

PTO **PRO 2 BAGGER** **GRASS COLLECTION SYSTEM**



BOB-CAT FASTCAT

48" and 52" DECKS
MODEL: 23020907

42" and 61" DECKS
MODEL: 23020908



OPERATOR'S MANUAL

MANUAL PART #: Q0387

ASSEMBLY • OPERATION • MAINTENANCE

\$10.00

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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 mower. Do not allow adults to operate the mower or grass collection system 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. If a slope must be ascended, back up the slope; drive forward when descending.
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 and never mow slopes greater than 15 degrees.
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** back up the face of slopes. **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 WARRANTED?

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 (90 days for commercial use) 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, batteries, and gearboxes must be returned to 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 for 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, batteries and, gearboxes attached to PECO products are covered under a separate warranty by the respective manufacturer.

D. UNAPPROVED ALTERATION OR MODIFICATION.

All obligations of PECO Inc., under this warranty, shall be terminated if products are altered or modified in ways not approved by 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 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, 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 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 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) - 2.9 cubic foot collection bags P#(G0004) 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 released to make for easy dumping.

Section II

INSTALLATION FOR USE

2-1 Preparation Of Mower

Carefully open the shipping box. The grass collection system will have various parts located inside. Remove and sort all parts for easy identification. Verify all parts against the list on page 16 and 17. If parts are missing, please contact PECO Inc. at (800) 438-5823.

From the underside of the engine, remove the bolt and bushing from the electric clutch assembly. Use a bungee cord or similar device to hold the clutch in place while the hardware is removed.

Replace the hardware removed with the engine pulley assembly number 2 P#(A0419). Fasten the engine pulley to the electric clutch assembly using (1) 7/16" hi-collar helical spring lock washer P#(K0140) and (1) 7/16"-20 x 3-3/4" HHCS P#(K0350). See Figure 2-1a and 2-1b for details.

The added pulley will power the collection system.
Torque the bolt to 55 ft./lbs.

Figure 2-1a

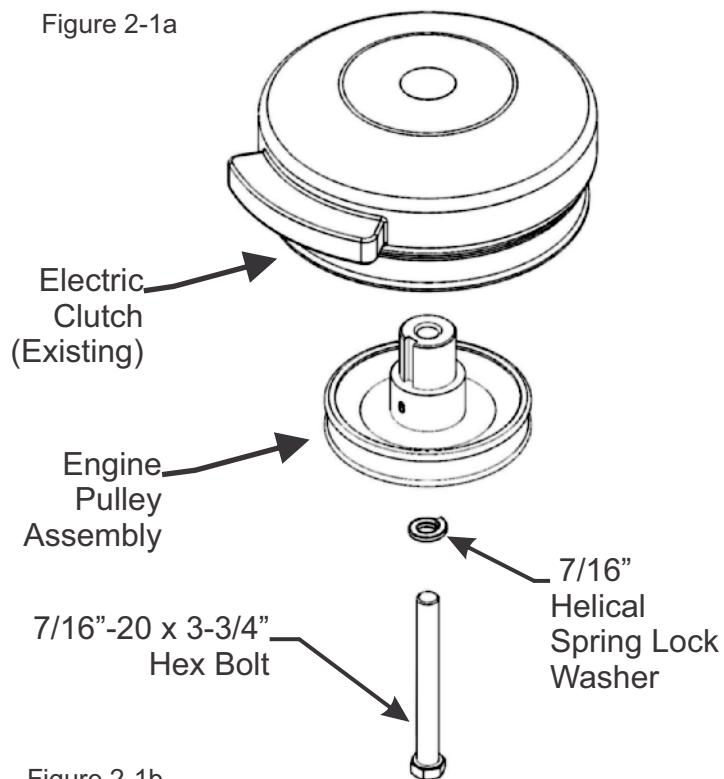
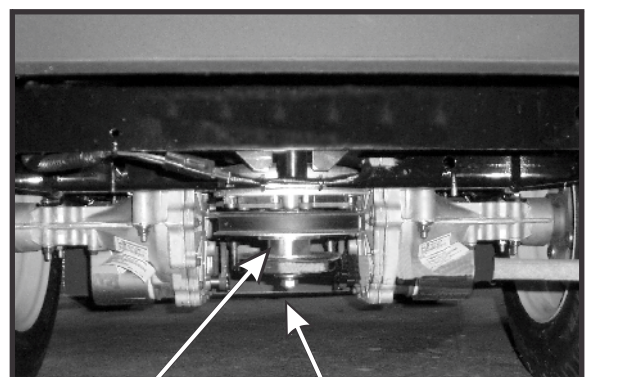


Figure 2-1b

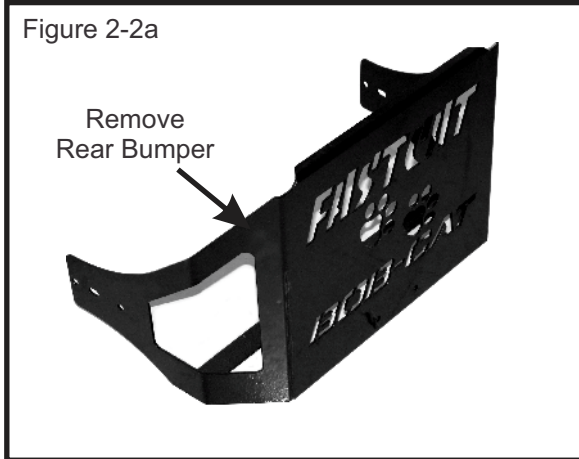


Engine Pulley Assembly

Helical Spring Lock Washer and Hex Bolt

2-2 Rear Bumper Installation

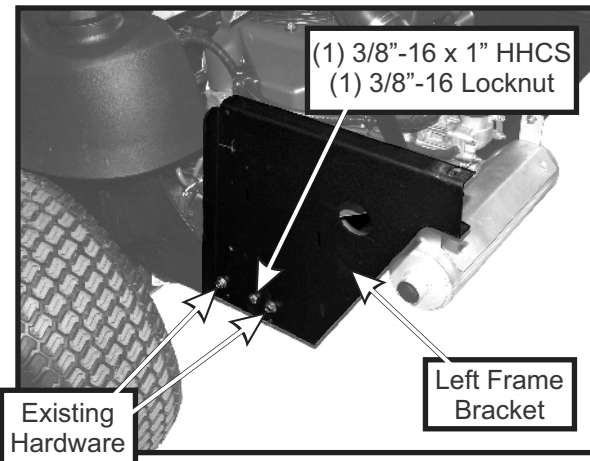
Remove the rear bumper shown in Figure 2-2a from the mower frame. Keep the hardware for use later in the installation.



2-3 Left and Right Frame Bracket Installation

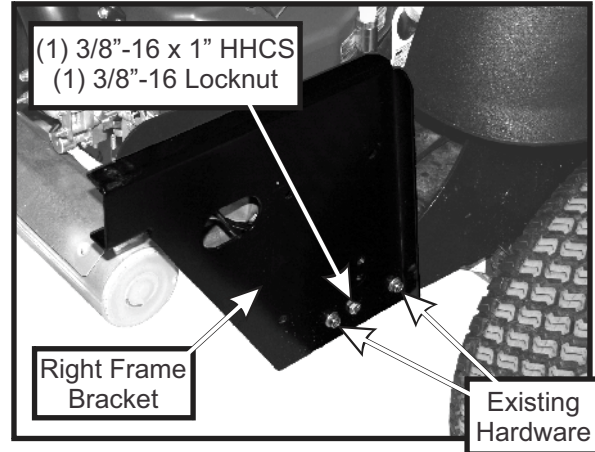
With the rear bumper removed, position the left frame bracket P#(B8138) as shown in Figure 2-3a. Secure the left frame bracket to the mower frame using (1) 3/8"-16 x 1" HHCS P#(K1191), (1) 3/8"-16 nylon flange locknut P#(K2038) and the existing hardware removed from the rear bumper.

Figure 2-3a



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 2-3b



2-4 Lower Frame Assembly Installation

Position the lower frame assembly P#(A1091) as shown in Figure 2-4a. 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 2-4b for reference.

