4"-20 nylon flange locknuts P#(K2014).

**NOTE:** Tighten all PTO mount plate component hardware at this time.

Figure 2-4c

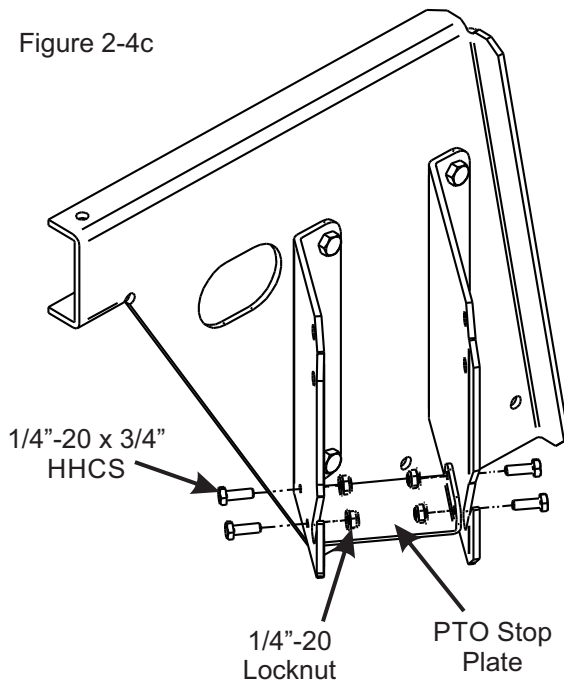
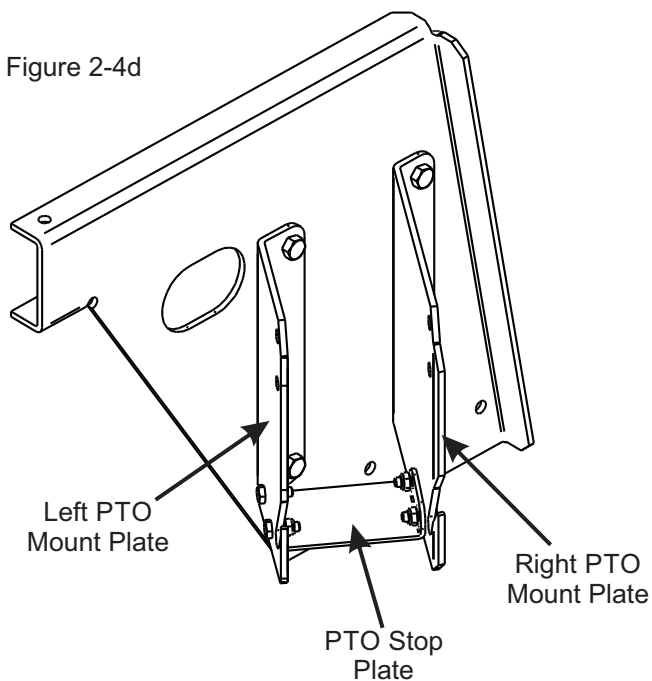


Figure 2-4d shows the complete PTO mount plate component assembly.

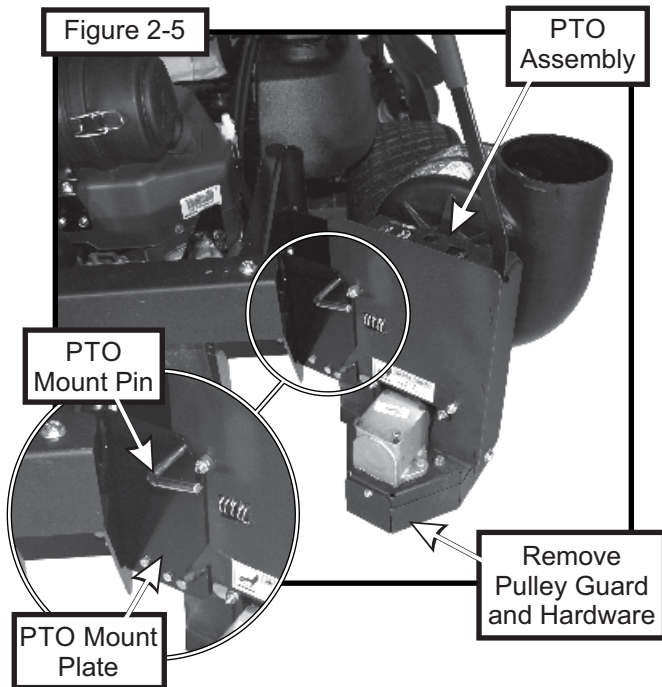
Figure 2-4d





## 2-5 PTO Assembly Installation

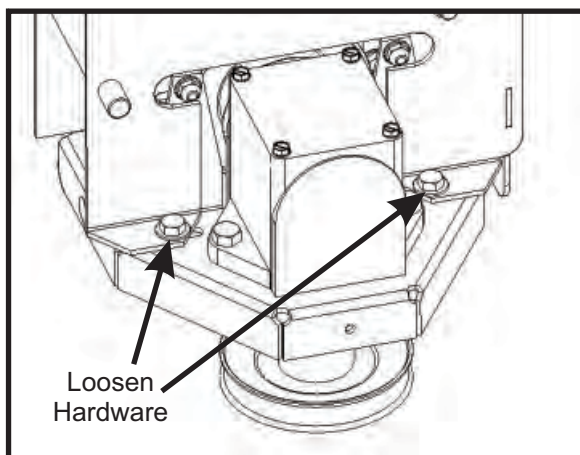
Insert the PTO assembly P#(A1840) into the mounting slots on the PTO mount plates, as shown in Figure 2-5. Secure the PTO assembly with (1) PTO mount pin P#(B0274) and (1) hair pin clip P#(K0086). Remove the gear box pulley guard and hardware from the PTO assembly in preparation for the belt installation.



## 2-6 Belt Installation and Adjustment

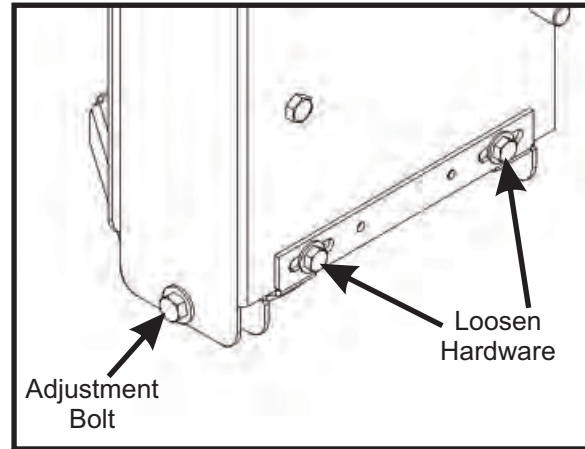
**Installation/Removal:** With the pulley guard, PTO mount pin and hair pin clip removed, loosen the (2) 5/16"-18 x 3/4" HHCS P#(K1153) that secure the gear box to the PTO assembly. Refer to Figure 2-6a.

Figure 2-6a



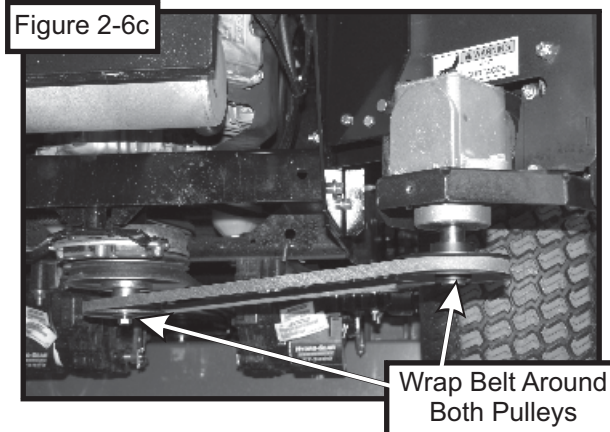
Loosen the (2) 5/16"-18 x 3/4" HHCS P#(K1153) that secure the gear box to the PTO assembly, as shown in Figure 2-6b. Loosen the adjustment bolt (1) 3/8"-16 x 2" hex bolt P#(K0348).

Figure 2-6b



Slide the gearbox towards the mower until there is enough clearance for the kevlar belt to slide over both the engine and gearbox pulleys. Install the A55K kevlar belt P#(M0248). Insert the PTO mount pin P#(B0274), and secure the pin with (1) hair pin clip P#(K0086). Refer to Figure 2-6c.

Figure 2-6c



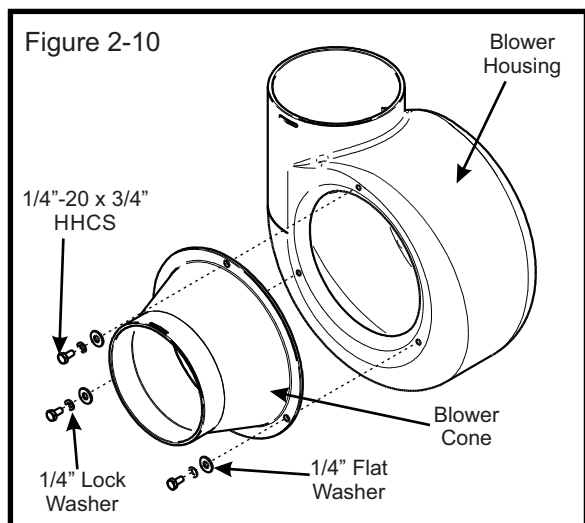
**Adjustment:** To adjust the belt tension, turn the adjustment bolt clockwise until there is 1" of deflection, with 10-11lbs of pressure applied to the center of the belt. When the belt has the proper tension, tighten the (4) 5/16"-18 x 3/4" HHCS that secure the gear box to the PTO assembly. Replace the pulley guard and hardware.



