



# GRASS COLLECTION SYSTEM

DESIGNED TO FIT:

**SCAG**

Model Years: 2010-Newer

**FREEDOM Z**  
Made in the USA by **SCAG**

61" Commercial  
Deck



MODEL #: 37131507  
PTO-C DRIVE

MODEL #: 37131508  
900 SERIES BRIGGS & STRATTON

MODEL #: 37131509  
6.5HP BRIGGS & STRATTON  
VANGUARD

## OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

# PECO GRASS COLLECTION 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 them quickly. **READ THE OPERATOR'S MANUAL!**
3. Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
4. Be especially watchful of children and pets entering into the area while operating.
5. Keep your eyes and mind on your machine while mowing or operating your attachment. Don't let others distract you.
6. Do not attempt to operate your machine when not in the driver's seat.
7. Always shut off blades and engine when emptying the container.
8. Stop machine, shut off deck attachment, set parking brake, shut off engine and remove ignition key before removing clogs, removing or replacing hose, boot, blower cone, or performing any maintenance.
9. Mow across the face of slopes (not more than 10 degrees); never up and down the face.
10. It is recommended that the container be emptied when half full while operating on 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 hearing protection.
13. Wear eye protection to prevent debris from getting into 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 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

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## 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, before the expiration of the original warranty period, whichever is later.
- 3. COMMERCIAL USE:** Products put to personal use around a single household or residence is considered 'Residential'; Products put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered 'Commercial.' Products designated as 'Commercial' are warrantied for 12 months from the date of delivery of the product to the original purchaser when used for in commercial applications. Products designated as 'Residential' are warrantied for 90 days from the date of delivery of the product to the original purchaser when in commercial applications.

## 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. at 10 Walden Drive, 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. PRODUCTS USED FOR RENTAL OR LEASE PURPOSES ARE WARRANTIED 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 warrantied 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 AND DESCRIPTION

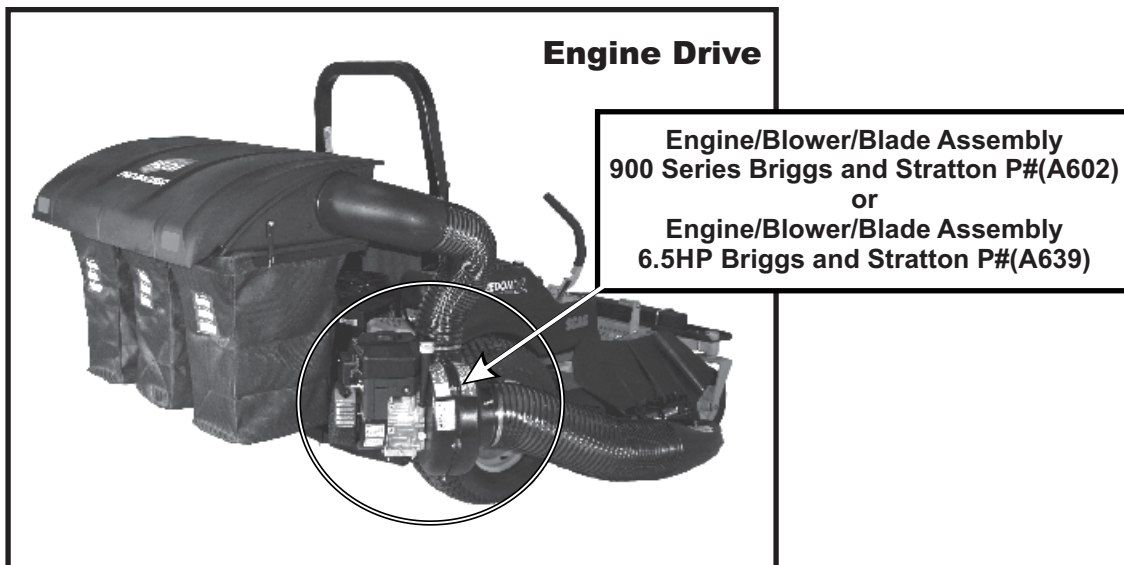
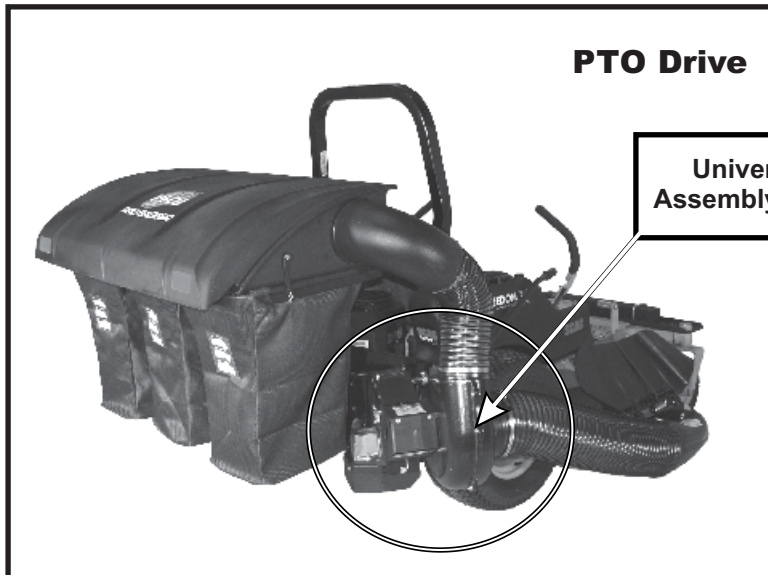
## 1-1 Introduction

We are pleased to have you as a PECO customer. Your 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 and 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 is also available with an external engine option of Briggs & Stratton 900 Series or 6.5HP Vanguard. The blower draws grass clippings from the discharge area of the cutter deck back to the (3) - 3.3 cubic foot collection bags P#(G0002) at the rear portion of the mower frame. The operator can engage the blower with a push of the over-center linkage on the right side of the unit. Once the bags are full with clippings, they can be released to make for easy dumping.

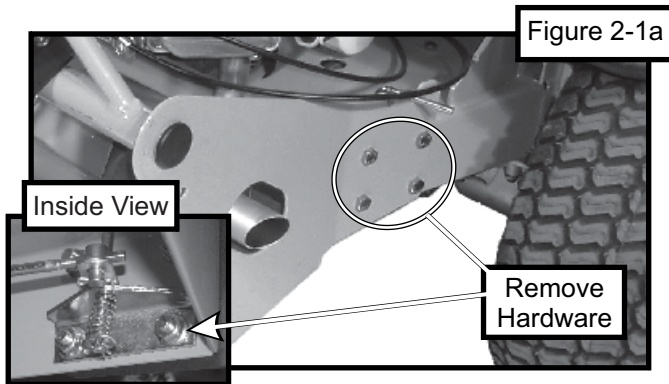




## Section II INSTALLATION FOR USE

### 2-1 Preparation Of Mower

Remove the rear bumper from the mower frame. There are (8) 3/8" hex bolts that secure the rear bumper to the mower frame. Save this hardware for use later in the installation. See Figure 2-1a.

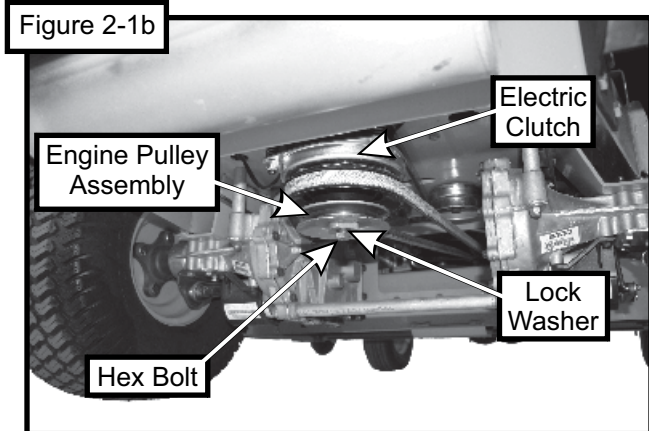


Next, check the exhaust direction, as if sitting in the Operator's Seat. If the exhaust is blowing to the Right-Hand Side, disassemble and reassemble the Diverter to point to the Left-Hand Side before continuing.

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.

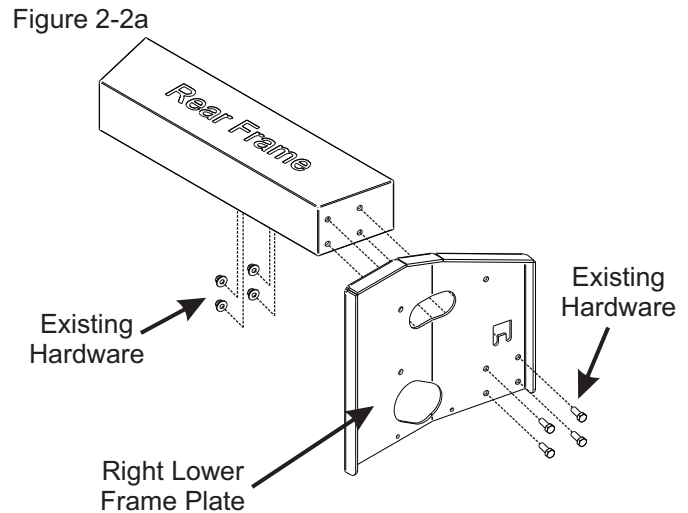
Replace the hardware removed with the engine pulley assembly number 13 P#(A0732). Fasten the engine pulley to the electric clutch assembly using (1) 7/16" hi-collar helical spring lock washer P#(K0140) and (1) 7/16"-20 x 3-3/4" HHCS P#(K0350). See Figure 2-1b for details.

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

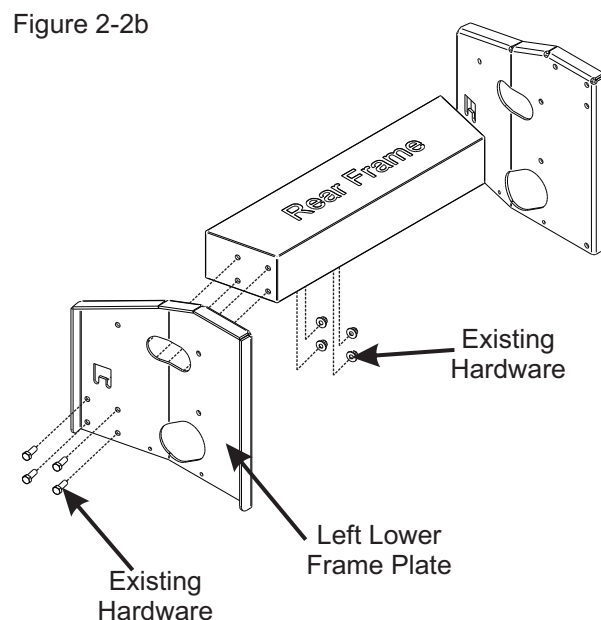


### 2-2 Right and Left Lower Frame Plate Installation

Fasten the right lower frame plate P#(B0730) to the rear frame of the mower using the (4) existing 3/8"-16 hex bolts and (4) 3/8"-16 nuts from the right rear bumper. Leave the hardware slightly loose until the heat guard from section 2-4 has been installed. Refer to Figure 2-2a.