Figure 2-4a

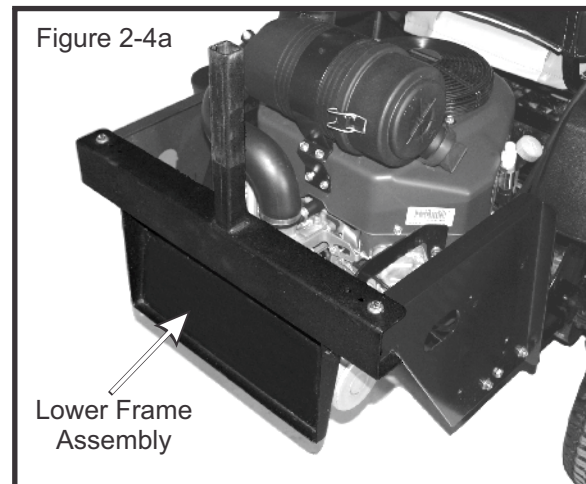
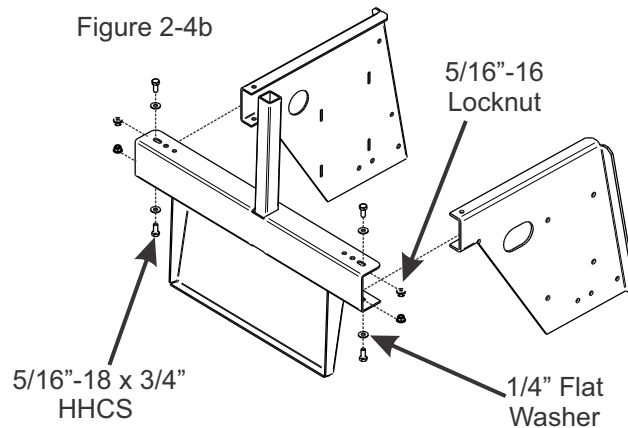
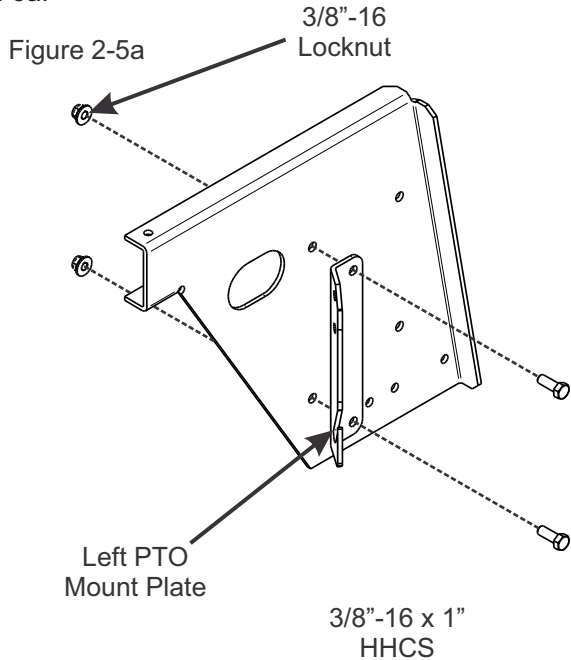


Figure 2-4b



2-5 PTO Mount Plate Component Installation

Fasten the left PTO mount plate P#(B0744) the right frame bracket P#(B0746) 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 2-5a.



Fasten the right PTO mount plate P#(B0743) 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 2-5b.

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

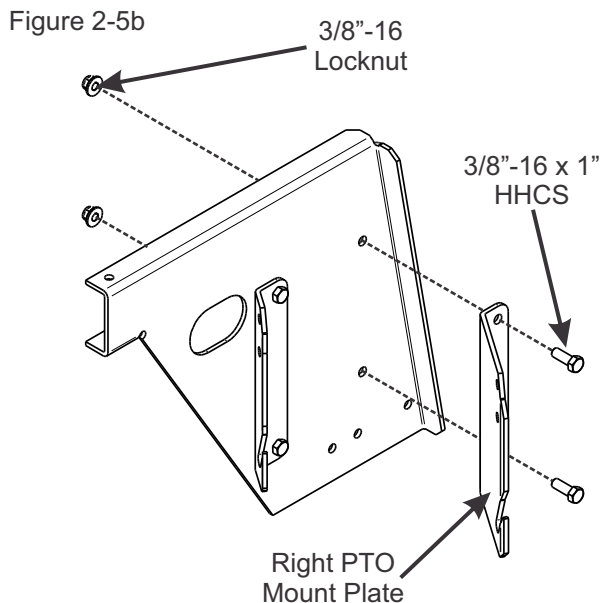
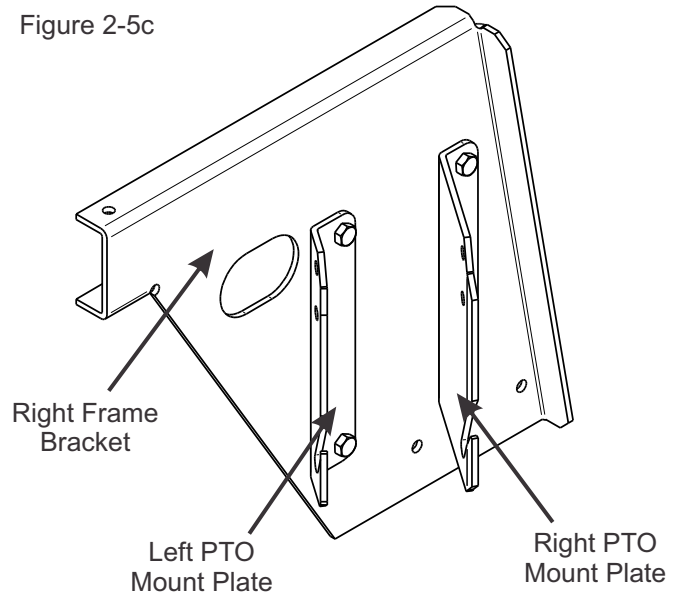
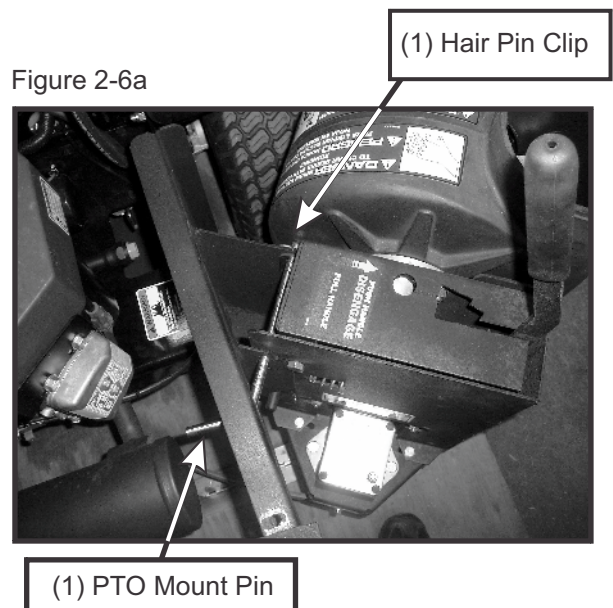


Figure 2-5c shows the complete PTO mount plate component assembly.



2-6 Universal PTO Installation

To mount the PTO assembly, insert the pivot rod on the PTO assembly P#(A1111) into the mounting slots located on the right PTO mount plate assembly P#(A1092). Tilt the PTO assembly upward and insert the PTO mount pin P#(B0274) through the hole in the top of the right PTO mount plate assembly. Secure the PTO mount pin using (1) 1/8" x 2-3/8" hair pin clip P#(K0086). Refer to figure 2-6a.



2-7 Belt Installation/Removal and Adjustment

Remove (3) 1/4"-20 x 1/2" P#(K0353) HHSTS from the belt guard located on the bottom of the PTO assembly as shown in Figure 2-7a and 2-7b.

Figure 2-7a



Gear Box Assembly

Belt Guard

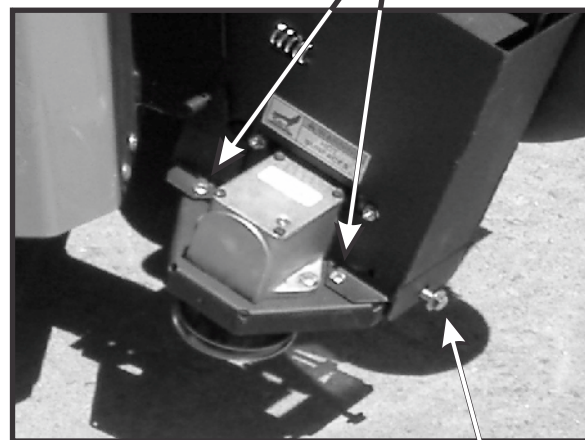
Figure 2-7b



Remove (3) Screws To
Remove Belt Guard

Loosen the (2) 5/16"-18 x 3/4" HHCS P#(K1153) that secure the gear box assembly to the PTO assembly P#(A1111). Refer to Figure 2-7c. Loosen the adjustment bolt (1) 3/8"-16 x 2" HHCS P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved toward the mower's engine pulley). Connect the kevlar cord belt A50K P#(M0241) from the engine pulley to the lower gear box pulley (Figure 2-7d). To tension the drive belt, turn the adjustment bolt clockwise (Figure 2-7c) until there is 1" of deflection with 10-11 lbs. of pressure at the center of the belt between the engine pulley and the gear box pulley. Once the correct tension of the belt is achieved, tighten the (2) bolts that secure the gear box assembly.