## 2-10 Blower Cone

### Installation/Removal

Fasten the blower cone P#(V0016) to the blower housing located on the PTO assembly. Use (3) 1/4"-20 x 3/4" HHCS P#(K1222), (3) 1/4" lock washers P#(K0039), and (3) 1/4" flat washers P#(K0037) to secure the blower cone to the blower housing. Refer to Figure 2-10 for reference.



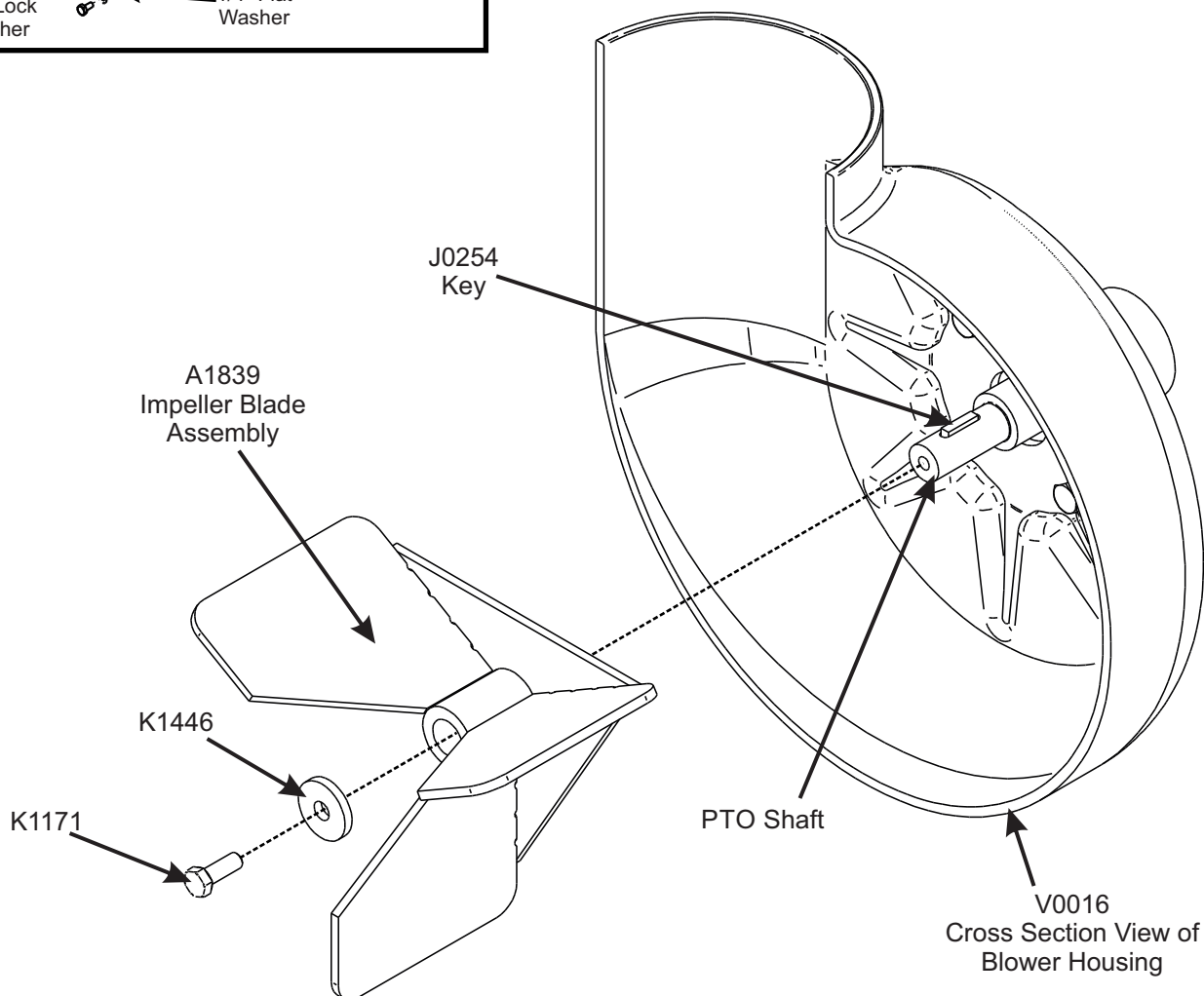
## 2-8 Impeller Blade

### Removal/Replacement

**To Remove:** To access the impeller blade, remove the blower cone P#(V0016) and blower cone hardware from the blower housing. Remove the 5/16"-24 x 7/8" left hand thread hex bolt P#(K1171) and washer P#(K1446). Insert (1) 1/2"-13 x 1" hex bolt into the threads on the impeller blade. Tighten the hex bolt until the impeller blade breaks free from the PTO shaft. Remove the impeller blade assembly P#(A1839) from the PTO shaft. Remove the key P#(J0254) from the PTO shaft.

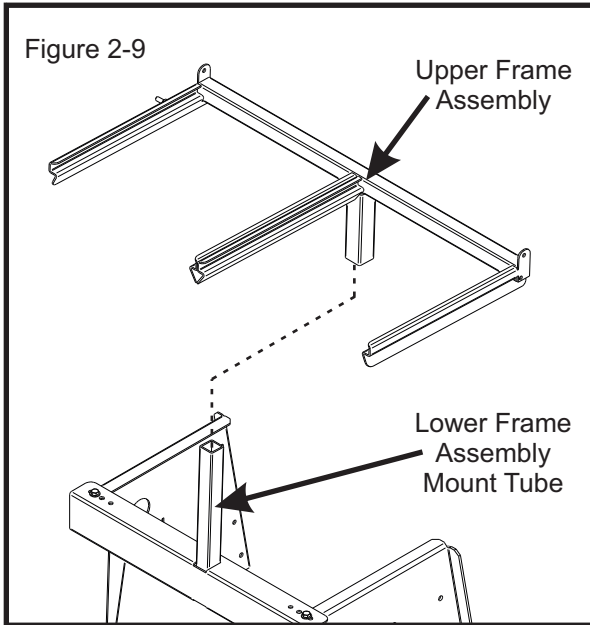
**To Replace:** Insert the key P#(J0254) into the keyway slot on the PTO shaft. Align the keyway slot on the bushing of the impeller blade assembly with the key on the PTO shaft and insert the impeller blade onto the PTO shaft. Secure the impeller blade with (1) 5/16"-24 x 7/8" left hand thread hex bolt P#(K1171) and (1) washer P#(K1446). Replace the blower cone P#(V0016) and blower cone hardware. Refer to Figure 2-8 for reference.

Figure 2-8



## 2-9 Upper Frame Assembly Installation

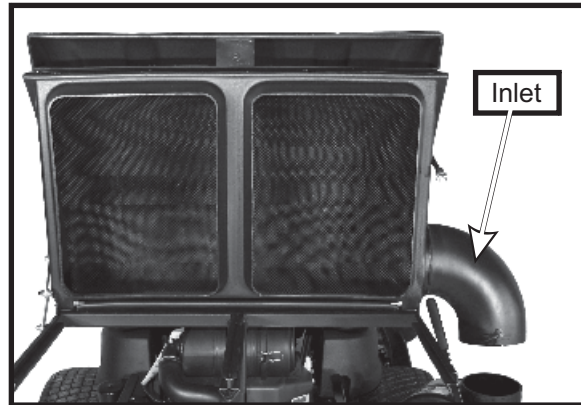
Lift the upper frame assembly P#(A0871) into position above the lower frame assembly P#(A1091) as shown in Figure 2-9. Slide the upper frame assembly onto the lower frame assembly mount tube.



## 2-11 Inlet Installation

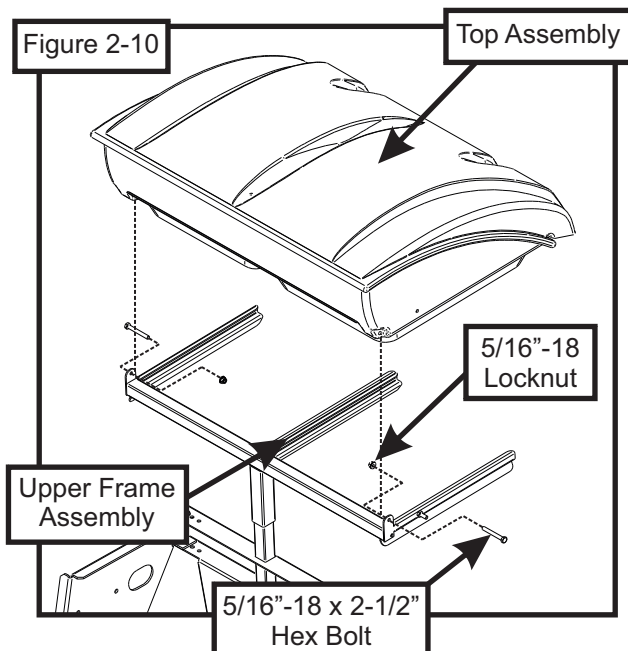
Insert the Inlet P#(V0019) into the hole on the top assembly from the inside and then snap the inlet into place. The inlet should pivot freely about the hole. Refer to Figure 2-11.