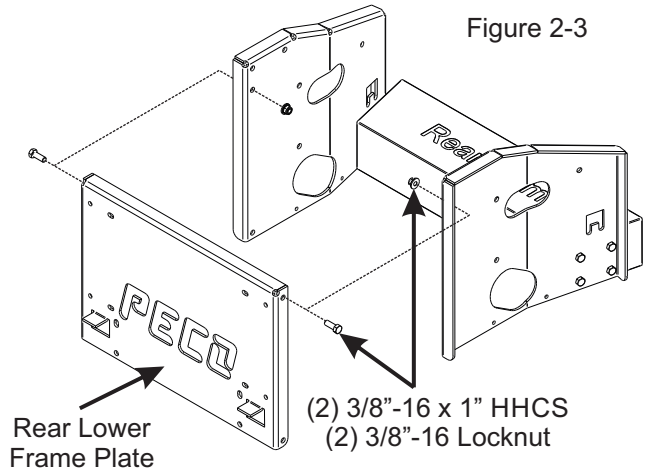
Fasten the left lower frame plate P#(B0729) to the rear frame of the mower using the (4) existing 3/8"-16 hex bolts and (4) 3/8"-16 nuts from the right rear bumper. Leave the hardware slightly loose until the heat guard from section 2-4 has been installed. Refer to Figure 2-2b.



## 2-3 Rear Lower Frame Plate

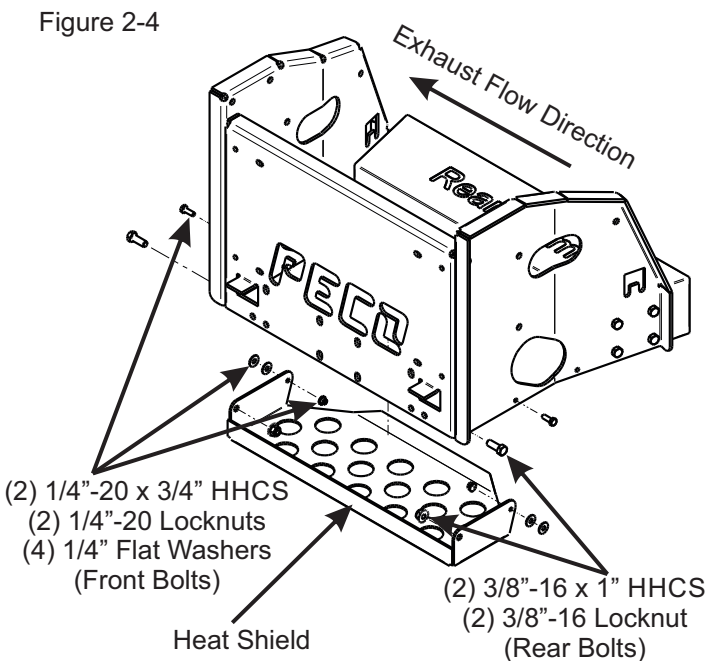
### Installation

Fasten the rear lower frame plate P#(B0728) to the left and right lower frame plate using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Leave hardware slightly loose until the heat guard from section 2-4 has been installed. Refer to Figure 2-3.



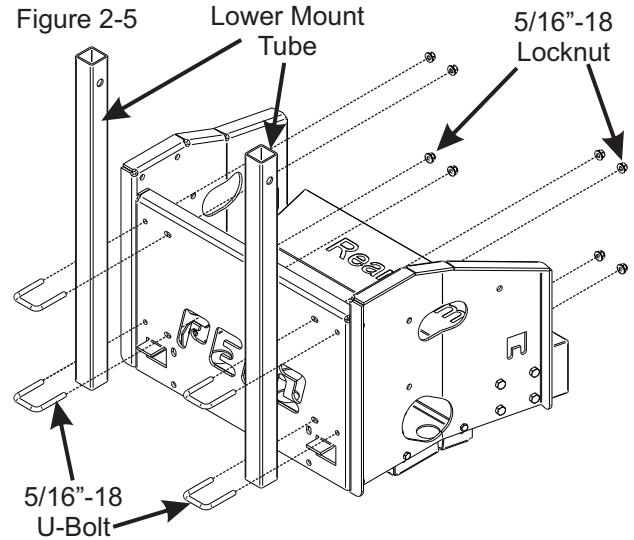
## 2-4 Heat Guard Installation

Secure front holes of heat shield P#(B0890) to left lower frame plate and right lower frame plate, using (2) 1/4"-20 x 3/4" HHCS P#(K1222), (2) 1/4"-20 nylon flange locknuts P#(K2014) and (4) 1/4" Flat Washers P#(K0037). Secure rear holes using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Once the heat shield has been installed, tighten all frame plate hardware. Refer to Figure 2-4.



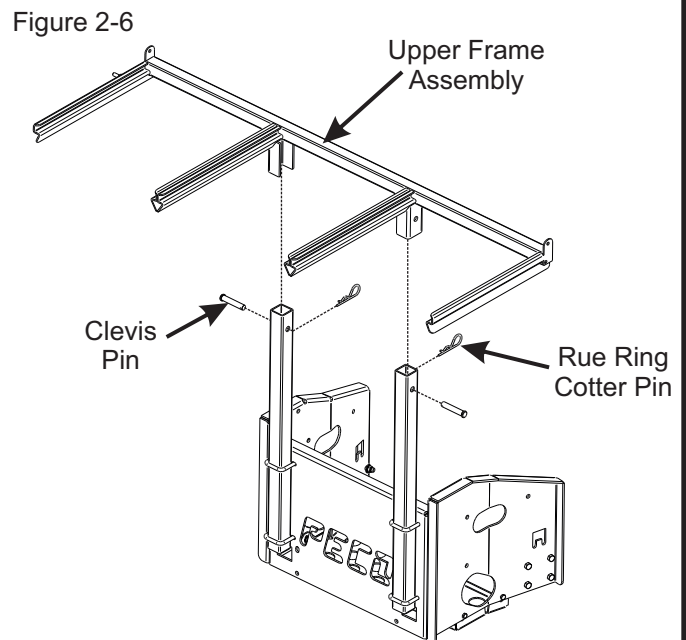
## 2-5 Lower Mount Tube Installation

Secure the (2) lower mount tubes P#(B0752) to the rear lower frame plate using (2) 5/16"-18 u-bolts P#(K1098) and (4) 5/16"-18 nylon flange locknuts P#(K2516) PER TUBE. Refer to Figure 2-5.



## 2-6 Upper Frame Assembly Installation

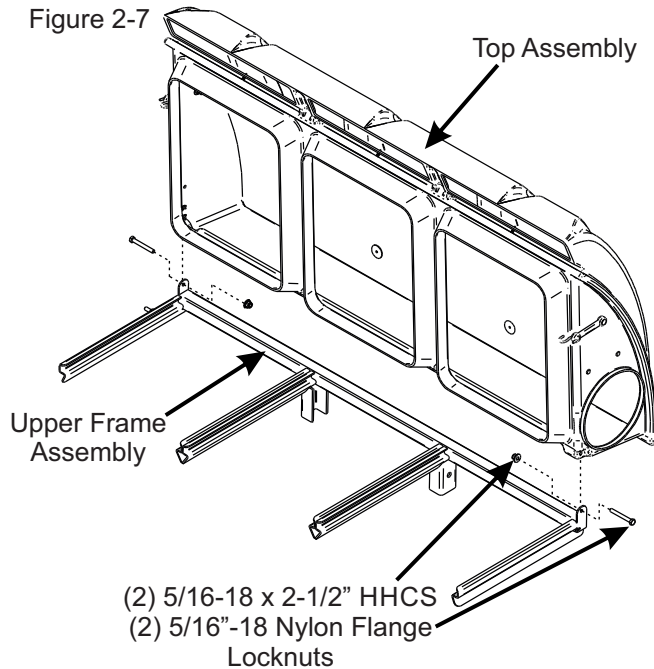
Position the upper frame assembly P#(A2068) above the lower mount tubes as shown in Figure 2-6. Slide the upper frame assembly down onto the lower frame tubes and secure using (2) clevis pins P#(K0133) and (2) Rue Ring Cotter Pin P#(K1437).



## 2-7 Top Assembly To Upper Frame

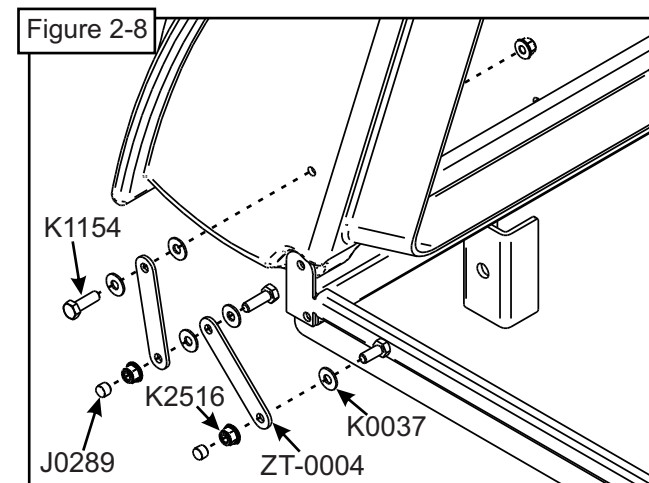
### Assembly Installation

Position the top assembly P#(A1157) above the upper frame assembly as shown in Figure 2-7. Fasten the top assembly to the upper frame assembly using (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Leave the locknuts slightly loose, to allow the top assembly to open and close easily. Refer to Figure 2-7 for hardware location.



## 2-8 Hinge Kit Assembly Installation

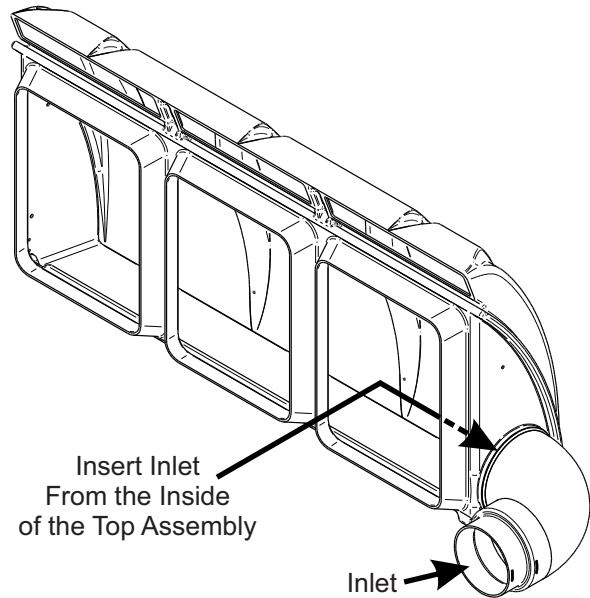
Assemble the hinge kit as shown in Figure 2-8, using (2) 5/16"-18 x 1" HHCS P#(K1154), (3) 5/16"-18 nylon flange locknuts P#(K2516), (5) 1/4" flat washers P#(K0037) and (2) swing arm brackets P#(ZT-0004). Place (1) vinyl cap P#(J0289) on the end of the hex bolts as shown in Figure 2-8. Leave the nuts 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.



## 2-9 Inlet Installation

Slide the inlet P#(V0025) into the hole on the bagger top until the inlet locks into place. The inlet should pivot 360 degrees about the hole in the bagger top. Refer to Figure 2-9.