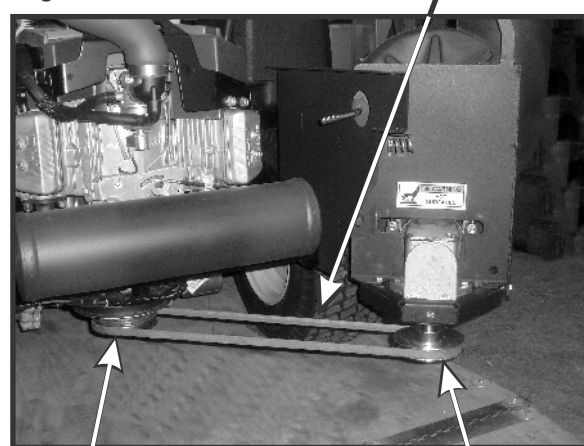
Figure 2-7c



(2) 5/16"-18 x 3/4" HHCS

(2) 3/8"-16 x 2" HHCS
Adjustment Bolt

Figure 2-7d



A50K Kevlar Belt

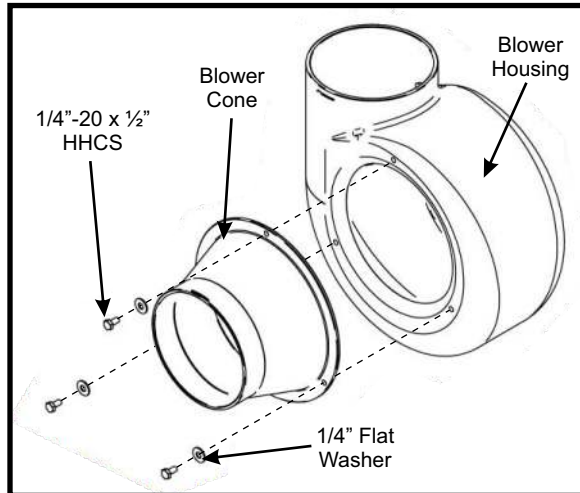
Engine Pulley

Gearbox Pulley

2-8 Blower Cone Installation/Removal

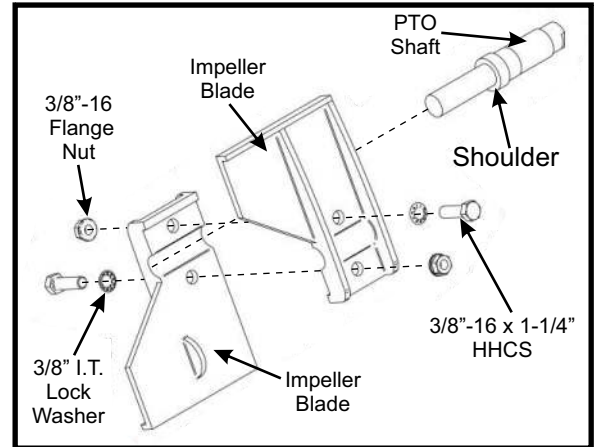
Fasten the blower cone P#(V0016) to the blower housing located on the PTO assembly P#(A1111). Use (3) 1/4" - 20 x 1/2" HHCS P#(K1105) and (3) 1/4" flat washers P#(K0037) to secure the blower cone to the blower housing. Refer to Figure 2-8a.

Figure 2-8a



Remove the (2) 3/8" - 16 x 1-1/4" HHCS P#(K1192), (2) 3/8" I.T. loc washer P#(K0049) and (2) 3/8" - 16 flange nuts P#(K1215) that secure the (2) impeller blades P#(E7003) to the PTO shaft P#(B0460). Inspect the impeller blades and replace if necessary. When replacing the impeller blades, run the impeller blades to the shoulder of the PTO shaft before tightening the hardware. Refer to Figure 2-9b.

Figure 2-9b



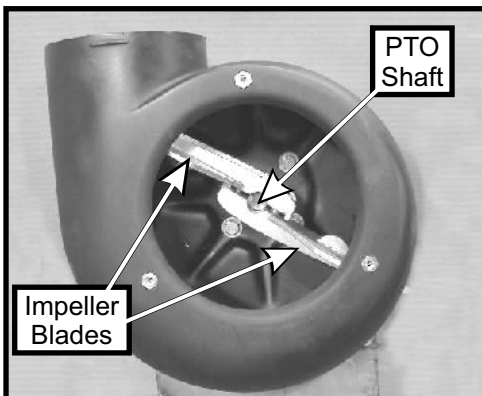
2-9 Impeller Blade Removal/Replacement

BEFORE REMOVING/REPLACING THE IMPELLER BLADES, BE SURE THE MOWER IS TURNED OFF, THE PTO ASSEMBLY IS DISENGAGED AND THE NEGATIVE CABLE IS REMOVED FROM THE BATTERY. FAILURE TO DO SO MAY RESULT IN SEVERE INJURY OR DEATH.



Remove the blower cone P#(V0016) from the blower housing located on the PTO assembly P#(A1111). With the blower cone removed, you will have access to the impeller blades P#(E7003). Figure 2-9a.

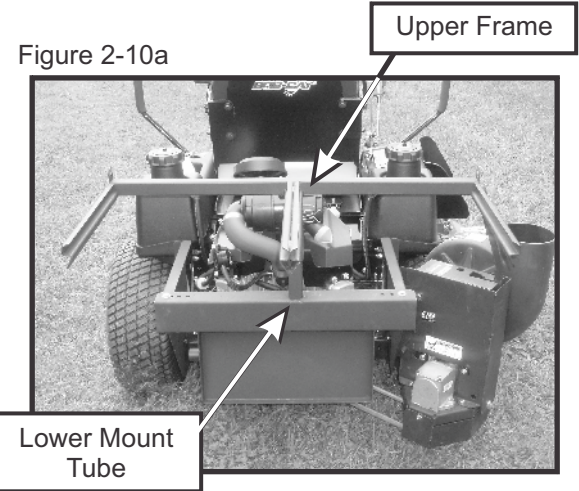
Figure 2-9a



2-10 Upper Frame Assembly Installation

NOTE: During this step it is recommended that two people install the upper frame.

Using two people, lift the upper frame assembly P#(A0871) above the lower frame assembly P#(A1091) making sure the frame bag arms are pointing away from the mower. Slide the upper frame tube into the lower frame assembly tube. See Figure 2-10a.



2-11 Top Assembly To Upper Frame Assembly Installation

Align the pivot brackets of the top assembly P#(A1028) to the pivot point on either side of the upper frame assembly P#(A0871). Place (1) 1/4" flat washer P#(K0037) between each pivot point and fasten each side by using (1) 5/16"-18 x 2-1/2 tap bolt P#(K0125) and (1) 5/16"-18 nyloc nut P#(K1180). See Figure 2-11a. When fastening leave nut slightly loose so that the top can pivot freely.

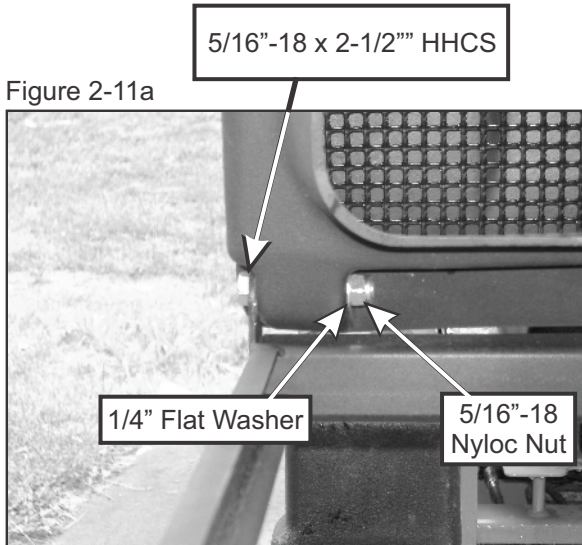


Figure 2-11a

2-13 Boot To Mower Deck Installation

NOTE: 48"/52" DECKS USE BOOT P#(V1162)

NOTE: 42"/ 61" DECKS USE BOOT P#(V1166)

Raise the grass deflector on the mower deck. Fasten the boot plate P#(B8143) to the boot P#(V1162) OR P#(V1166) using (3) 5/16"-18 x 3/4" carriage bolts P#(K1142) and (3) 5/16"-18 nyloc nuts P#(K1180). 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 Figures 2-13a and 2-13b.

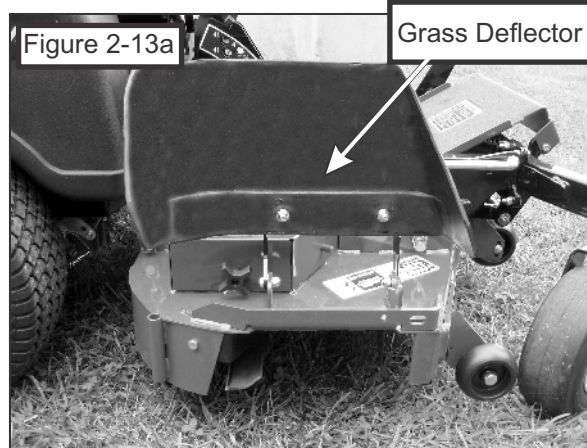


Figure 2-13a

2-12 Inlet Installation

With the top assembly P#(A1028) in the upright position, insert the inlet P#(V0019) into the right hand hole in the top assembly as shown in Figure 2-12a. Continue to insert the inlet until the snap locks into place. The inlet should now pivot freely about the hole.