Figure 2-11



## 2-10 Top Assembly Installation

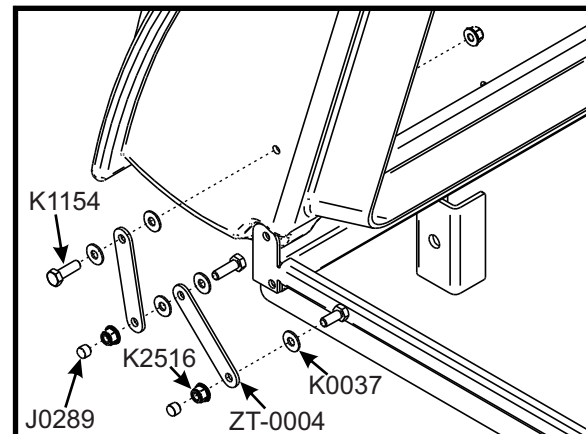
Lift the top assembly P#(A1028) into position above the upper frame assembly. Secure the top assembly to the upper frame assembly using (2) 5/16"-18 x 2-1/2" P#(K0125) hex bolts and (2) 5/16"-16 nylon flange locknuts P#(K2516). Refer to Figure 2-10 for reference.



## 2-12 Hinge Kit Assembly Installation

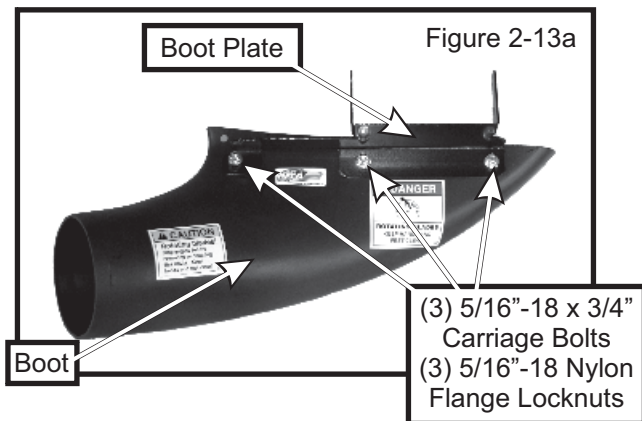
Assemble the hinge kit as shown in Figure 2-12, using (2) 5/16"-18 x 1" HHCS P#(K1154), (3) 5/16"-18 nylon flange locknuts P#(K2516), (5) 1/4" flat washers P#(K0037) and (2) swing arm brackets P#(ZT-0004). Place (1) vinyl cap P#(J0289) on the end of the hex bolts as shown in Figure 2-12. Leave the nuts loose enough to allow fluid movement of the top when opening and closing. When opened, the top should rest on the middle joint of the hinge allowing it to remain up.

Figure 2-12

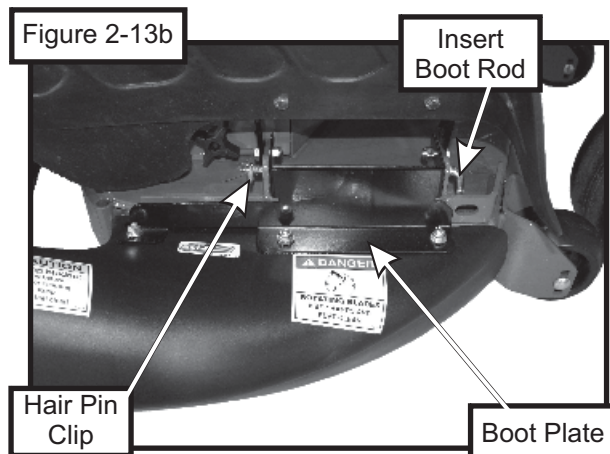


## 2-13 Boot To Mower Deck Installation

Raise the grass deflector on the mower deck. Fasten the boot plate P#(B0750) to the boot P#(V1168) using (3) 5/16"-18 x 3/4" carriage bolts P#(K1142) and (3) 5/16"-18 nyloc nuts P#(KK2516). Insert bolts from the inside of the boot so that the threads are on the top outside of the boot. This will help to prevent grass from collecting on the bolts. Refer to Figure 2-13a.

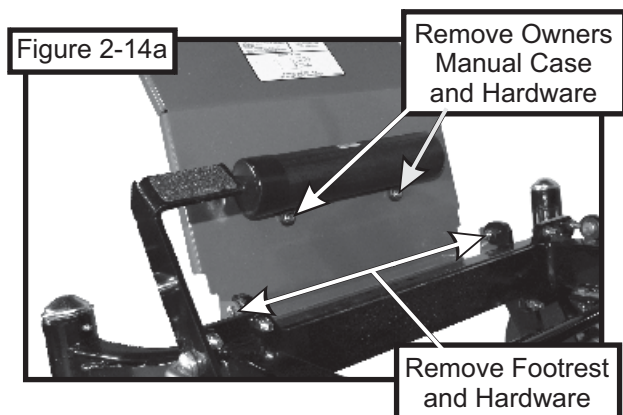


Secure the boot plate to the mower deck using (1) boot rod P#(B0288) and (1) hair pin clip P#(K0099). Refer to Figure 2-13b.

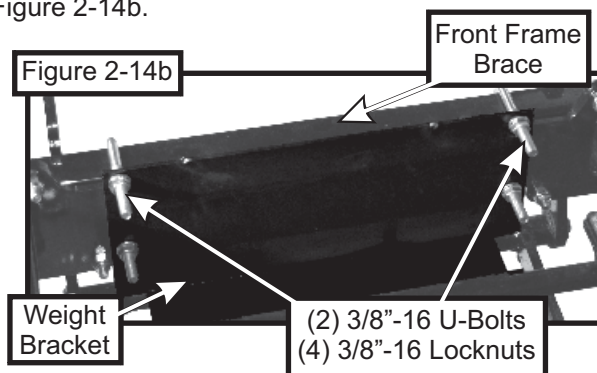


## 2-14 Weight Kit Assembly Installation

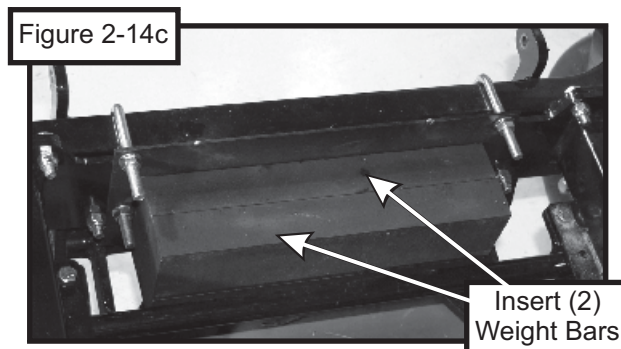
Remove the owners manual case and hardware from the foot rest. Remove the foot rest and hardware. Refer to Figure 2-14a.



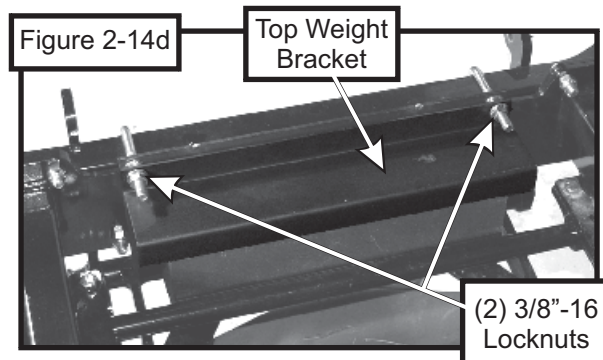
Fasten the weight bracket P#(B1844) to the front frame brace using (2) 3/8"-16 x 3-1/2" u-bolts P#(K0136) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-14b.



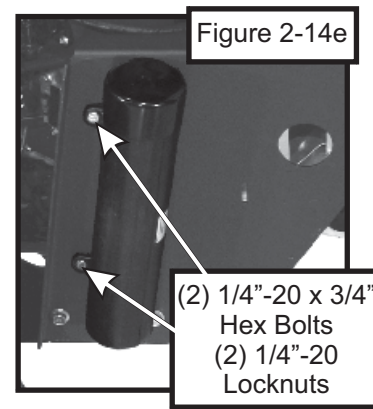
Insert (2) weight bars P#(B8146) into the weight bracket as shown in Figure 2-14c.



Secure the top weight bracket P#(B8145) to the weight bracket using (2) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-14d.



Secure the owners manual to the left frame bracket using (2) 1/4"-20 x 3/4" HHCS P#(K1222) and (2) 1/4"-20 nylon flange locknuts P#(K2014). Refer to Figure 2-14e for reference. Replace the footrest and hardware.





## 2-15 Length Of Hose Adjustment

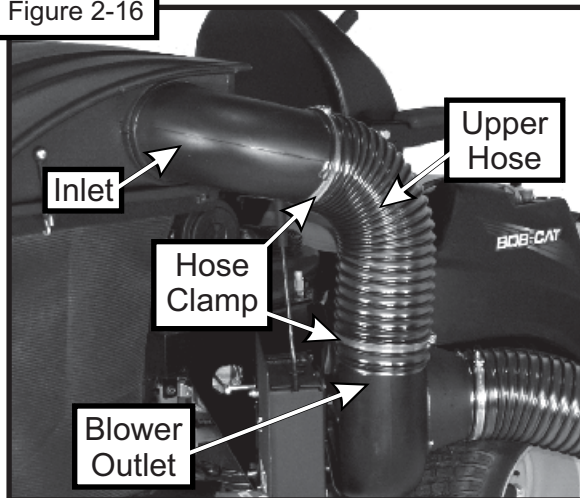
The hoses in steps 2-16 and 2-17 must be cut to fit your machine. Follow steps 2-16 and 2-17. do not cut the hoses until you have tried to fit them on your machine. Remember that the hoses have to be long enough to adjust for the blower assembly's movement as well as allow for enough clamping surface between the inlet, blower assembly, and the deck boot.