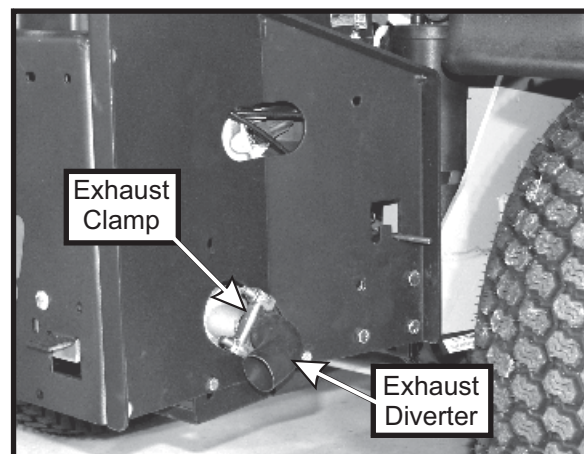
Figure 2-9



## 2-10 Exhaust Diverter Installation

Insert the exhaust deflector P#(J0251) onto the end of the muffler. Orientate the exhaust diverter to exhaust towards the rear of the mower, slightly downward to avoid burning the cloth bags or the grass. Secure the exhaust diverter with (1) exhaust clamp kit P#(X1046). Refer to Figure 2-10.

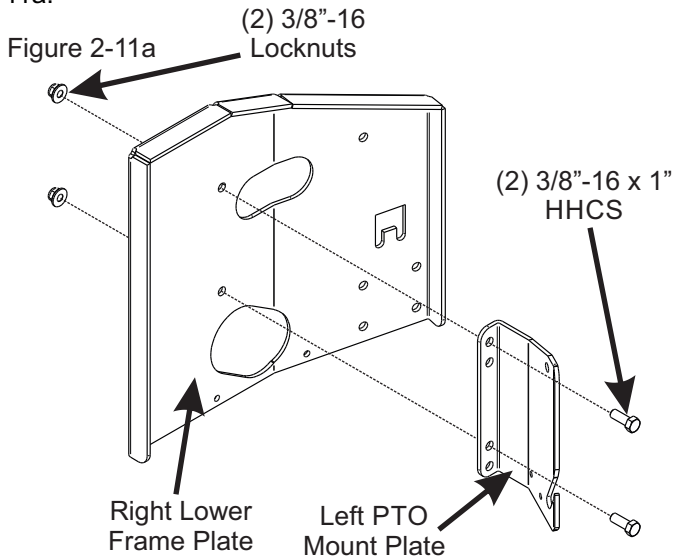
Figure 2-10



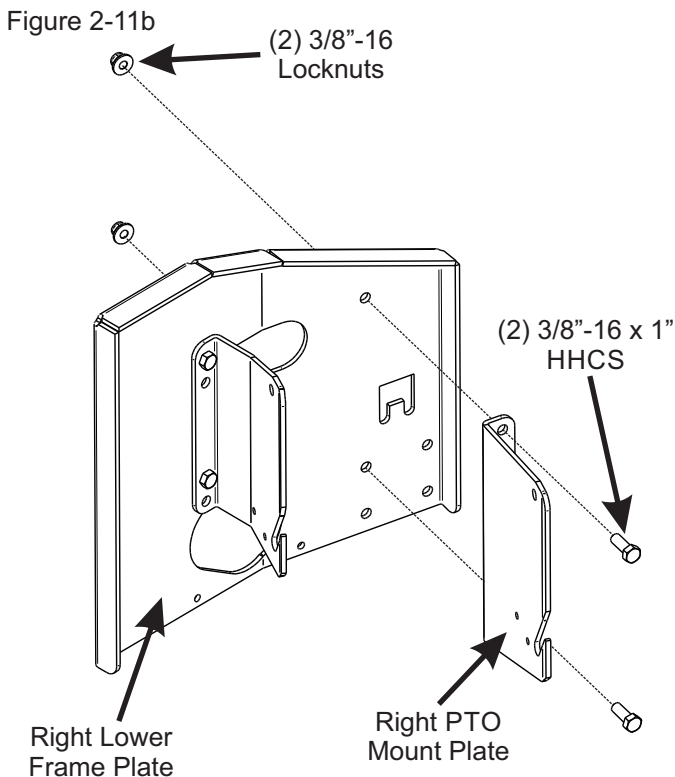


## 2-11 PTO Mount Plate Component Installation (PTO MODELS ONLY)

Secure the left PTO mount plate P#(B0734) to the right lower frame plate using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Leave the hardware slightly loose until the PTO stop plate has been installed. Refer to Figure 2-11a.



Secure the right PTO mount plate P#(B0735) to the right lower frame plate using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Leave the hardware slightly loose until the PTO stop plate has been installed. Refer to Figure 2-11b.



Secure the PTO stop plate P#(B0736) 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). With the stop plate secured, tighten all PTO mount plate component hardware at this time. Refer to Figure 2-11c.

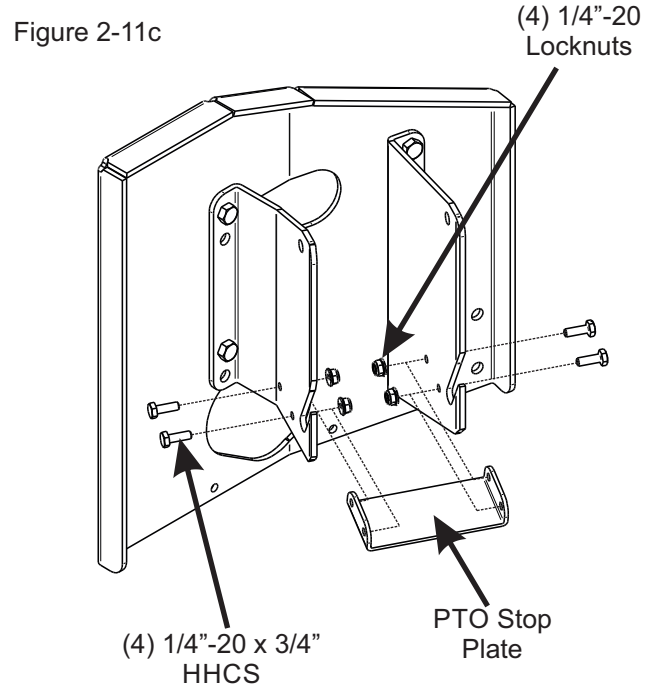
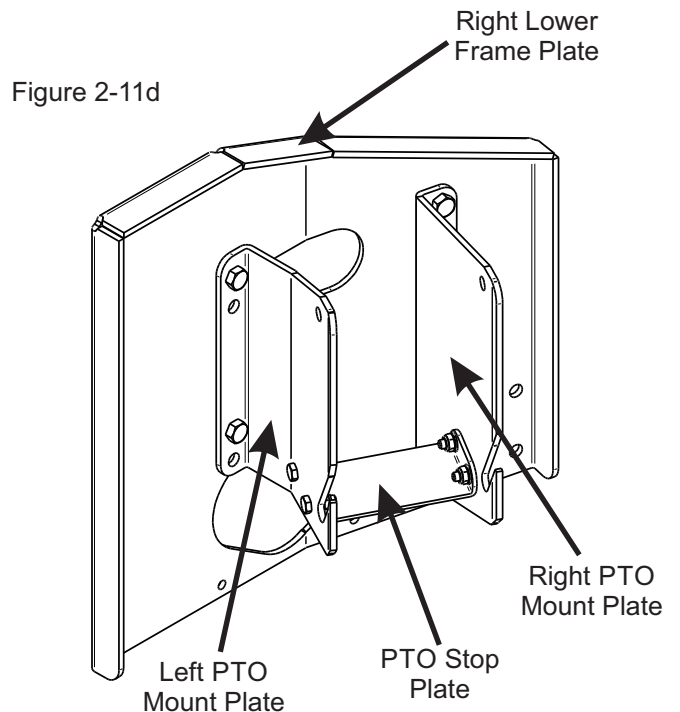


Figure 2-11d shows the complete PTO mount plate assembly as it should be assembled on your mower.



## 2-12 PTO Assembly Installation

### PTO MODELS ONLY

Insert the PTO assembly P#(A0623) into the PTO mount plate assembly as shown in Figure 2-12a. The mount rod on the PTO assembly slides into the mounting slots on the PTO mount plate assembly. Secure the PTO assembly with (1) mount pin P#(B0274) and (1) hair pin clip P#(K0086) shown in Figure 2-12b. Remove the pulley guard in preparation for the belt installation.

Figure 2-12a

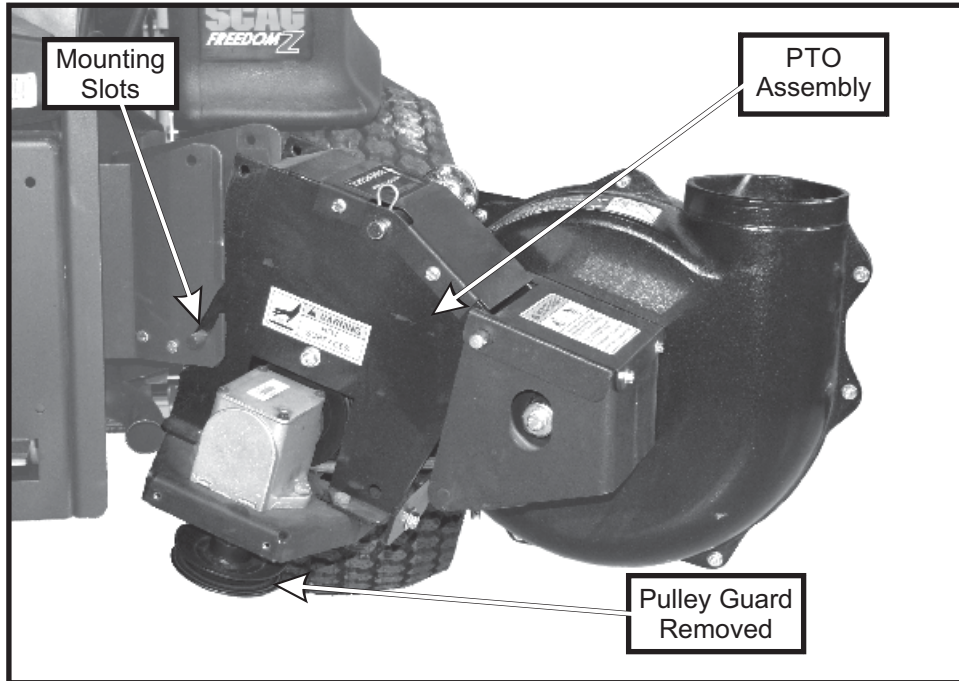
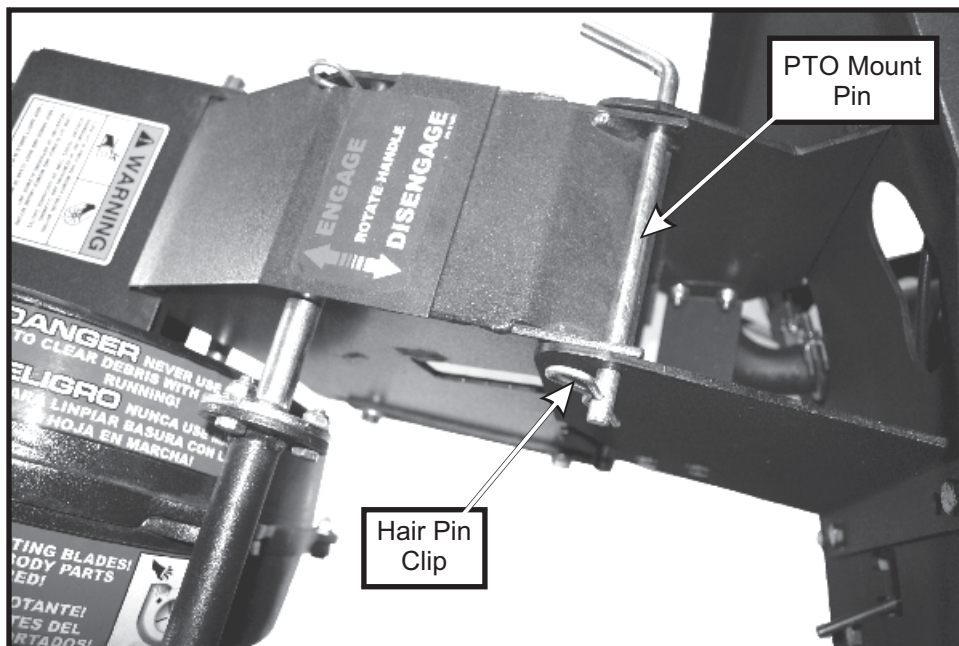


Figure 2-12b



## 2-13 Belt Installation and Adjustment PTO MODELS ONLY

Loosen the (4) bolts P#(K1191), (2) on each side, that secure the gear box assembly to the PTO assembly P#(A0623) (Figure 2-13a and 2-13b).