Figure 2-12a

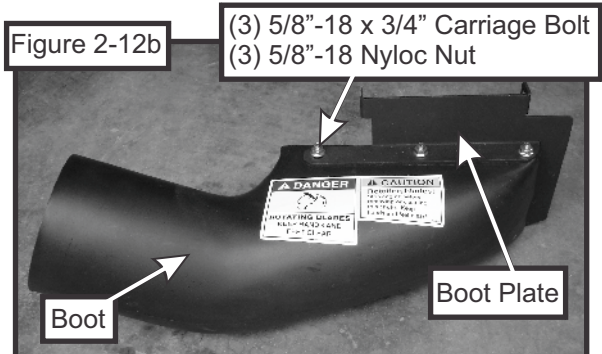
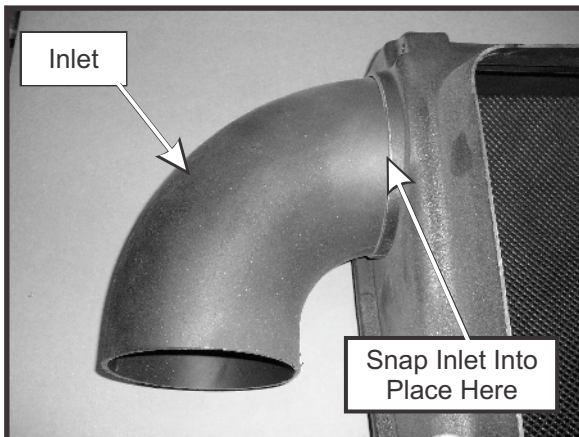
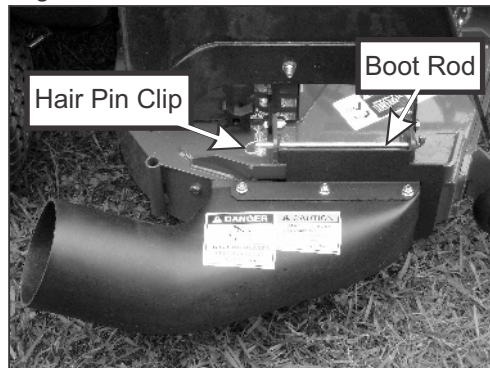


Figure 2-12b

Next, align the boot plate holes with the holes in the mowing deck grass deflector mount. Place boot plate # (B0288) to the inside then insert the boot rod through all four holes and secure with (1) hair pin clip P#(K0099). Refer to Figures 2-13c.

Figure 2-13c

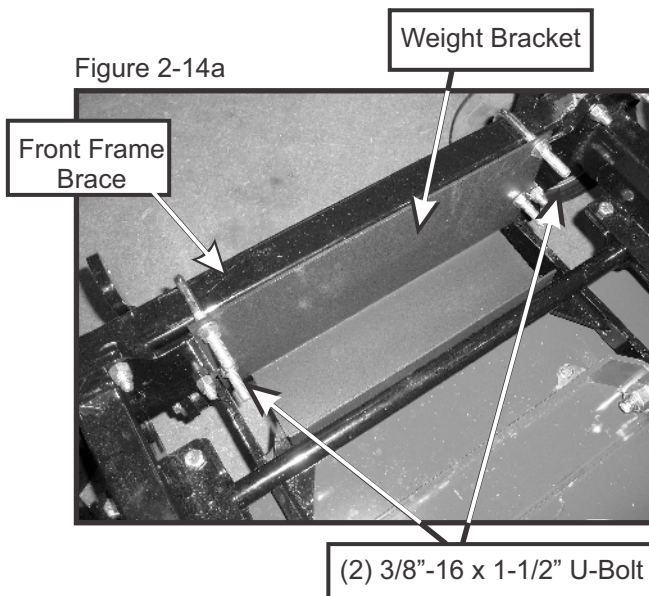


2-14 Front Weight Assembly

NOTE: Remove the front foot rest and hardware for this step. When finished installing the weight kit assembly, replace the front foot rest and hardware.

Attach (1) weight bracket P#(B8144) by using (2) 3/8"-16 x 3-1/2" U-bolts P#(K0136) and (4) 3/8"-16 nyloc nuts P#(K1215). Refer to Figure 2-14a.

NOTE: When installing weights you should have another person help position the weights. Lift the weights (2) P#(B8146) and place on top of the weight bracket. Figure 2-14b.



Fasten the weights to the weight bracket by using (1) top weight bracket P#(B8145). Align top weight bracket holes with the U-bolt on previously installed bottom weight bracket. Fasten with (2) 3/8" - 16 nyloc nuts P#(K1216). Figure 2-14c.

Figure 2-13b

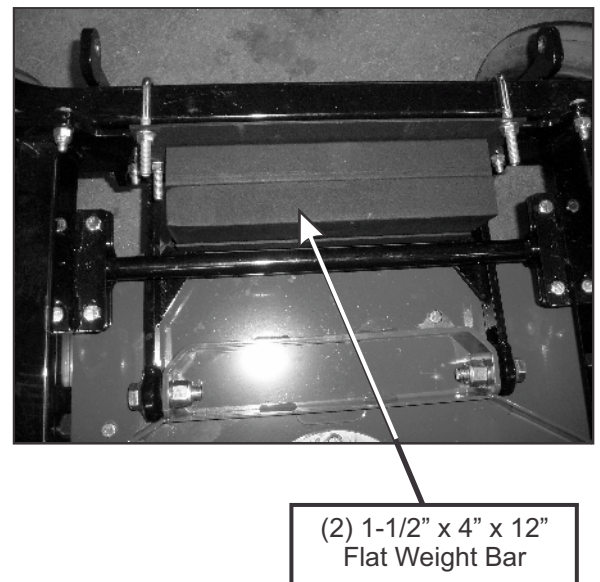
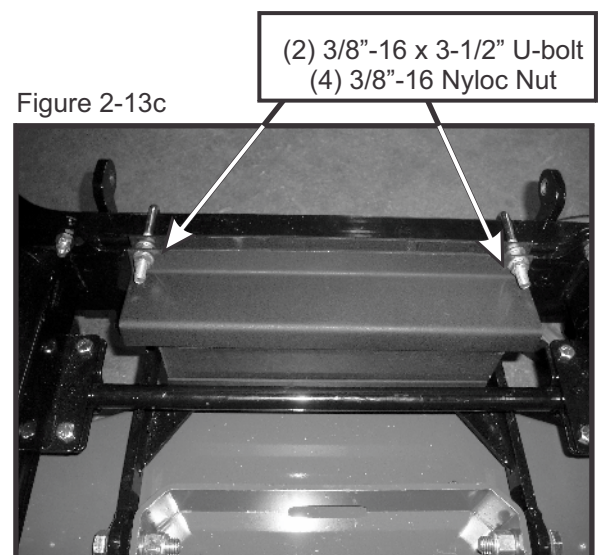


Figure 2-13c



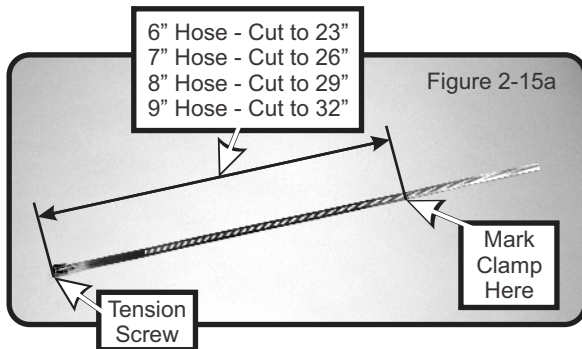
2-15 Hose Clamp Preparation



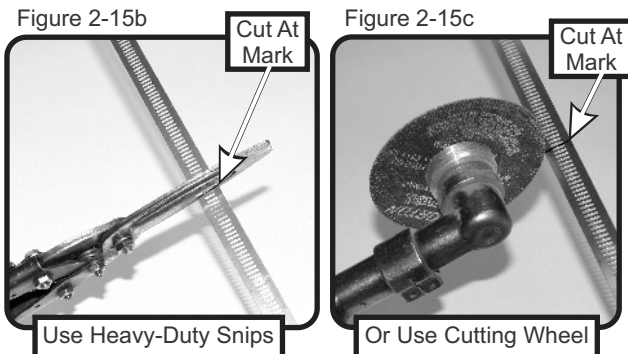
Note: To prevent injury, wear safety gear when cutting or grinding hose clamps.

The hose clamps P#(J1000), provided with your collection system, will fit hose sizes 6" through 9". The excess should be cut from the clamp prior to installing the hoses. Follow the steps listed to properly install the hose clamps to your collection system.