**Note:** The upper hose should no shorter than 22".

## 2-16 Upper Hose Installation

Fasten the inlet to the plastic top by sliding the inlet from the inside of the top to the outside and lock into place. Slide a pre-assembled hose clamp P#(J0060) onto both ends of the 6" upper hose (Figure 2-17). Then slide one end of the 6" hose onto the inlet. Make sure there is about a two-inch overlap between the hose end and the container inlet. Proceed to slide the opposite end of the 6" hose onto the outlet of the blower assembly. See (Figure 2-16) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

Figure 2-16



## 2-17 Lower Hose To Blower Cone

### Installation

Slide a pre-assembled hose clamp P#(J0060) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. The assembly should look like Figure 2-18b.

## 2-18 Lower Hose To Boot Installation

Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the lower hose clamp to secure the hose to the boot (Figure 2-18b). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.

**Note:** If the impeller blades continue to spin after the PTO has been disengaged, make sure the bolt shown in Figure 2-18a is not too tight. The bolt should be able to spin freely.

Figure 2-18a

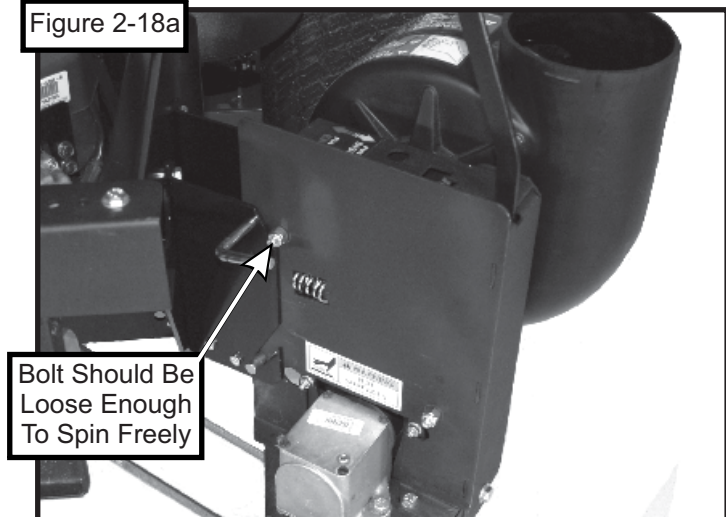
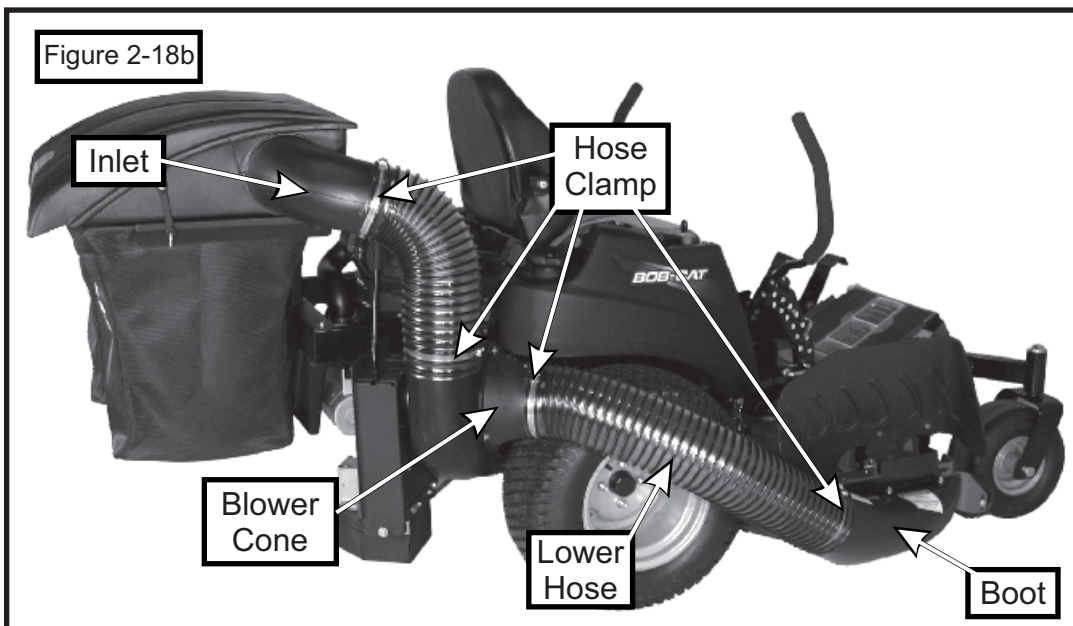


Figure 2-18b

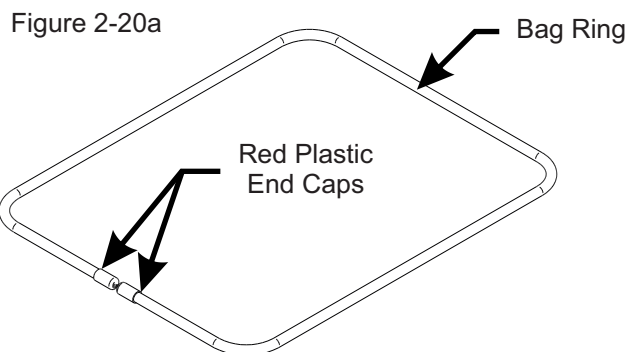




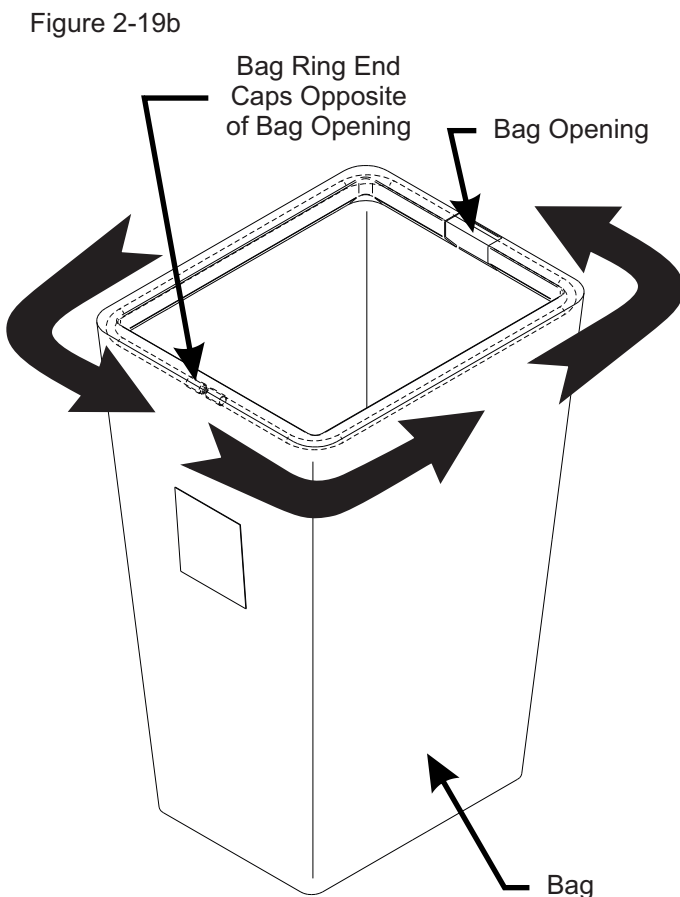
## 2-19 Installation/Removal Of Collection Bags

### IMPORTANT!

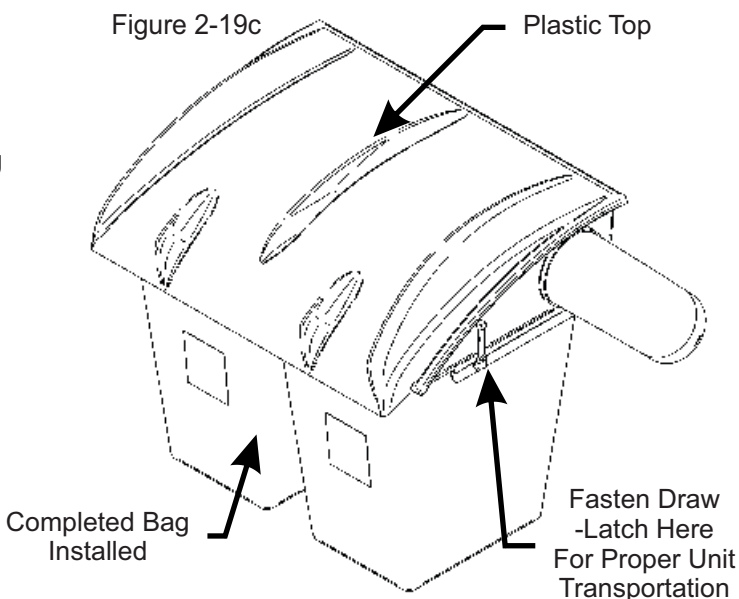
To prevent bag wear, install (2) red plastic end caps P#(J0274), as shown in Figure 2-20a, on each bag ring before installing bags.