Figure 2-13a

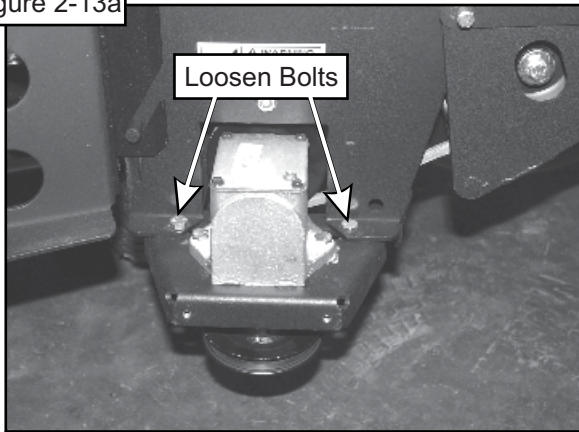
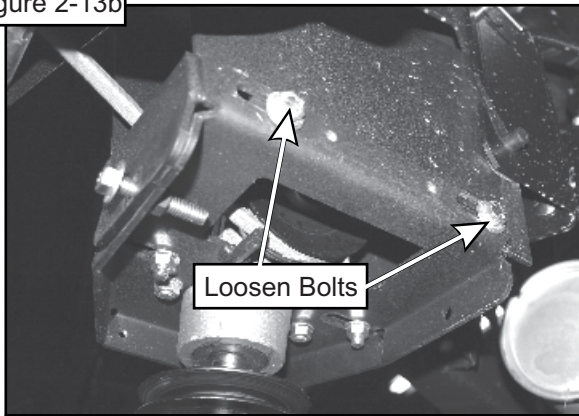
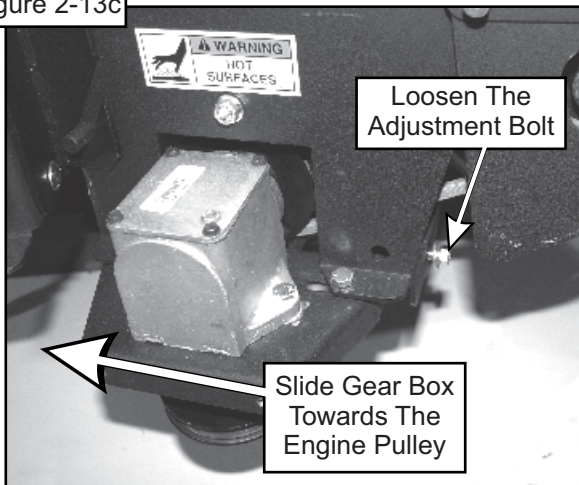


Figure 2-13b



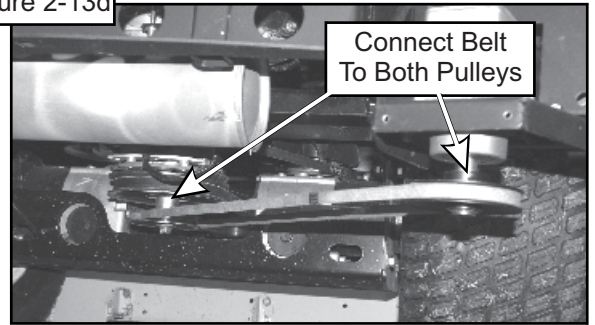
Loosen the adjustment bolt P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved toward the mower's engine pulley). Refer to Figure 2-13c.

Figure 2-13c



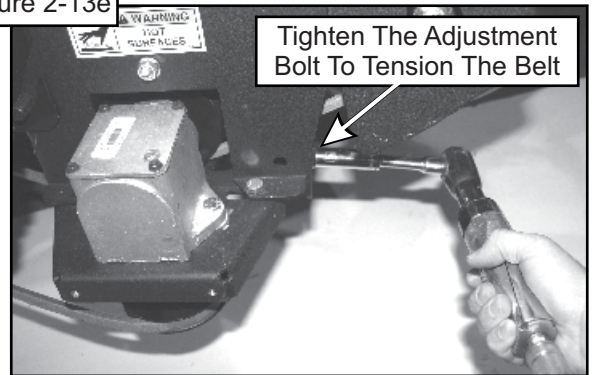
Connect the belt A55K P#(M0248) from the engine pulley to the lower gear box pulley (Figure 2-13d).

Figure 2-13d



To tension the drive belt, turn the adjustment bolt clockwise (Figure 2-13e) 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.

Figure 2-13e



Once the correct tension of the belt is achieved, tighten the (4) bolts that secure the gear box assembly. Refer to Figures 2-13f and 2-13g. Replace the belt guard and hardware that was removed in Section 2-12.

Figure 2-13f

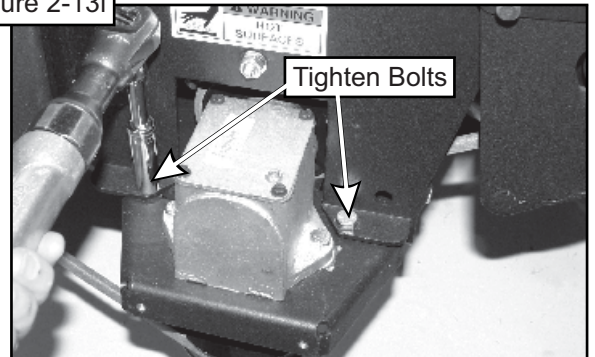
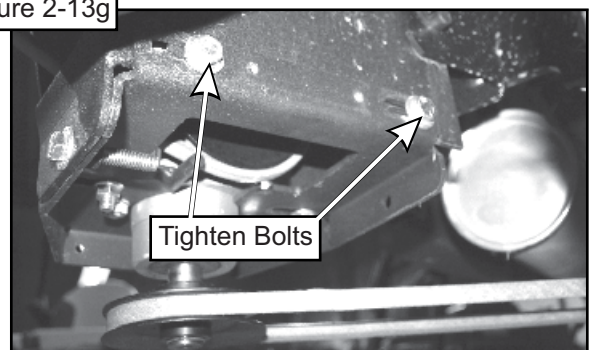


Figure 2-13g



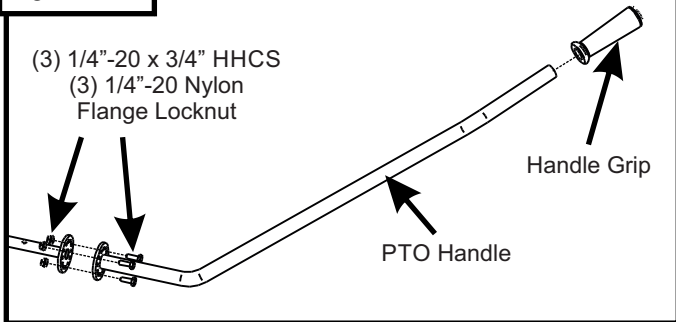


## 2-14 PTO Handle Assembly Installation

### PTO MODELS ONLY

Attach the PTO handle P#(A1142) to the PTO assembly using (3) 1/4"-20 x 3/4" HHCS P#(K1222) and (3) 1/4"-20 nylon flange locknuts P#(K2014). Attach the handle grip P#(J0522) to the PTO handle. Refer to Figure 2-14.

Figure 2-14

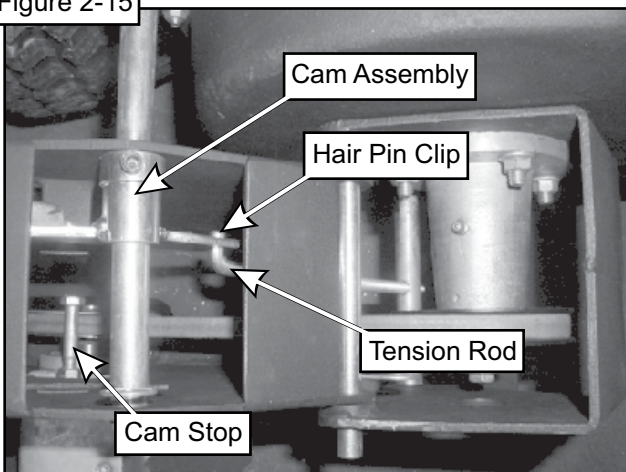


## 2-15 Cam Assembly Adjustment

### PTO MODELS ONLY

The cam assembly P#(A0422), which controls the blower belt tension, comes from the factory pre-adjusted. If the belt is too tight or becomes too loose, remove the hair pin clip P#(K0099) from the belt tension rod P#(K0326) and pull the "L" end of the rod out of its hole in the cam assembly. The tension rod may then be screwed out to tighten the belt or screwed in to loosen the belt. Replace the "L" end into the top hole in the cam and replace the hair pin clip. Adjust the cam stop bolt P#(K1159) to allow the cam to rotate slightly over center when the blower is disengaged (Figure 2-15).

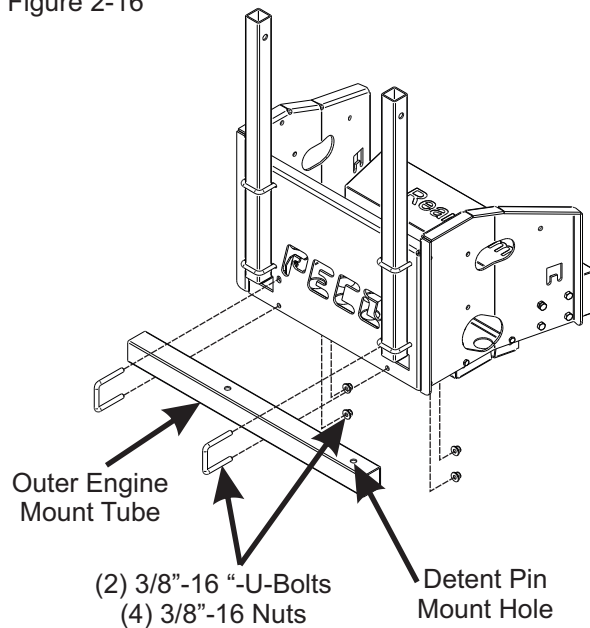
Figure 2-15



## 2-16 Outer Engine Mount Tube Installation

Position the outer engine mount tube P#(B1117) as shown in Figure 2-16. Secure the outer engine mount tube to the lower mount plate using (2) 3/8"-16 x 2-18" u-bolt P#(K1119) and (4) 3/8"-16 nylon flange lock nuts P#(K2038). Orient the tube so that the detent pin mount hole is to the outside. Leave hardware finger tight until the engine/blower/blade assembly has been installed.