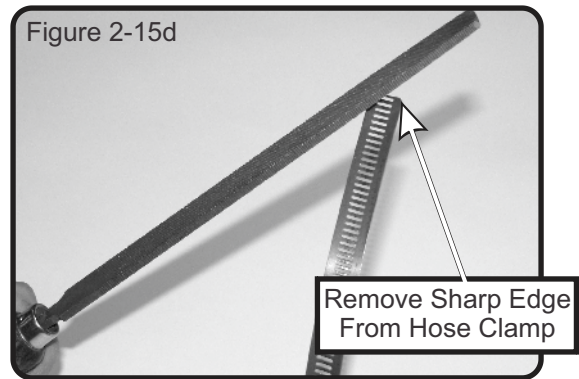
Step 1: Measure from hose clamp's fastening end (end with tension screw) to the dimension specified for your hose diameter and mark the clamp for cutting. Refer to Figure 2-15a.



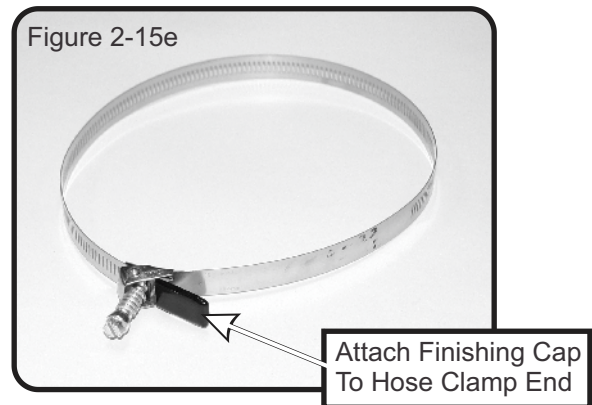
Step 2: See note on Caution above! Cut the hose clamp at mark determined from Step 1. It is recommended to use heavy-duty snips or a cutting wheel. Refer to Figure 2-15b and 2-15c.



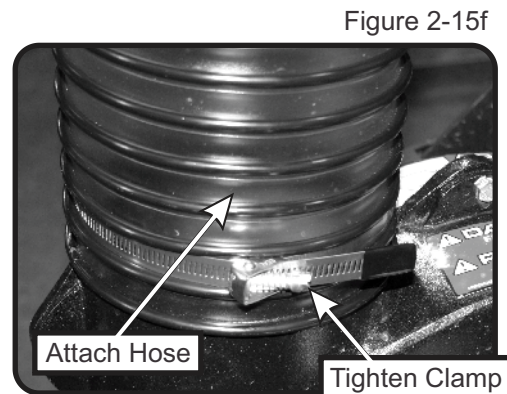
Step 3: Using a flat file or disc grinder, remove sharp edges from clamp cut in Step 2. Refer to Figure 2-15d.



Step 4: Loop previously cut hose clamp end under and through the clamp's tension screw. Next, slide one finishing cap P#(V0040) over cut end. Refer to Figure 2-15-e.



Step 5: To clamp hose, first slide completed clamp assembly over hose end. Next, hold tension screw up while pulling clamp end to pre-tighten. Then, fold tension screw down and tighten using 5/16" socket or flat-head screw driver. See Figure 2-15f.



2-16 Length Of Hose Adjustment

The hoses in steps 2-17 and 2-18 must be cut to fit your machine. 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.

2-17 Upper Hose Installation

Slide a 5" - 6" hose clamp P#(J1000) over both ends of the upper hose. Then slide one end of the upper 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 upper hose onto the outlet of the blower assembly. See Figure 2-19 for details. Tighten the hose clamps.

2-18 Lower Hose To Blower Cone Installation

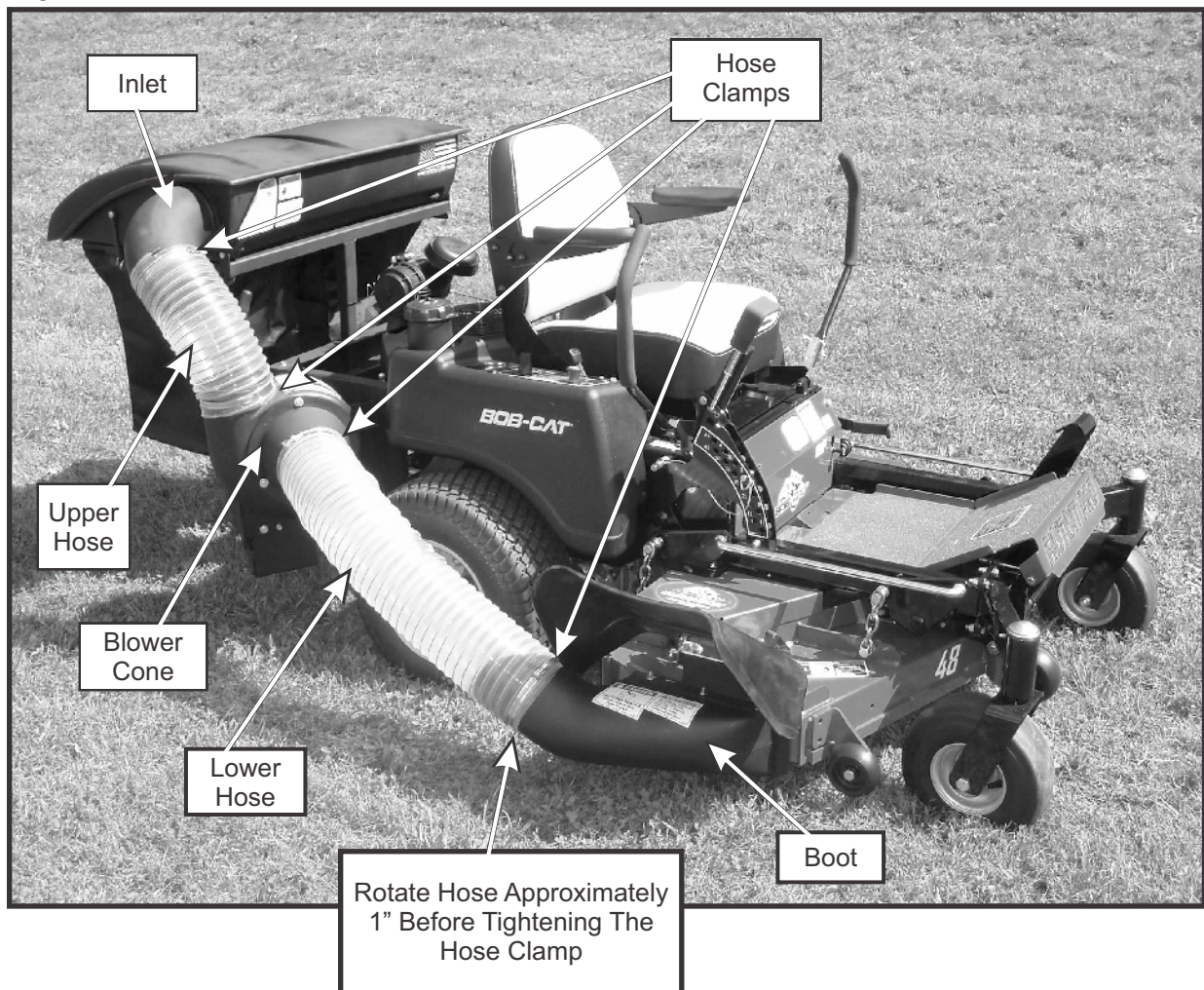
Slide a 5" - 6" upper hose clamp P#(J1000) over both ends of the 6" lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. See Figure 2-19 for details.

2-19 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 5" - 6" hose clamp P#(J1000) to secure the hose to the boot.

NOTE: Before tightening the hose clamp, rotate the lower hose counter clockwise (see Figure 2-19) approximately 1" and then tighten the clamp. This will hold the bottom edge of the boot tight to the mower deck.

Figure 2-19

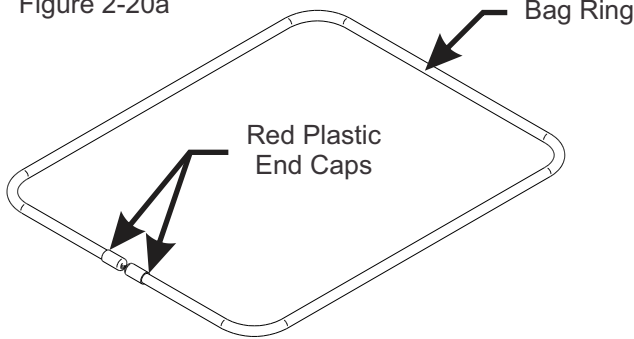


2-20 Installation/Removal Of Collection Bags

IMPORTANT!