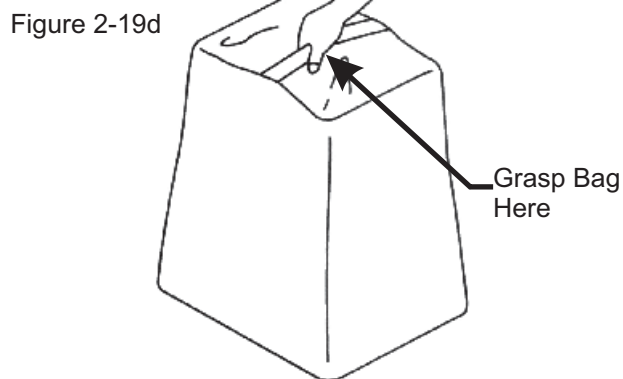
To install the bag onto the bag ring, place the seam openings of the bag onto the bag ring openings and turn the bag one full turn (360°) so the plastic end caps are located opposite to the opening in the bag (Figure 2-19b). Do this for each bag.



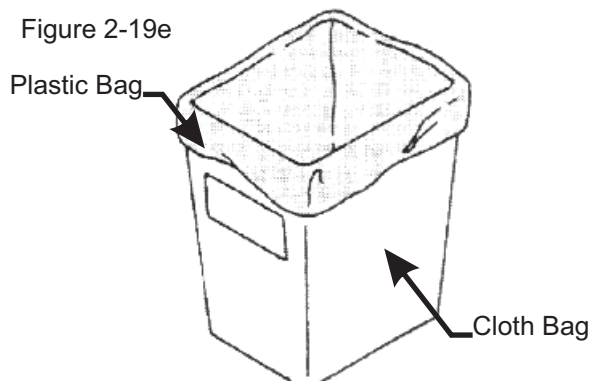
Install the completed assemblies onto the support frame and close the plastic top. Fasten the draw-latches to hold the plastic top closed (Figure 2-19c).



To empty the bag, first unlatch and lift top, next remove the bag and bag ring by sliding rearward, then grasp the loop on the bottom of the bag, and last turn it upside down to empty the collected debris (Figure 2-19d). Repeat for the other bag. Reinstall both bags, line with plastic bags if desired, close the plastic top and reattach the draw latches.



Plastic lawn and leaf bags, 33 gallon size, may be used inside the cloth bags. Be sure to leave enough plastic bag hanging over the frame so the plastic bags can be twist tied before emptying (Figure 2-19e).



## SECTION III OPERATING INSTRUCTIONS

### 3-1 General Safety

Only qualified people familiar with this operator's manual and the mower's operator's manual should operate this machine.

### 3-2 Operation And Tips On Mowing

- A. Perform BEFORE EACH USE the maintenance list in paragraph 4-1.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. While seated in the operator's seat, pull the engagement handle of the PTO assembly towards the operator's seat until the handle slides into position in the retaining slot. With the PTO assembly engaged, you can proceed to operate the control levers of the mower.

**NOTE:** If the collection system does not appear to be collecting the grass clippings, disengage the deck and PTO assembly (Section 3-3), then, engage the parking brake and turn the mower off. Check upper and lower hoses for any clogs.

To obtain the maximum effectiveness from your collection system, the tips listed below should be followed:

- \* Watch your speed- Normal conditions will allow a speed of up to approximately 4 mph, but thick, heavy damp conditions will require reduced ground speed.
- \* Mow with sharp blades- A sharp blade cuts cleaner.
- \* Wet grass and leaves will decrease effectiveness and will increase horsepower requirements.
- \* Mow at higher cutting heights- Remove and mulch no more than 2" of grass length with each mowing. (Experts recommend not cutting off more than 1/3 of the grass blade length at any given time.)
- \* Mow twice, at different height settings, (high, then low), if grass is extra tall.
- \* Remember that horsepower requirements will vary with the mowing conditions such as type and height of turf grass, moisture content, amount of leaves, whether the terrain is flat or hilly, etc.

### 3-3 Disengagement Of The PTO Assembly

A. To disengage the PTO assembly, slide the engagement handle out of the retaining slot and push the engagement handle away from the operator's seat.

**WARNING:** The PTO assembly blades will continue to spin. DO NOT TOUCH the PTO assembly, pulleys, or the belt until the tractor is turned off. DO NOT adjust the belt tension until the mower is turned off. Refer to section 2-6 of the manual.

### 3-4 Unloading The Collection System

**NOTE:** To determine when the collection bags are full, follow the following steps:

- A. Stop the forward movement of the mower.
- B. Disengage the mower deck.
- C. Disengage the PTO assembly.
- D. Engage the parking brake.
- E. Once the parking brake has been engaged, then and only then, walk behind the mower and check the collection bags by first unhooking the rubber strap with S-hook that secures the plastic top, then lift the plastic hood. Load in bags should not exceed the height of the installed bag.
- F. To remove the bags from the frame slide bags out and turn bags over to deposit clippings.
- G. Slide empty bags back onto the frame and secure plastic top with the rubber strap with S-hook.

**NOTE:** Do not allow collection bags to become over-filled as potential damage may occur to your equipment. Also, be sure to clean the plastic top screen as needed.

## SECTION IV MAINTENANCE

### 4-1 Maintenance Checklist

Before each use:

1. Check blades and spindles to be sure that no foreign objects, such as wire or steel strapping bands, are wrapped around them.
2. Inspect blades for wear. Replace if necessary. If it is necessary to sharpen the blades, remove the blades from the spindles before sharpening. DO NOT sharpen blades while still attached to the mower.

3. Make sure all shields are in place and in good condition. Repair or replace any missing or damaged shields.
4. Perform lubrication per paragraph 4-2.
5. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
6. With the engine off, engage the blower assembly. Check the belt tension and inspect the pulley belt for cracks or tears.
7. Check for wear or deterioration of the upper or lower hoses. If there are any portions of the hose that have been torn or worn through, replace immediately.

**After Each Use:**

1. Clean all debris from machine especially from the container, underneath the belt shields, and safety decals. Replace any missing or illegible decals.
2. Inspect the unit for worn or damaged components. Repair or replace before the next use. Any replacement component installed during repair shall include the component's current safety decal specified by the manufacturers to be affixed to the component.
3. Under normal usage, the bag material is subject to deterioration and wear and should therefore be frequently checked for necessary replacement. Any replacement bag should be checked to ensure compliance with the original manufacturer's recommendations or specifications.
4. Check belt for proper tension.

## 4-2 Lubrication

**Gearbox:**

**NOTE:** The gearbox is filled with 6.0 oz. of Mobilube HD Plus 80W-90 oil and permanently sealed. There is no need for scheduled lubrication. The oil level should only be checked if a leak is observed or if a change in gearbox noise is noticed.

Operators are recommended to check for leaks weekly. If a leak is observed, both the gasket and the seals are recommended to be replaced.

Replace the oil using 5.5 oz. of the recommended Mobilube HD Plus 80W-90 oil. Be sure to not overfill.

**Blower Assembly:**

**NOTE:** The following is for older PTO models that contain a greaseable zirc fitting. Newer models contain maintenance-free bearings and are without a greaseable fitting.

1. On initial use: Grease the fitting on the blower shaft.
2. Every 25 hours of use: Re-grease the grease fitting.

**NOTE:** Use only white lithium based grease for lubrication of the shaft on the blower assembly.

## SECTION V - PARTS & SERVICE

### 5-1 Parts And Service Information

Collection system owners should record the name and telephone number of their Service Center. Your Service Center will be happy to supply replacement parts, accessories, and do any service or repairs to your collection system. If for any reason your Service Center is unable to service your collection system or supply replacement parts, contact New PECO, Inc. and include the following information on the chart below.

THE SERIAL NUMBER PLATE  
IS LOCATED ON THE TOP  
ASSEMBLY

<b>PECO</b>	
<b>OUTDOOR POWER EQUIPMENT</b>	
<b>Model Number</b>	<input type="text"/>
<b>Serial Number</b>	<input type="text"/>
<b>Arden, North Carolina 28704</b>	

WRITE THE MODEL AND  
SERIAL NUMBER IN THE  
BOX TO THE LEFT  
FOR FUTURE REFERENCE.

**Unit Model Number:** \_\_\_\_\_

**Unit Engine Size:** \_\_\_\_\_

**Unit Serial Number:** \_\_\_\_\_

**Date of purchase:** \_\_\_\_/\_\_\_\_/\_\_\_\_

**Dealer/Distributor Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **State:** \_\_\_\_\_ **Zip:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_