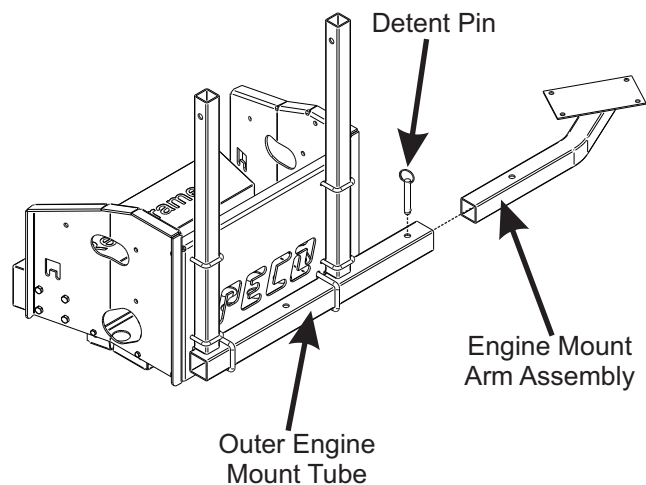
Figure 2-16



## 2-17 Engine Mount Arm Assembly Installation

Insert the engine mount arm assembly P#(A1824) into the outer engine mount tube and secure using (1) detent pin P#(J0248). Refer to Figure 2-17.

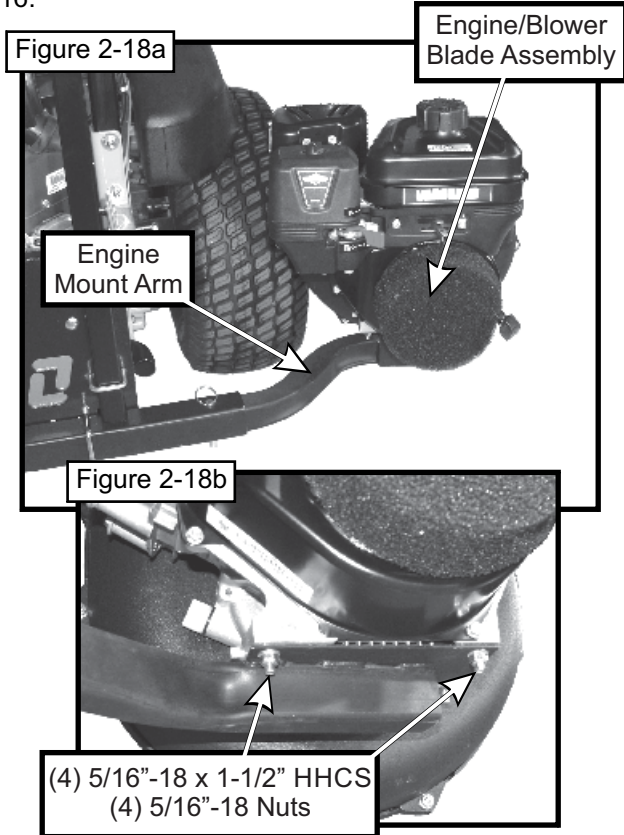
Figure 2-17





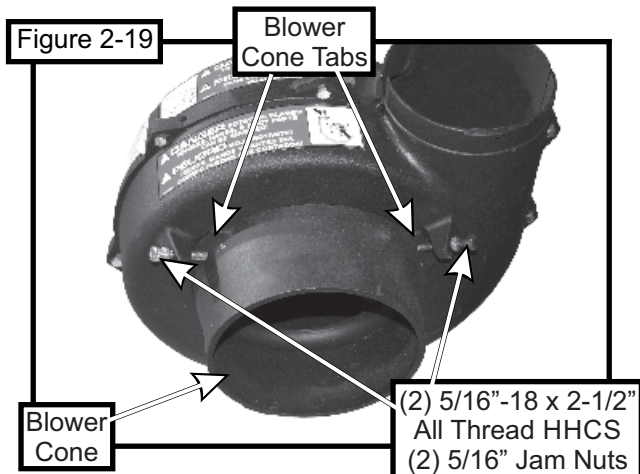
## 2-18 Engine/Blower/Blade Assembly Installation

Place the engine blower blade assembly on top of the engine mount arm as shown in Figure 2-18A. Secure the assembly using (4) 5/16"-18 x 1-1/2" HHCS P#(K1157) and (4) 5/16"-18 nylon flange lock nuts P#(K2516) as shown in Figure 2-18b. Tighten all hardware in Section 2-16.



## 2-19 Blower Cone Installation

Thread (1) 5/16"-18 jam nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125). Now partially thread the bolts into each of the two tabs located on the blower housing. Place blower cone so the two tabs line up with the bolts then tighten completely (Figure 2-19).



## 2-20 Boot To Mower Deck Installation

Position the boot plate P#(B0751) on top of the aluminum boot P#(E1047) as shown in Figure 2-20a. Secure the boot plate to the boot using (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 nylon flange lock nuts P#(K2038). Insert the bolts from the inside of the boot so that the threads are on the outside of the boot. This will prevent any grass clippings from collecting on the threads. To attach the boot to the mower deck, lift the grass deflector and hook the tabs on the boot plate under the deflector hardware as shown in Figure 2-20b.

Figure 2-20a

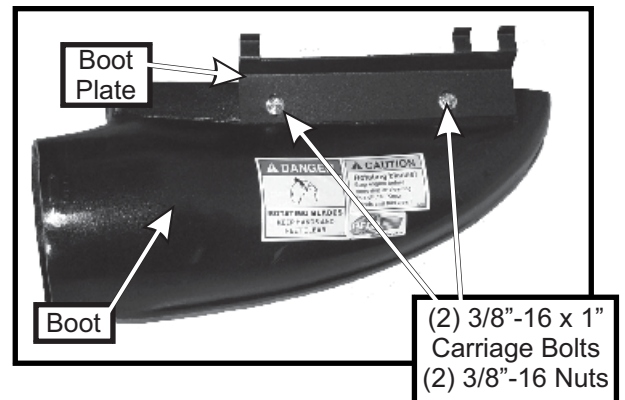
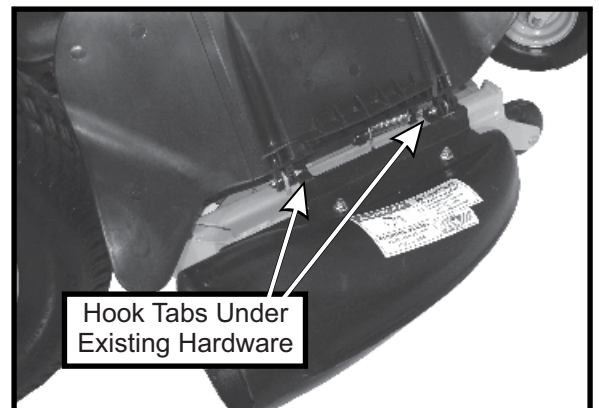


Figure 2-20b



## 2-21 Length Of Hose Adjustment

The hoses in steps 2-22 and 2-23 must be cut to fit your machine. Follow steps 2-22 and 2-23. 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.

## 2-22 Upper Hose Installation

Slide a 6" hose clamp P#(J0060) onto both ends of the 6" upper hose (Figure 2-24). 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 2-24) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

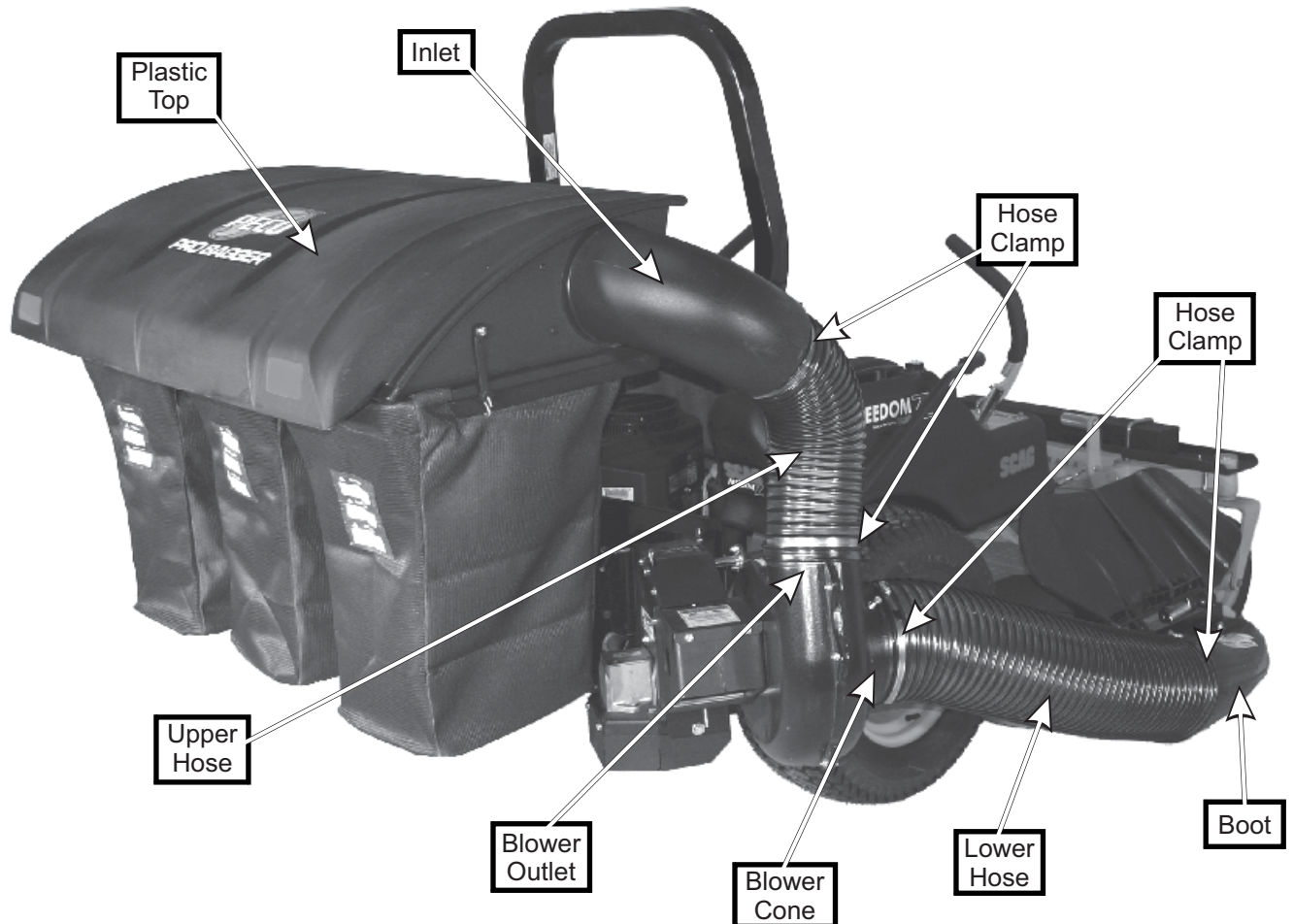
## 2-23 Lower Hose To Blower Cone Installation

Slide a 8" hose clamp P#(J0080) 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 2-24.