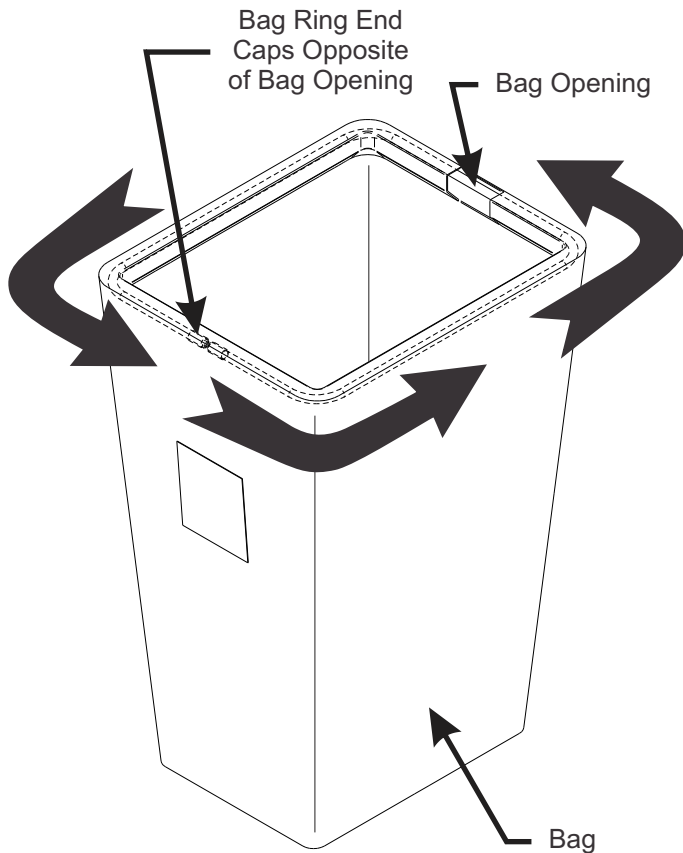
To prevent bag wear, install (2) red plastic end caps P#(J0274), as shown in Figure 2-20a, on each bag ring before installing bags.

Figure 2-20a



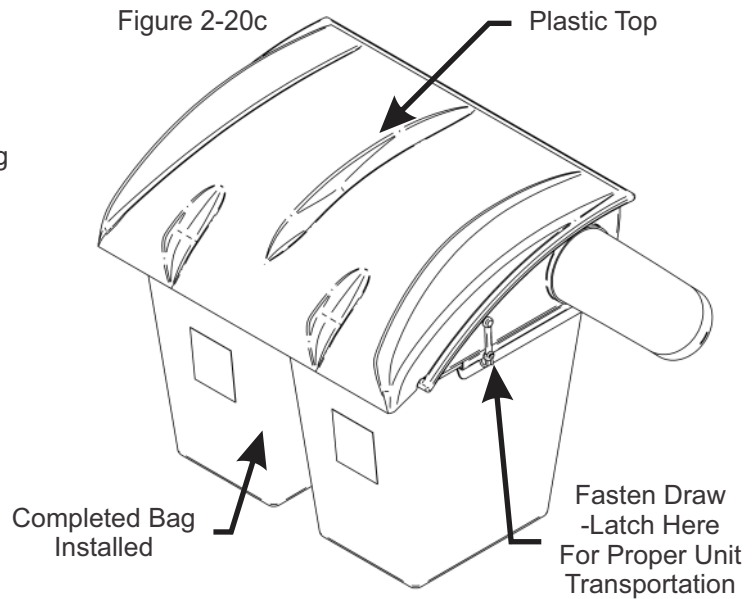
To install the bag onto the bag ring, place the seam openings of the bag onto the bag ring openings and turn the bag one full turn (360°) so the plastic end caps are located opposite to the opening in the bag (Figure 2-20b). Do this for each bag.

Figure 2-20b



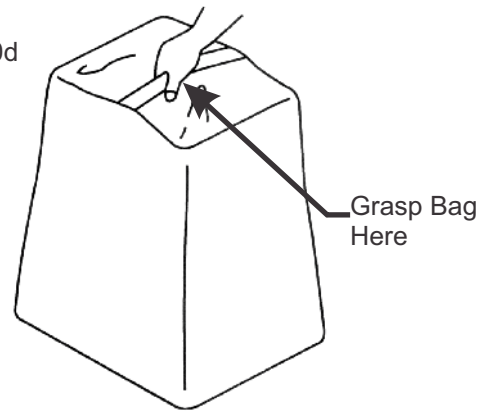
Install the completed assemblies onto the support frame and close the plastic top. Fasten the draw-latches to hold the plastic top closed (Figure 2-20c).

Figure 2-20c



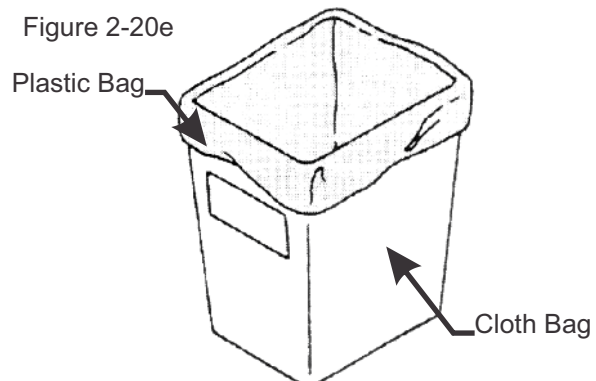
To empty the bag, first unlatch and lift top, next remove the bag and bag ring by sliding rearward, then grasp the loop on the bottom of the bag, and last turn it upside down to empty the collected debris (Figure 2-20d). Repeat for the other bag. Reinstall both bags, line with plastic bags if desired, close the plastic top and reattach the draw latches.

Figure 2-20d



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 2-20e).

Figure 2-20e



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 2-7 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 hood 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. Check belt for proper tension.

4-2 Lubrication

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

1. On initial use: Grease the fitting on the blower shaft.
2. Every 25 hours of use: Re-grease the grease fitting.
3. Every 200 hours of use: Check oil levels in gear box. Oil in gear box should cover the gears. If not, fill using an EP90 weight oil. 6oz. will fill the gear box from empty.

SECTION V PARTS AND 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 PECO Inc. and include the following information on the chart below.

THE SERIAL NUMBER PLATE
IS LOCATED ON THE TOP
ASSEMBLY

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: _____

PECO Inc.
100 Airport Road | Arden, NC | 28704
Phone: 1-800-438-5823
Fax: (828)684-0858
E-Mail: peco@lawnvac.com

MODEL#: 23020907

MOWER NAME: BOB-CAT

MOWER MODEL: FAST CAT F & G-SERIES

MOWER DECK SIZE: 48" AND 52" DECKS

VAC NAME: PRO 2 BAGGER

PTO DRIVEN

MANUAL #Q0387

A1090 UNIT ASSEMBLY



FOR YEAR: 2012 - 2008

REVISED: 5/29/2012

(1) A1028 TOP ASSEMBLY

(1) BLACK 6" x 30" UPPER HOSE

(1) BLACK 6" x 42" LOWER HOSE

M0241 A50K KEVLAR BELT

(1) HB0376 UNIT HARDWARE BAG

(1) V0019 INLET

(1) V0016 BLOWER CONE 6"

(1) B0744 LT. PTO MNT. PL.

(4) J1000 HOSE CLAMPS

(1) HB0379 ENGINE PULLEY HARDWARE BAG

(1) A0871 UPPER FRAME ASSEMBLY

(1) A1091 LOWER FRAME ASSEMBLY

(1) B0746 RT. FRAME BRKT.

(1) B0743 RT. PTO MNT. PL.

(1) B8138 LEFT FRAME BRACKET

(1) A1111 PTO ASSEMBLY

(2) G0004 2.9 CU. FT. COLLECTION BAGS

(2) B0227 BAG RING

A1093 BOOT KIT

(1) B0288 BOOT ROD

(1) V1162 BOOT

(1) B8143 BOOT PLATE

(1) HB0377 HARDWARE BAG

A1094 WEIGHT KIT

(1) HB0378 HARDWARE BAG

(2) B8146 WEIGHT

(1) B8144 WEIGHT BRACKET

(1) B8145 TOP WEIGHT BRACKET

MODEL#: 23020908

MOWER NAME: BOB-CAT

MOWER MODEL: FAST CAT G-SERIES

MOWER DECK SIZE: 42" AND 61" DECKS

VAC NAME: PRO 2 BAGGER

PTO DRIVEN

MANUAL #Q0387

A1090 UNIT ASSEMBLY



FOR YEAR: 2012 - 2008

REVISED: 4/30/2012

(1) A1028 TOP ASSEMBLY

(1) BLACK 6" x 30" UPPER HOSE

(1) BLACK 6" x 42" LOWER HOSE

M0241 A50K KEVLAR BELT

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(1) HB0379 ENGINE PULLEY HARDWARE BAG

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(1) B0746 RT. FRAME BRKT.

(1) B0743 RT. PTO MNT. PL.