Owner's Manual: Q0436

**Deck Size:** 52" & 61" Decks

**Vac Type:** 9 Cu. Ft. Pro 2+ Bagger

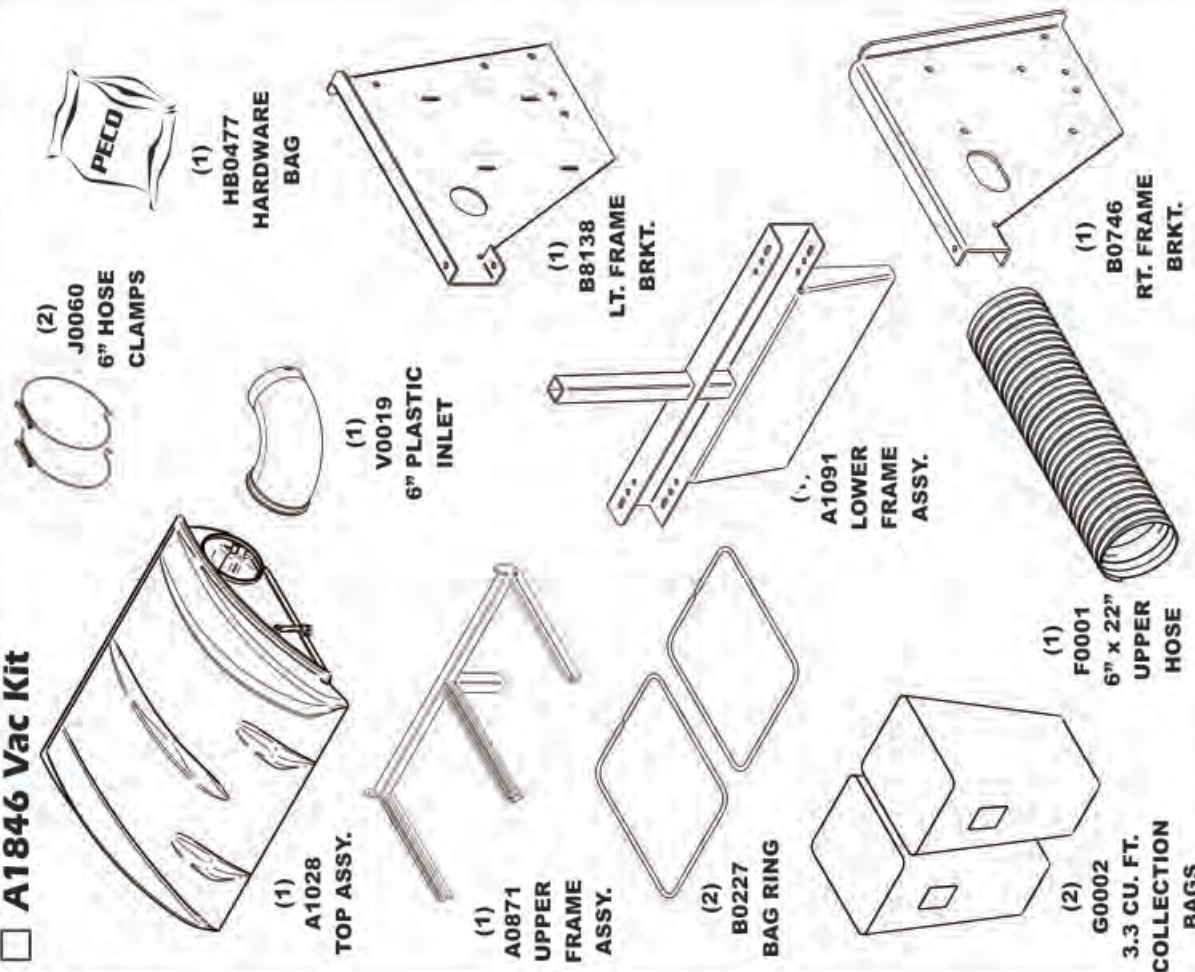
**Deck Type:**

**Drive Type:** PTO

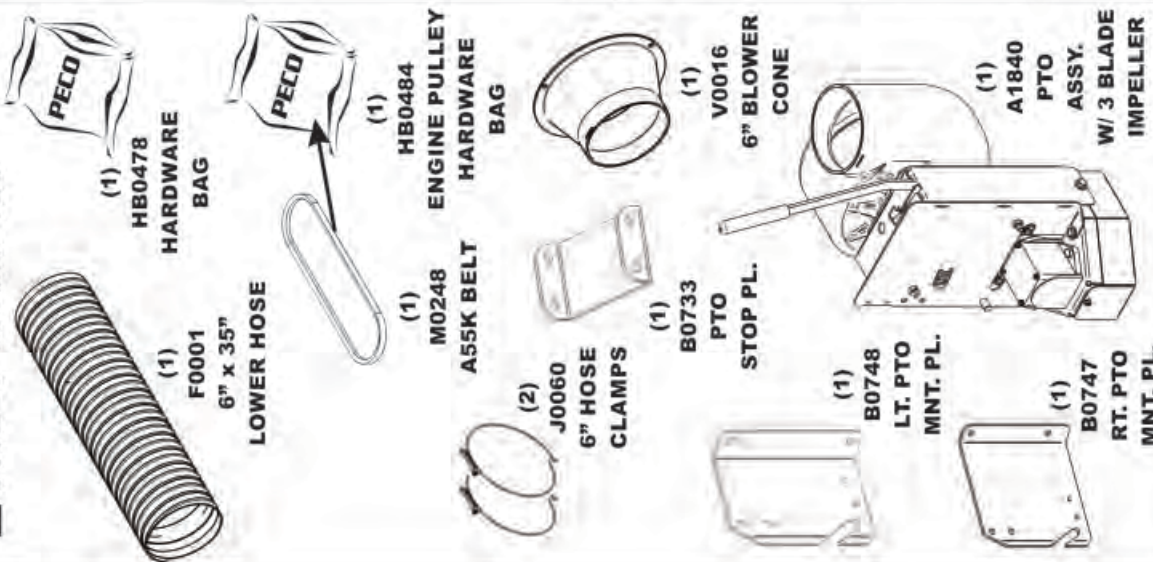
Revision #:	1 - Updated Mower Models 4/11/14	Fits Year(s): 2012-2014
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Fits Year(s): 2012-2014