## 2-24 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 2-24). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.

Figure 2-24



## 2-25 Impeller Blade Removal/Replacement

To gain impeller blade (#1) access, first remove the blower cone (#2) from the blower housing, located on the PTO assembly P#(A1821), by removing two blower cone bolts and nuts (#3). Next, remove the blower housing front (#4) by removing seven bolts and nuts (#5) around the outer housing edge. Refer to Figure 2-25.

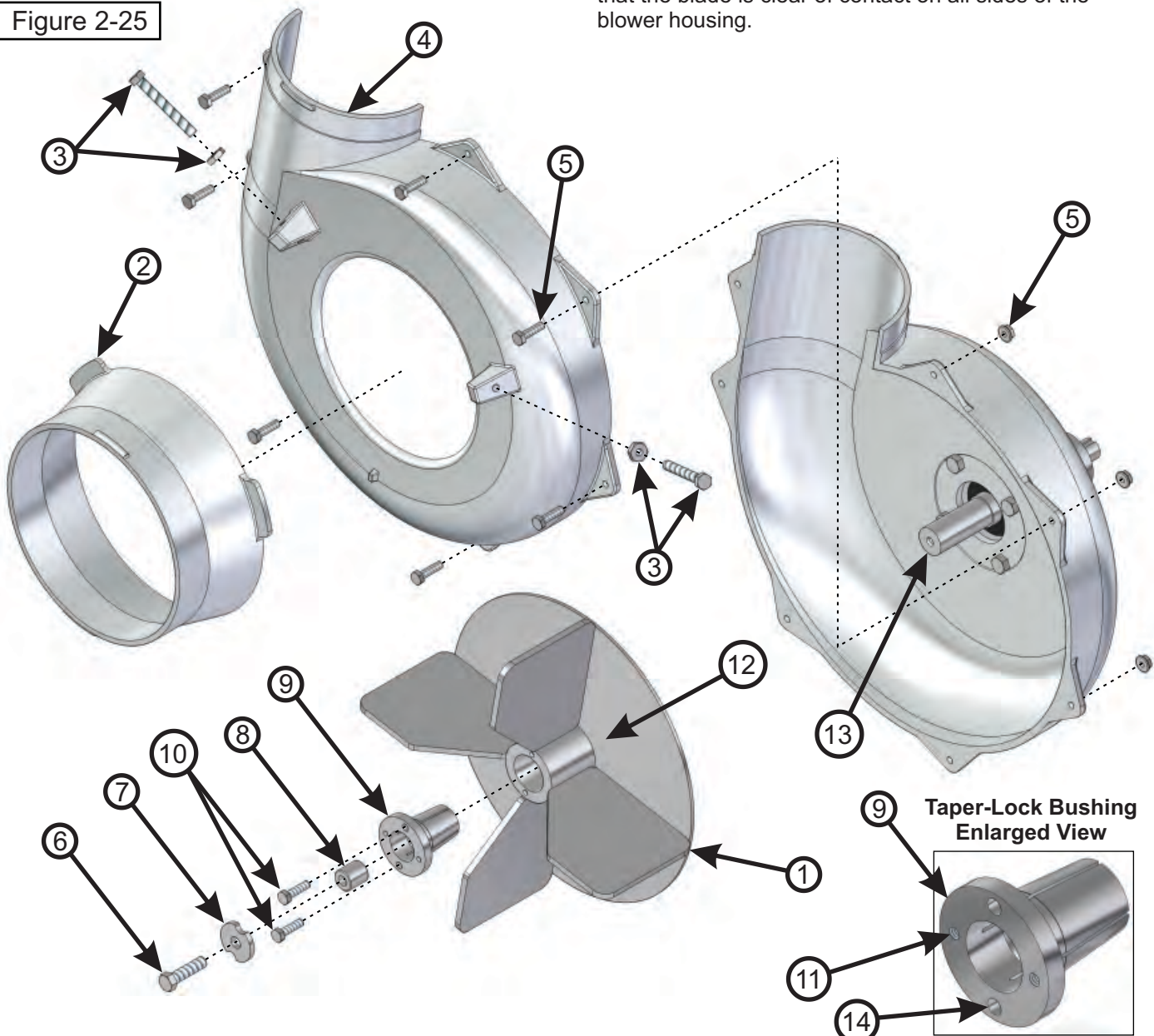
**To Remove:** First, remove one 3/8"-16 x 1-1/2" HHCS P#(K1211) (#6), one taper-lock bushing washer P#(K0278) (#7) and one spacer bushing P#(S3242) (#8) from the taper-lock bushing (#9). See Figure 2-25. Next, remove two 1/4"-20 x 1" HHCS (#10) and place them into the threaded holes (#11) of the taper-lock bushing P#(S4302). Last, gradually thread each bolt evenly into the taper-lock bushing, forcing the blade to break-away from the taper-lock bushing.

### Tips on removing impeller blade;

- 1 - Try carefully hitting the base of the impeller blade (#1), between each vein (#12), with a rubber mallet to loosen the taper-lock bushing hold.
- 2 - Spray break-free lubricant into the surrounding areas of the taper-lock bushing (#9) and repeat Tip 1.

**To Replace:** First, place the impeller blade (#1) over the drive shaft (#13). Next, slide the taper-lock bushing (#9) on to the drive shaft and into the impeller blade, aligning the **non-threaded** holes (#14) of the taper-lock bushing to the threaded holes of the impeller blade. Then, fasten by using two 1/4"-20 x 1" HHCS (#10), one spacer bushing (#8) one taper lock bushing washer (#7), and one 3/8"-16 x 1-1/2" HHCS (#6). Torque all bolts to the specifications located in the chart towards the back of this manual. Last, rotate the impeller blade to ensure that the blade is clear of contact on all sides of the blower housing.

Figure 2-25





## 2-26 Weight Kit Installation

Position the Dual Weight Bracket Base (Item#1) under the caster tubing w/ opening towards caster fork. Next, position the Weight Bracket Clamp (Item#2) on top of caster tubing w/ opening towards caster fork.

Align the (4) holes of the Weight Bracket Clamp (Item#2) to the holes in the Dual Weight Bracket Base (Item#1). Loosely fasten the Weight Bracket Clamp (Item#2) to the Weight Bracket Base (Item#1) using (4) 5/16"-18 x 3" Bolts (Item#4) & (4) 5/16"-18 Ny-Flange Lock Nuts (Item#5).

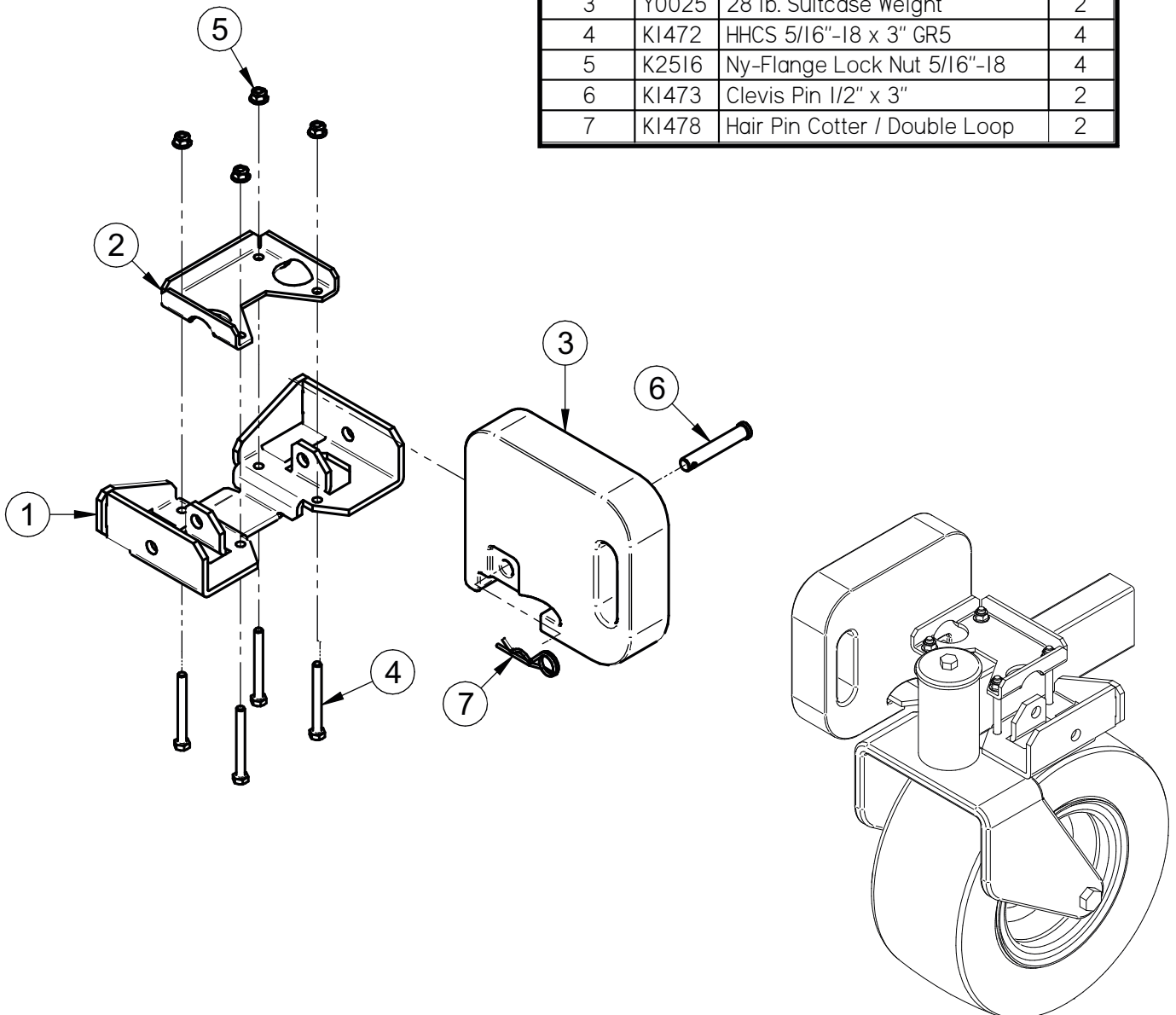
Position the Weight Bracket Base and the Weight Bracket Clamp assembly along the caster tubing to prevent interference from caster forks or any other objects. Tighten the fasteners in an 'X' pattern until assembly is firmly clamped to caster tubing. Do not over tighten which may result in bending Weight Bracket Clamps (Item#3).

Insert (1) Weight (Item#3) Into the Weight Bracket Base (Item#2) & align the holes of the Weight w/ the holes of the Weight Bracket Base (Item#2). Fasten the Weight (Item#1) to the Weight Bracket Base Using (1) Clevis Pin (Item#6) & (1) Hair Pin Clip (Item#7) per weight.

Repeat on additional caster. Refer to the Figure Below.