(1) A1111 PTO ASSEMBLY

(2) G0004 2.9 CU. FT. COLLECTION BAGS

(2) B0227 BAG RING

(1) B8138 LEFT FRAME BRACKET

A1743 BOOT KIT

(1) B0288 BOOT ROD

(1) V1166 BOOT

(1) HB0377 HARDWARE BAG

(1) B8143 BOOT PLATE

A1094 WEIGHT KIT

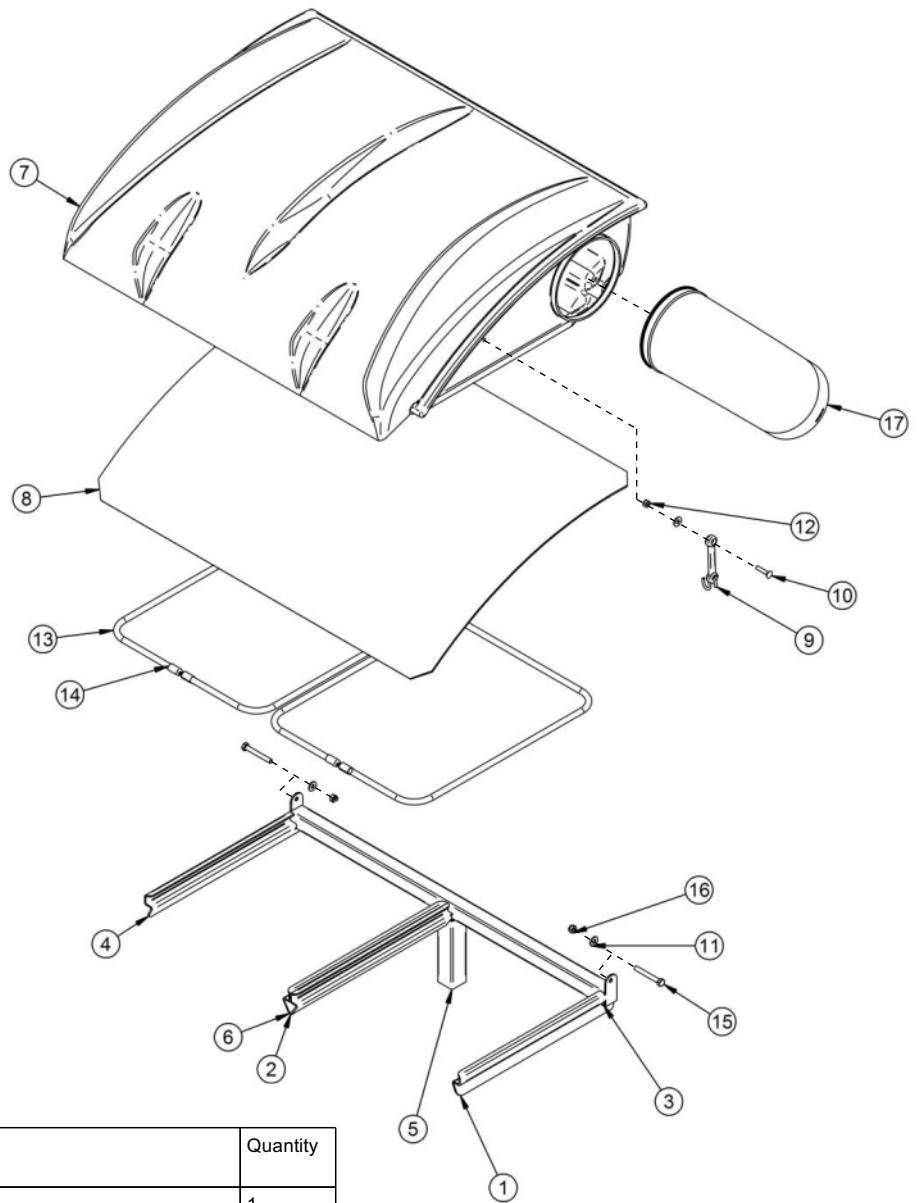
(1) HB0378 HARDWARE BAG

(2) B8146 WEIGHT

(1) B8144 WEIGHT BRACKET

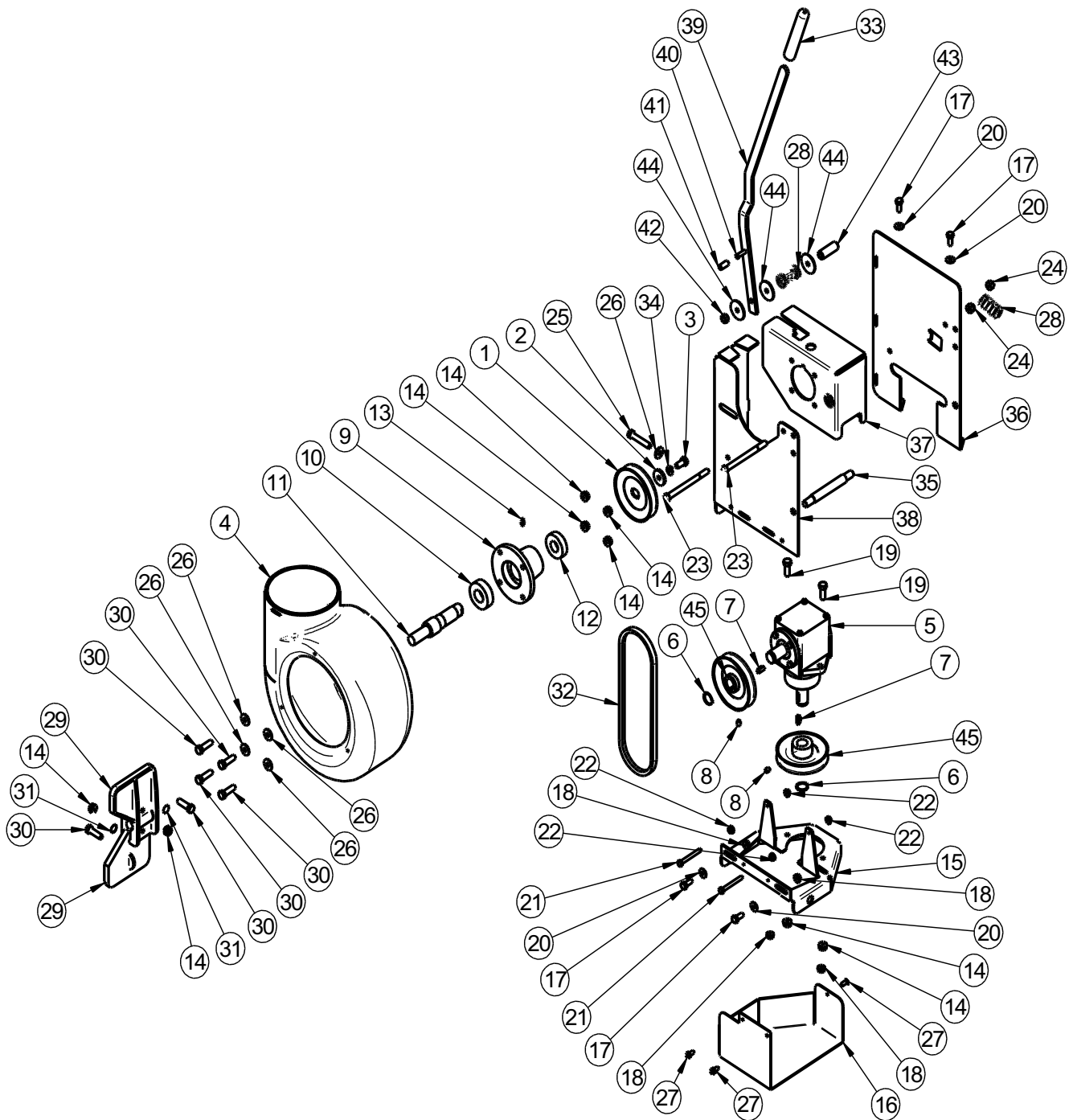
(1) B8145 TOP WEIGHT BRACKET

TOP/UPPER FRAME ASSEMBLY
EXPLODED VIEW
AND PARTS LIST



Item Number	Document Number	Title	Quantity
1	B0451	RT. PIVOT SIDE RAIL	1
2	B0448	RT. CENTER RAIL	1
3	B0459	RAIL MNT. TUBE	1
4	B0450	LT. PIVOT SIDE RAIL	1
5	B0449	VERT. MNT. TUBE	1
6	B0470	LT. CENTER RAIL	1
7	V0017	BAGGER TOP	1
8	V0018	SCREEN	1
9	J4009	SHORT RUBBER STRAP W/ S HOOK	1
10	K1030	1/4"-20 x 1-1/4" CARRIAGE BOLT	1
11	K0037	1/4" FLAT WASHER .75 OD x .314 ID x .060 T	3
12	K1128	1/4"-20 NYLOC NUT	1
13	B0227	BAG RING	2
14	J0274	BAG RING END CAP	4
15	K0125	5/16"-18 x 2-1/2" ALL THREAD HHCS	2
16	K1180	5/16"-18 NYLOC NUT	2
17	V0019	INLET	1