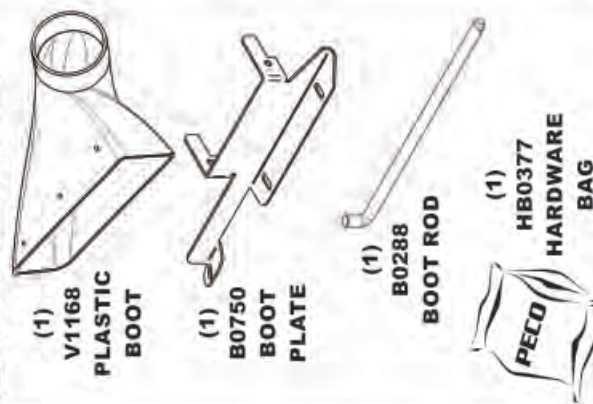
Fits Year(s): 2012-2014

☐ **A1846 Vac Kit**

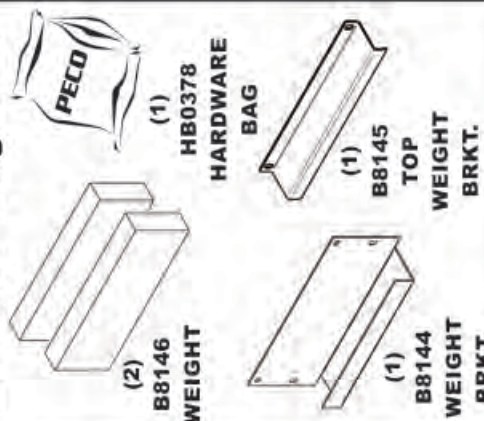
☐ **A1847 Mount Kit**



## ☐ A1845 Boot Kit

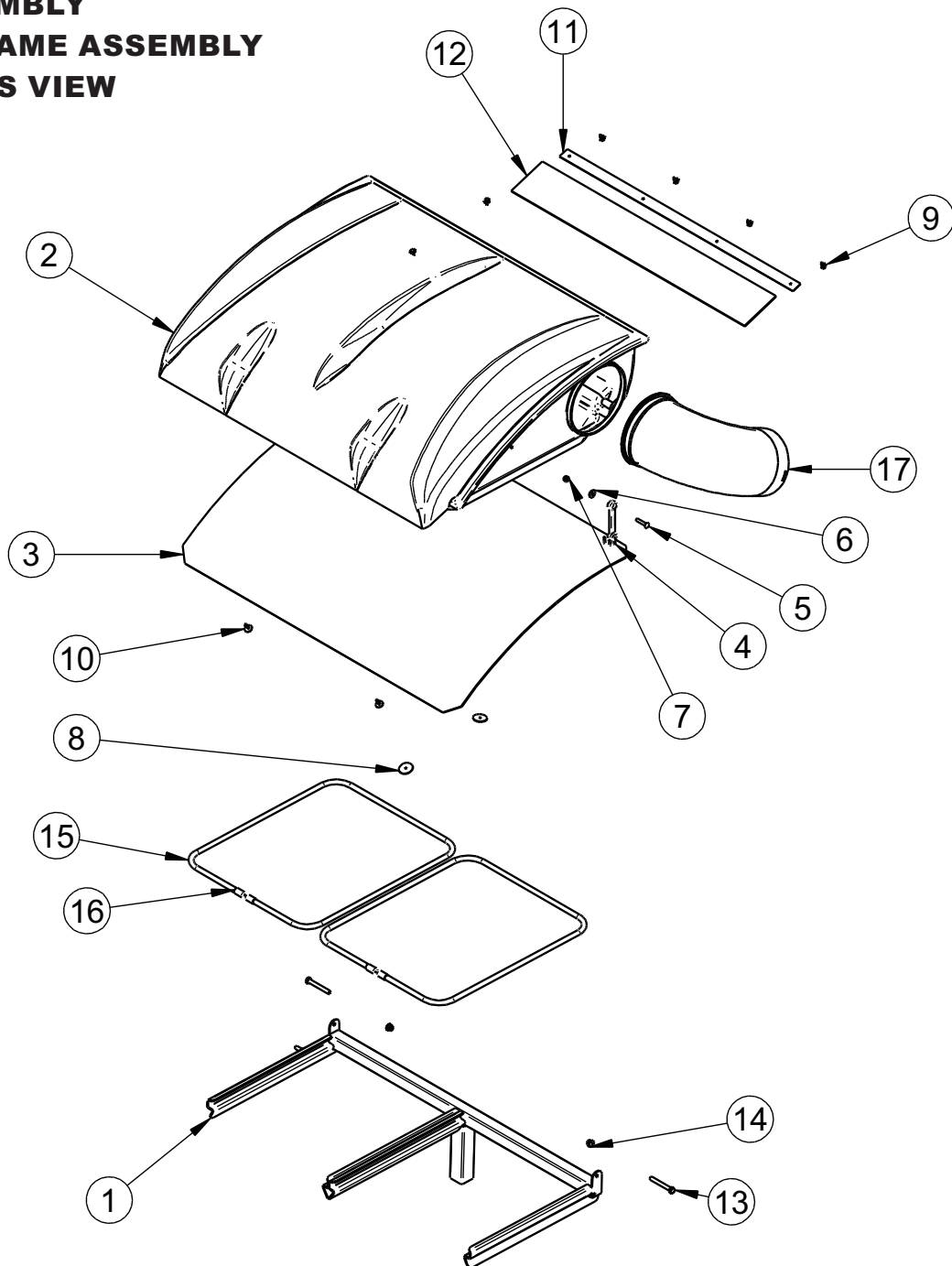


☐ **A1094 Weight Kit**



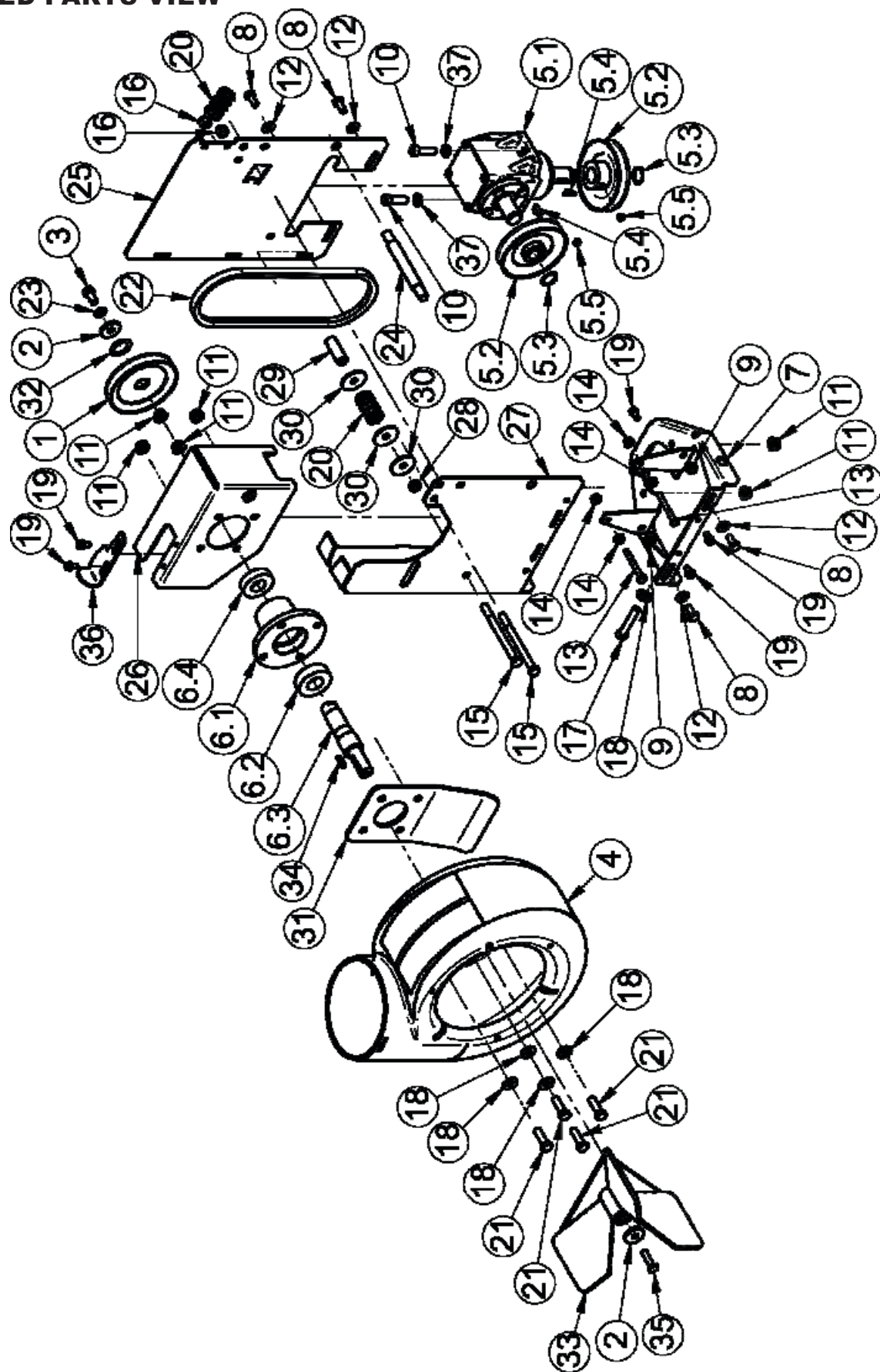


**A1028 TOP ASSEMBLY  
A0871 UPPER FRAME ASSEMBLY  
EXPLODED PARTS VIEW**



Item #	Doc #	Title	Qty
1	A0871	2 BAG FRAME ASSY.	1
2	V0017	PRO 2 BAGGER TOP	1
3	V0018	Black Plastic Screen	1
4	J4009	SHORT RUBBER STRAP W/ S HOOK	1
5	K1030	1/4\"-20 x 1-1/4\" CARRIAGE BOLT	1
6	K0037	1/4\" FLAT WASHER .75 OD x .314 ID x .060 T	1
7	k1128	1/4\"-20 NYLOC NUT	1
8	K0062	3/16\" x 1-1/2\" FENDER WASHER, Z	2
9	K0114	BLACK PLASTIC RIVET	6
10	K1265	BLACK PANEL RETAINER	2
11	C0067	DUST GUARD BRACE	1
12	V1117	DUST GUARD	1
13	K0125	5/16\"-18 x 2-1/2\" ALL THREAD HHCS	2
14	K2516	5/16\"-15 NYLON FLANGE LOCKNUT	2
15	B0227	BAG RING	2
16	j0274	BAG RING END CAP	4
17	V0019	INLET	1