Figure A

Item #	Part #	Desc.	Qty.
1	B1014	Dual Weight Bracket / Base	1
2	B1015	Weight Bracket / Clamp	1
3	Y0025	28 lb. Suitcase Weight	2
4	K1472	HHCS 5/16"-18 x 3" GR5	4
5	K2516	Ny-Flange Lock Nut 5/16"-18	4
6	K1473	Clevis Pin 1/2" x 3"	2
7	K1478	Hair Pin Cotter / Double Loop	2



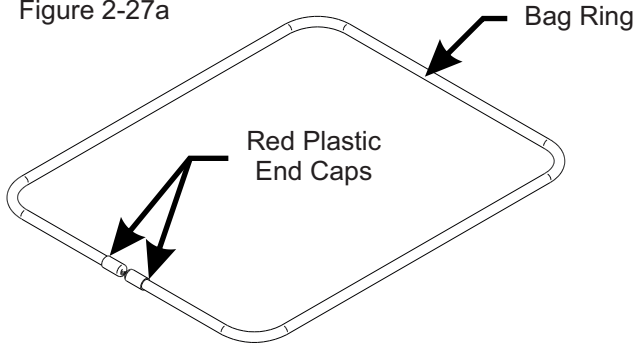


## 2-27 Installation/Removal Of Collection Bags

### IMPORTANT!

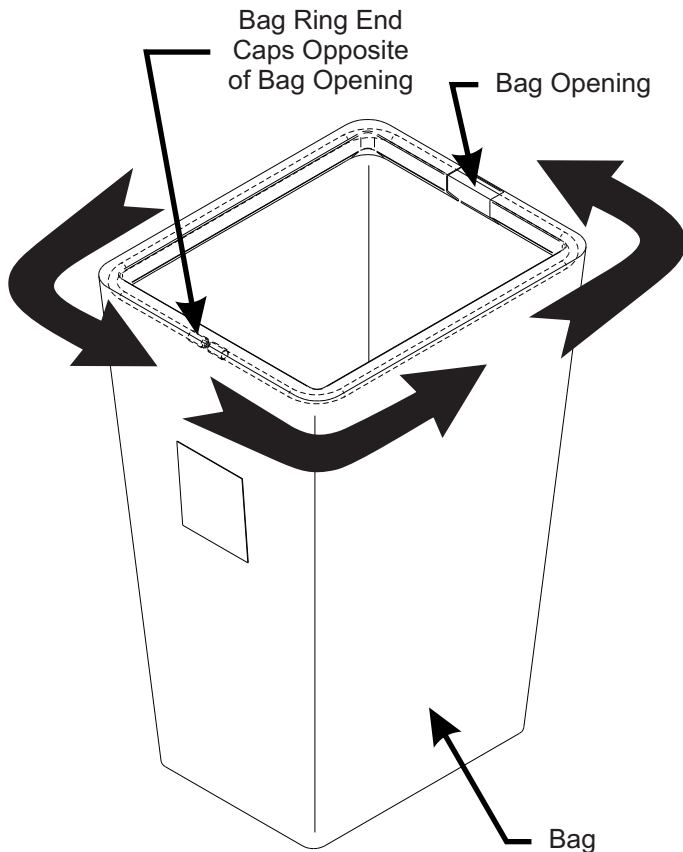
To prevent bag wear, install (2) red plastic end caps P#(J0274), as shown in Figure 2-27a, on each bag ring before installing bags.

Figure 2-27a



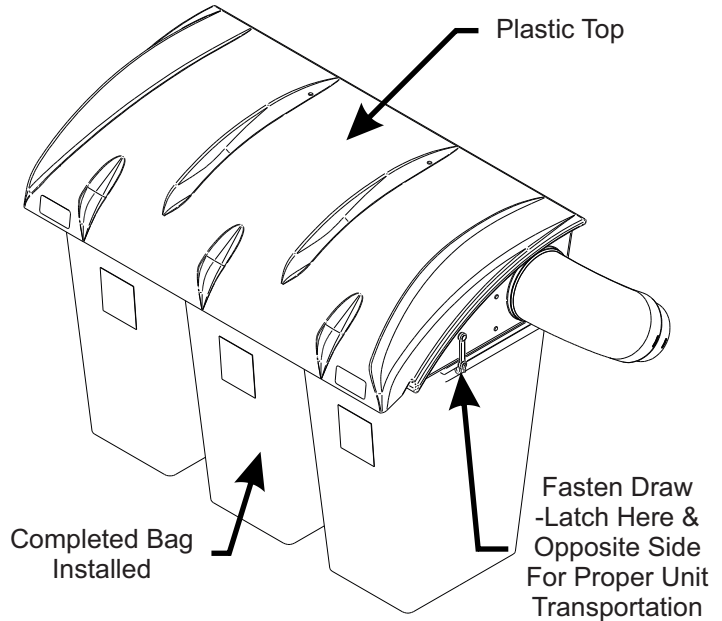
To install the bag onto the bag ring, place the seam openings of the bag onto the bag ring openings and turn the bag one full turn (360°) so the plastic end caps are located opposite to the opening in the bag (Figure 2-27b). Do this for each of three bags.

Figure 2-27b



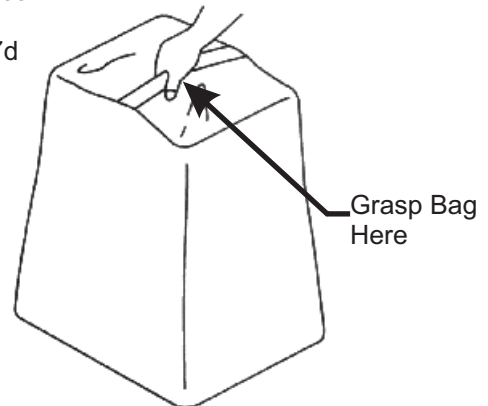
Install the completed assemblies onto the support frame and close the plastic top. Fasten both draw-latches to hold the plastic top closed (Figure 2-27c).

Figure 2-27c



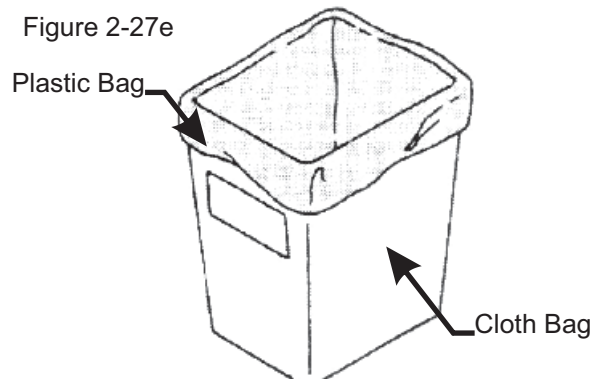
To empty the bag, first unlatch and lift top, next remove the bag and bag ring by sliding rearward, then grasp the loop on the bottom of the bag, and last turn it upside down to empty the collected debris (Figure 2-27d). Repeat for the other bags, line with plastic bags if desired, close the plastic top and reattach the draw latches.

Figure 2-27d



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 2-27e).

Figure 2-27e



## 2-28 Throttle Cable Installation

### **NOTE: Engine Driven Models Only**

To install the throttle cable kit to the ROPS (roll over protection system), place the 3/8" U-Bolt P#(K0136) onto the ROPS with the threads facing the front of the mower. Next slide on the throttle mount plate assembly P#(A0666) with the rivets also facing toward the front of the mower. Tighten the throttle mount plate assembly securely to the ROPS using (2) 3/8"16 nylon flange lock nuts P#(K2038) (Figure 2-28a). With the throttle cable facing toward the engine/blower/blade assembly, place the throttle base plate over the rivets. Slide the throttle cable kit to the right, moving the smaller end of the slot over the rivets. When positioned correctly, the throttle spring plate will snap into place (Figure 2-28b).

To remove the throttle cable kit, lift the throttle spring plate and slide the throttle kit to the left.

Route cable over the upper hose as shown in Figure 2-28c.

Figure 2-28a

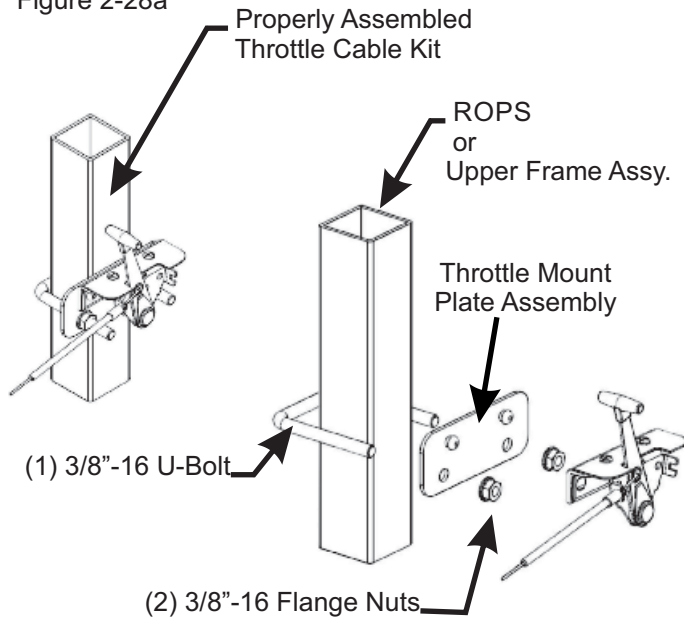


Figure 2-28b

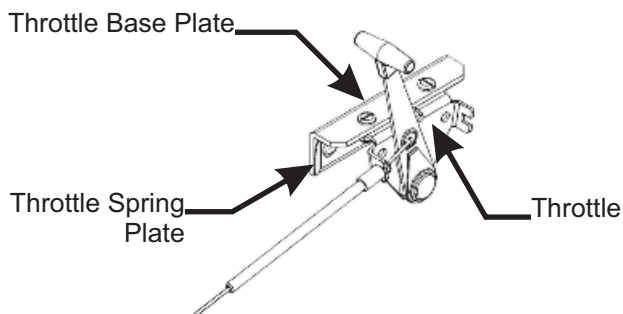
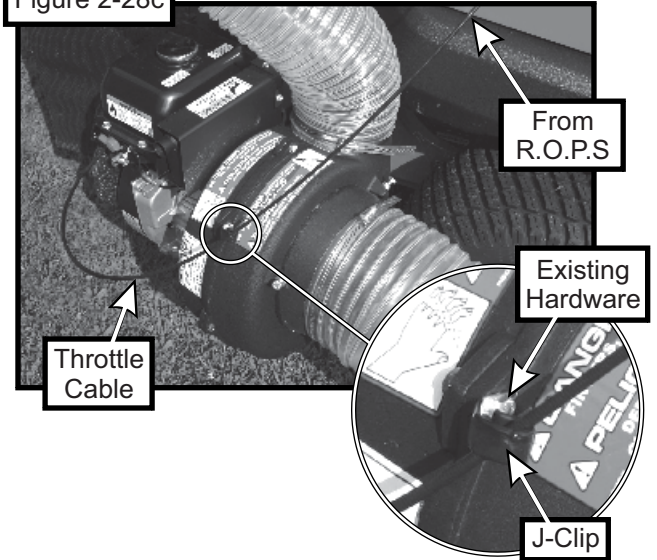


Figure 2-28c

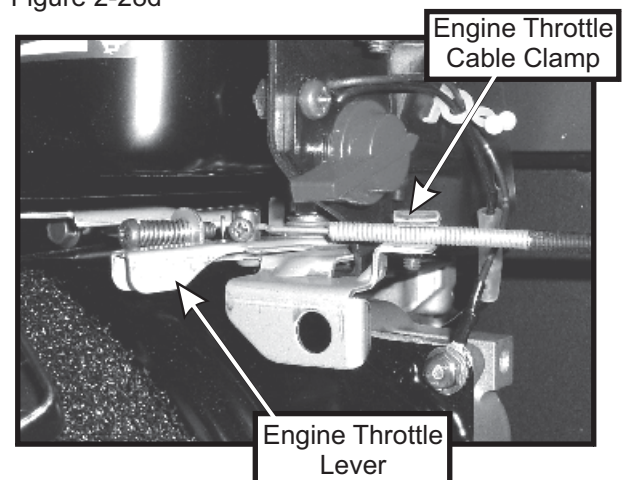


Secure the throttle cable to the blower housing assembly using (1) J-Clip P#(K1455). Use the existing hardware from the blower housing to secure the J-Clip, as shown in Figure 2-28c.