**A1111 PTO ASSEMBLY
EXPLODED PARTS VIEW**



**A1111 PTO ASSEMBLY
EXPLODED PARTS VIEW DESCRIPTION**

Item Number	Document Number	Title	Quantity
1	M0266	'A' PULLEY FOR DECK DRIVE PTO	1
2	K1446	1.187 OD x .380 ID x .187 WASHER	1
3	K1190	3/8"-16 x 3/4" HHCS	1
4	V0015	BLOWER HSG.	1
5	A0431	GEAR BOX	1
6	K0360	7/8" SNAP RING	2
7	J0272	#9 WOODRUFF KEY	2
8	K0035	5/16-18 SET SCREW	2
9	E0015	PTO SHAFT HOUSING	1
10	N0147	BEARING 2.0472 OD, 0.9843 ID, 0.5906 W (6205RS PEER)	1
11	B0460	PTO SHAFT	1
12	N0165	BEARING	1
13	J0801	1/4"-28 ZIRC FITTING	1
14	K1215	3/8"-16 FLANGE NUT	9
15	B0466	BASE PL.	1
16	B0478	GEAR BOX PULLEY GUARD	1
17	K1153	5/16"-18 x 3/4" HHCS	4
18	K1178	5/16"-18 FLANGE NUT	4
19	K1191	3/8"-16 x 1" HHCS	2
20	K0037	1/4" FLAT WASHER .75 OD x .314 ID x .060 T	4
21	K1150	1/4"-20 x 2-1/4" HHCS	2
22	K1126	1/4"-20 FLANGE NUT	4
23	K1202	3/8"-16 x 4-1/2" HHCS G5	2
24	K1216	3/8"-16 NYLOC NUT	2
25	K0348	3/8"-16 x 2" ALL THREAD HHCS	1
26	K0042	5/16" FLAT WASHER .875 OD x .380 ID x .075 T	5
27	K0353	1/4"-20 x 1/2" HHSTS	3
28	J0303	SPRING	2
29	E7003	IMPELLER BLADE	2
30	K1192	3/8"-16 x 1-1/4" HHCS	6
31	K0049	3/8" INTERNAL LOCK WASHER	2
32	M0267	A28K KEVLAR BELT	1
33	V1151	5/8" ID x 4-3/4" BLACK HANDLE GRIP	1
34	K0048	3/8" LOCK WASHER	1
35	B0505	PTO ARM MNT. ROD	1
36	B0506	LT. PTO ARM	1
37	B0642	BLWR. MNT. BRKT.	1
38	B0643	RT PTO ARM	1
39	B0509	PTO HANDLE	1
40	J0005	PTO HANDLE PIN	1
41	S0001	ROLLER BUSHING	1
42	B0510	SPACER BUSHING	1
43	B0511	SPACER BUSHING	1
44	K0403	WASHER 1-1/2" OD x 3/8" ID	3
45	A0498	PULLEY ASSY. FOR GEAR BOX	2

SAFETY DECALS

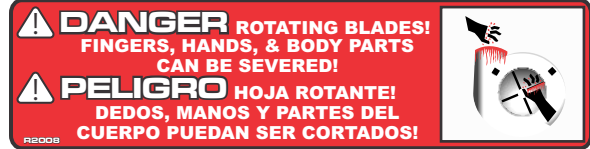
To promote safe operation, PECO Inc. supplies safety decals on all products manufactured. Damage can occur to safety decals either through shipment, use or reconditioning. Contact your local Service Center for replacement decals.



Part #: R1070
PECO Label



Part #: R2007
Never Use Hands Label



Part #: R2008
Rotating Blades Label



Part #: R1100
Engage-Disengage Label



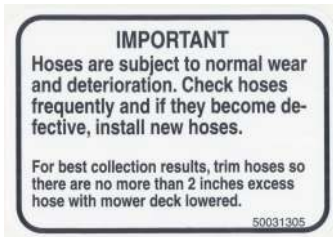
Part #: R4037
Warning: Hot Surface Label



Part #: R1052
Small Warning: Turn Off Blower Label



Part #: R1065
Made In America Label



Part #: R1054
Important Label



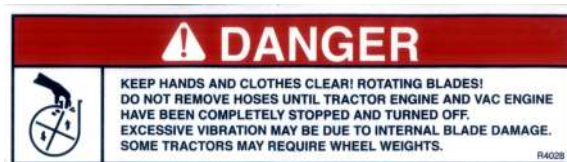
Part #: R1069
Warning: Turn Off Blower Label



Part #: R4015
Danger: Rotating Blades Label



Part #: R1051
Warning: Hearing Protection Label



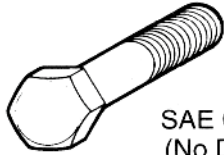
Part #: R4028
Danger Keep Hands & Clothes Clear Label



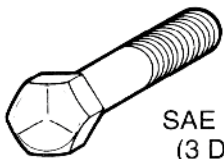
Part #: R4008
Caution: Rotating Blades Label

TORQUE SPECIFICATIONS

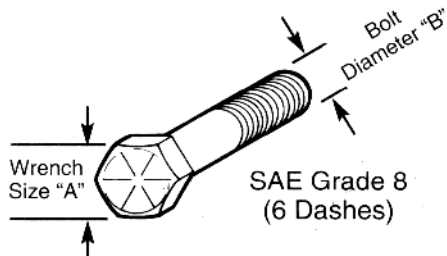
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



SAE Grade 5
(3 Dashes)

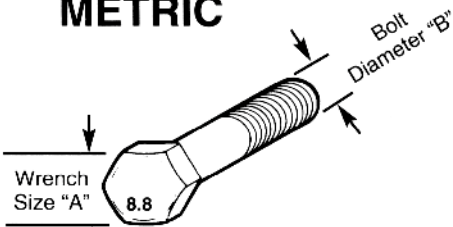


SAE Grade 8
(6 Dashes)

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



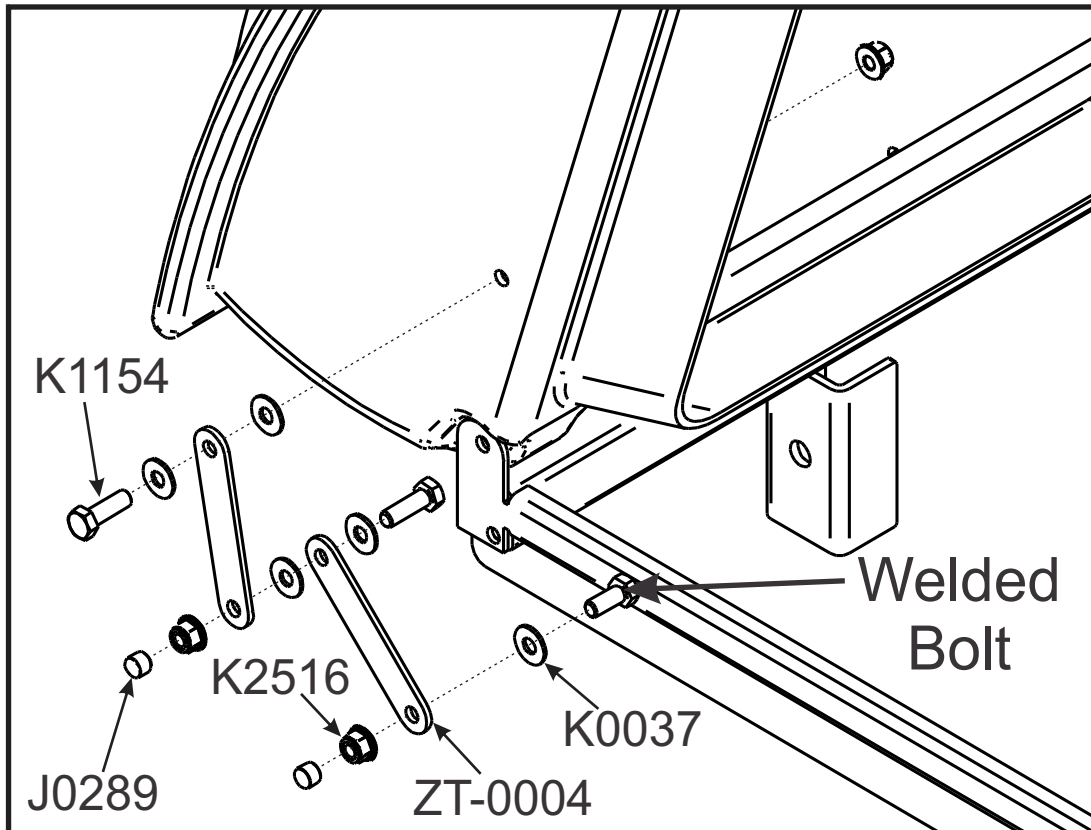
Numbers appearing on bolt heads indicate ASTM class.

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.

HINGE KIT ASSEMBLY INSTALLATION



Assemble the hinge kit as shown in the Figure, 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 2-11. 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.



**100 AIRPORT ROAD
ARDEN, NORTH CAROLINA 28704
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EMAIL: peco@lawnvac.com
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