**A2194 PTO BASE ASSEMBLY  
EXPLODED PARTS VIEW**



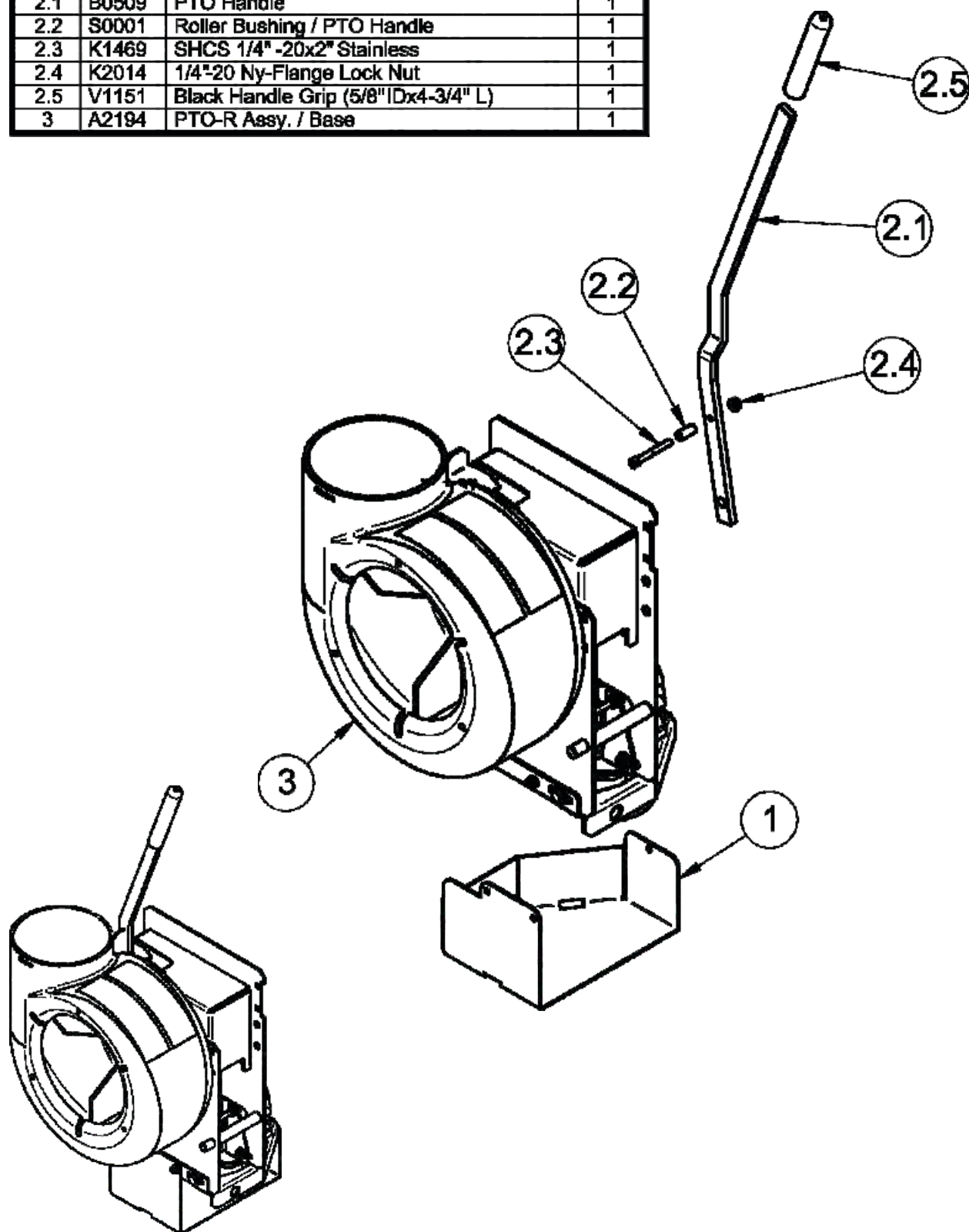
**A2194 PTO BASE ASSEMBLY**  
**EXPLODED PARTS VIEW DESCRIPTION**

Item#	Part#	Desc.	Qty.
1	M0266	A-Section Pulley / 4.25 OD	1
2	K1446	PTO Housing Washer	2
3	K1190	HHCS / 3/8"-16x3/4"	1
4	V0015	Blower Hsg.	1
5	A0429	Gear Box Assy.	1
5.1	A0431	Gearbox	1
5.2	A0498	Pulley Assy. / Gear Box	2
5.3	K0360	Snap Ring / 7/8"Shaft	2
5.4	J0272	Woodruff Key #9	2
5.5	K0035	Set Screw 5/16"-18x1/4" CupPoint	2
6	A1004	PTO Shaft Assy.	1
6.1	E0015	Housing / PTO Shaft	1
6.2	N0147	Bearing (2.0472OD,0.9843ID,0.5906W)	1
6.3	B0460	PTO Shaft	1
6.4	N0165	Bearing (1.875OD,.875ID,.500W)	1
7	A1003	PTO Base Plate Assy.	1
8	K1153	HHCS 5/16"-18x3/4"	4
9	K1178	Flange Nut 5/16"-18	4
10	K0309	3/8"-16x1-1/4" SHCS	2
11	K1215	Flange Nut 3/8" -16	6
12	K0037	Flat Washer / 1/4" (.75ODx.312IDx.060T)	4
13	K1150	HHCS / 1/4"-20x2-1/4"	2
14	K1126	Flange Nut 1/4" -20	4
15	K1202	HHCS / 3/8"-16x4-1/2"/G5	2
16	K1216	Nyloc Nut / 3/8"-16	2
17	K0348	HHCS / 3/8"-16x2" AllThread	1
18	K0042	Flat Washer 5/16" / .875ODx.380IDx.075T	5
19	K0353	HWHTCS 1/4"-20x1/2"	5
20	J0303	Spring	2
21	K1192	HHCS 3/8"-16x1-1/4" GR5	4
22	M0267	Kevlar Belt / A28K	1
23	K0048	Lock Washer 3/8"	1
24	B0505	Mount Rod	1
25	B0506_01	Lt. PTO Arm	1
26	B0642	Mount Bracket / Blower Hsg.	1
27	B0643	Rt. PTO Arm	1
28	B0510	Spacer Bushing / Small	1
29	B0511	Spacer Bushing / Large	1
30	K0403	Flat Washer (1-1/2"ODx3/8"IDx.092T)	3
31	B0739	Stiffener Plate / Blower Hsg.	1
32	K0070	Flat Washer (1.295 OD x .881 ID x .020T)	1
33	A1839	3-Blade Impeller Assy.	1
34	J0254	Key / 3/16" x3/16" x3/4"	1
35	K1171	HHCS / 5/16" -24LHx1-1/4" / G5 w/ Patch Coating	1
36	B0887	Belt Tension Adjust Bracket	1
37	K0048	Lock Washer 3/8"	2

## A1840 PTO ASSEMBLY

### EXPLODED PARTS VIEW DESCRIPTION

Item#	Part#	Desc.	Qty.
1	B0478	Gear Box Pulley Guard	1
2	A1112	PTO Handle Assembly	1
2.1	B0509	PTO Handle	1
2.2	S0001	Roller Bushing / PTO Handle	1
2.3	K1469	SHCS 1/4" -20x2" Stainless	1
2.4	K2014	1/4"-20 Ny-Flange Lock Nut	1
2.5	V1151	Black Handle Grip (5/8" IDx4-3/4" L)	1
3	A2194	PTO-R Assy. / Base	1





# SAFETY DECALS

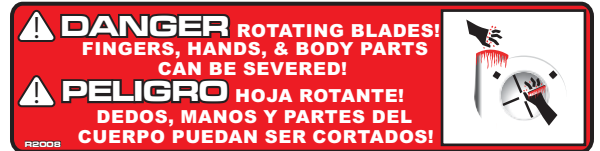
To promote safe operation, PECO Inc. supplies safety decals on all products manufactured. Damage can occur to safety decals either through shipment, use or reconditioning. Contact your local Service Center for replacement decals.



Part #: R1070  
PECO Label



Part #: R2007  
Never Use Hands Label



Part #: R2008  
Rotating Blades Label



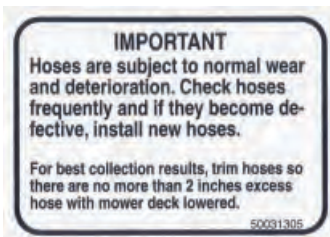
Part #: R1100  
Engage-Disengage Label



Part #: R4037  
Warning: Hot Surface Label



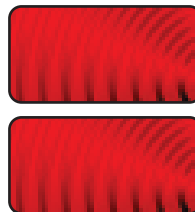
Part #: R1052  
Small Warning: Turn Off Blower Label



Part #: R1054  
Important Label



Part #: R1065  
Made In America Label



Part #: R1057 - (2)



Part #: R1069  
Warning: Turn Off Blower Label



Part #: R4015  
Danger: Rotating Blades Label



Part #: R1051  
Warning: Hearing Protection Label

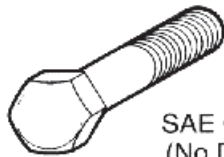


Part #: R4008  
Caution: Rotating Blades Label

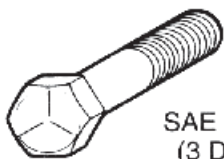
# TORQUE SPECIFICATIONS

## AMERICAN

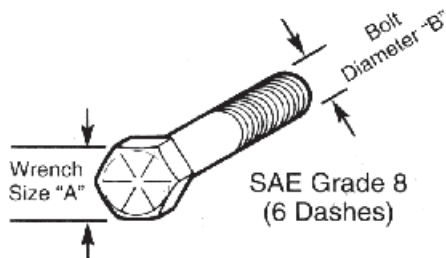
Bolt Head Markings



SAE Grade 2  
(No Dashes)



SAE Grade 5  
(3 Dashes)

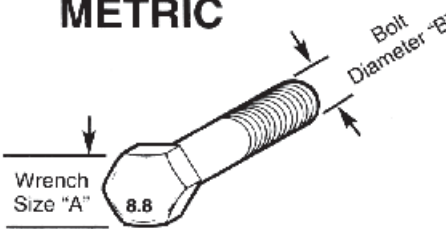


SAE Grade 8  
(6 Dashes)

Recommended Torque in Foot Pounds (Newton Meters).\*

WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8
7/16	1/4 - 20 UNC	6 (7)	8 (11)	12 (16)
7/16	1/4 - 28 UNF	6 (8)	10 (13)	14 (18)
1/2	5/16 - 18 UNC	11 (15)	17 (23)	25 (33)
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)
9/16	3/8 - 24 UNF	23 (31)	35 (47)	49 (66)
5/8	7/16 - 14 UNC	32 (43)	49 (66)	70 (95)
5/8	7/16 - 20 UNF	36 (49)	55 (75)	78 (106)
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)
7/8	9/16 - 12 UNC	70 (95)	109 (148)	153 (207)
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)
1-1/8	3/4 - 10 UNC	144 (195)	266 (360)	376 (509)
1-1/8	3/4 - 16 UNF	192 (260)	297 (402)	420 (569)
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)
1-1/2	1 - 8 UNC	250 (339)	644 (873)	909 (1232)
1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)
1-1/2	1 - 14 UNF	280 (379)	721 (977)	1019 (1381)
1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288 (1745)
1-11/16	1-1/8 - 12 UNF	397 (538)	890 (1206)	1444 (1957)
1-7/8	1-1/4 - 7 UNC	500 (678)	1120 (1518)	1817 (2462)
1-7/8	1-1/4 - 12 UNF	553 (749)	1241 (1682)	2013 (2728)
2-1/16	1-3/8 - 6 UNC	655 (887)	1470 (1992)	2382 (3228)
2-1/16	1-3/8 - 12 UNF	746 (1011)	1672 (2266)	2712 (3675)
2-1/4	1-1/2 - 6 UNC	870 (1179)	1950 (2642)	3161 (4283)
2-1/4	1-1/2 - 12 UNF	979 (1327)	2194 (2973)	3557 (4820)

## METRIC



Numbers appearing on bolt heads indicate ASTM class.

Recommended torque in foot pounds (newton Meters).\*

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (566)	1119 (1516)		1547 (2096)

\*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

## NOTES



**10 WALDEN DRIVE  
ARDEN, NORTH CAROLINA 28704  
(800) 438-5823 OR (828) 684-1234 FAX: (828) 684-0858  
EMAIL: [peco@lawnvac.com](mailto:peco@lawnvac.com)  
WEBSITE: [www.lawnvac.com](http://www.lawnvac.com)**