To fasten the throttle cable end to the engine, place the throttle control lever into the "stop" position. Rotate the engine throttle lever to the "stop" position. Thread the wire end of the throttle cable into the engine throttle lever eyelet and tighten the screw. Fasten the throttle cable sleeve to the clamp on the engine throttle (Figure 2-28d). Rotate the throttle control lever into the "fast" position to check for proper installation.

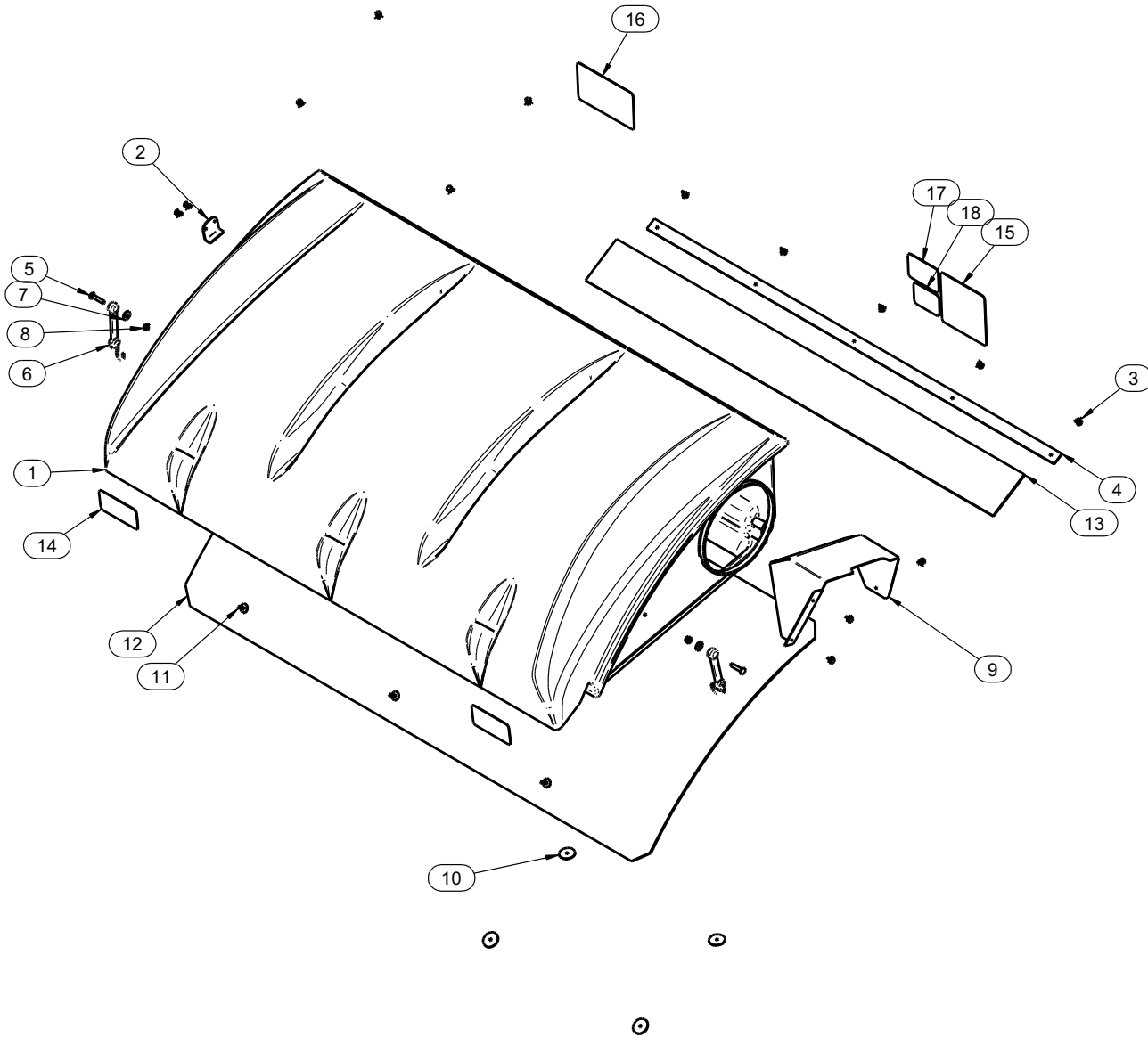
**NOTE:** Cable sleeve may need to be cut, depending on the engine type. Once throttle cable is attached, lift the plastic top assembly and make sure that the throttle cable does not interfere with the movement of the plastic top.

Figure 2-28d



# Exploded Parts View

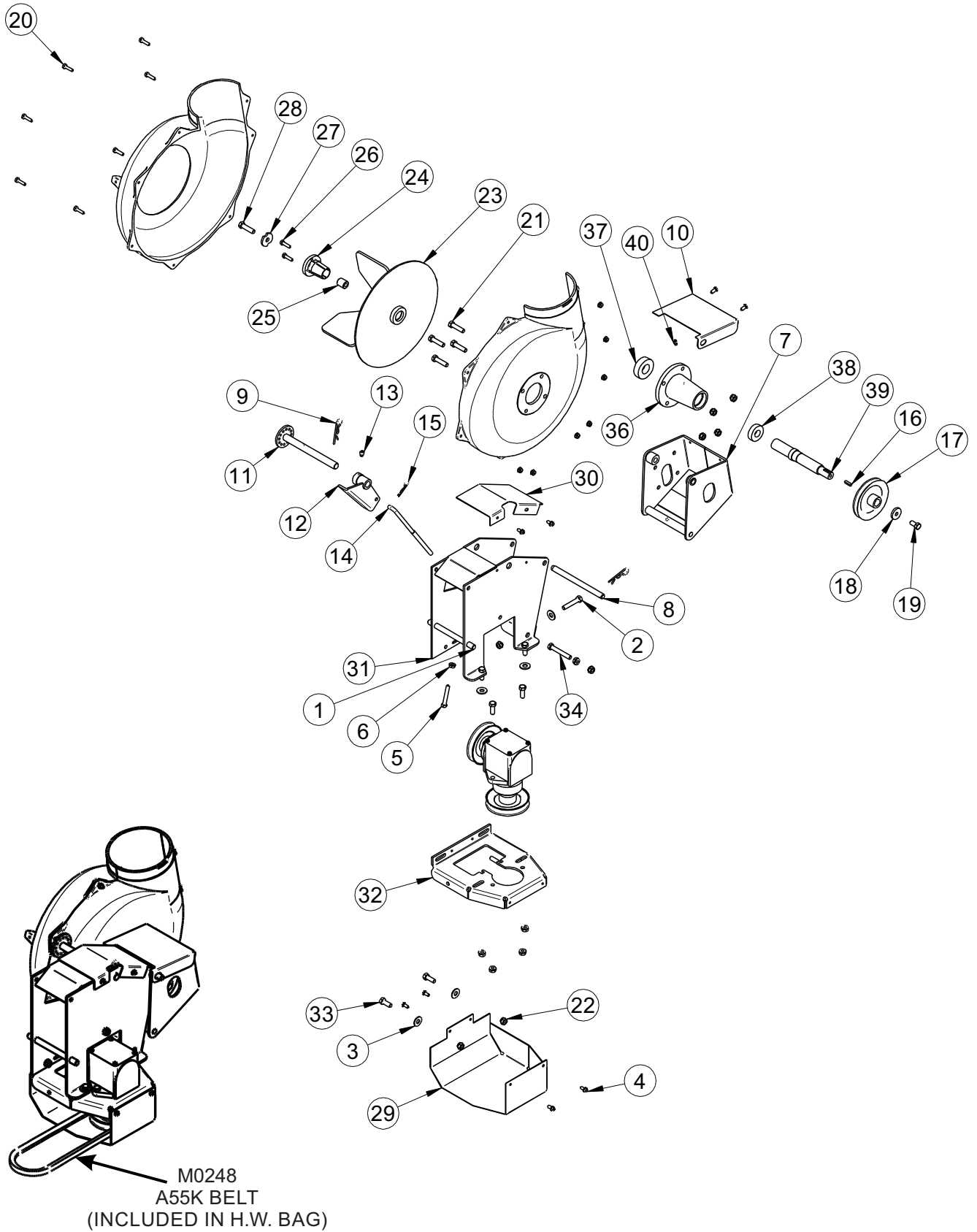
## A1157 Top Assembly



Item #	Doc #	Title	Qty
1	V0022	PRO 3 BAGGER TOP	1
2	B0676	Hinge Stop Pl.	1
3	K0114	BLACK PLASTIC RIVET	14
4	C0069	DUST GUARD BRACE	1
5	K1030	1/4"-20 x 1-1/4" CARRIAGE BOLT	2
6	J4009	SHORT RUBBER STRAP W/ S HOOK	2
7	K0037	1/4" FLAT WASHER .75 OD x .314 ID x .060 T	2
8	K1128	1/4"-20 NYLOC NUT	2
9	C0026	GRASS DEFLECTOR	1
10	K0062	3/16" x 1-1/2" FENDER WASHER, Z	4
11	K1265	BLACK PANEL RETAINER	3
12	V1120	Black Plastic Screen	1
13	V1118	DUST GUARD	1
14	R1057	2" x 4" Red Reflector Label	2
15	R1069	Warning - Turn Off Blower Label	1
16	R1065	Made In USA Label	1
17	R1054	Important Check Hoses	1
18	R1051	Warning - Use Hearing Protection	1

# **Exploded Parts View**

## **A0623 PTO Assembly**





## PTO Parts List

### A0623 PTO Assembly

Item Number	Document Number	Title	Quantity
1	A0429	GEAR BOX ASSEMBLY	1
2	K0348	3/8"-16 x 2" ALL THREAD HHCS	1
3	K0047	3/8" FLAT WASHER 1.00 OD x .446 ID x .075 T	5
4	K0353	1/4"-20 x 1/2" HHSTS	8
5	K1159	5/16"-18 x 2" ALL THREAD HHCS	1
6	K1178	5/16"-18 FLANGE NUT	1
7	A0144	BLOWER MOUNT BRACKET ASSEMBLY	1
8	B1755	BLOWER PIVOT ROD	1
9	K0086	.125 OD x 2.50 HAIR PIN CLIP	2
10	B0121	BLOWER BELT GUARD	1
11	A0604	PTO HANDLE MOUNT ASSY	1
12	A0422	CAM BRACKET ASSEMBLY	1
13	K0356	3/8"-16 TAPERED SET SCREW	1
14	K0326	BELT TENSION ROD 3/8"-16	1
15	K0130	.091 OD x 1.625 L HAIR PIN CLIP	1
16	J0254	3/16" SQ. x 3/4" LONG KEYWAY	1
17	M0228	BLOWER PULLEY	1
18	K1446	1.187 OD x .380 ID x .187 WASHER	1
19	K1190	3/8"-16 x 3/4" HHCS	1
20	E4004A	BLOWER HSG. ASSY.	1
21	K1193	3/8"-16 x 1-1/2" HHCS	4
22	K1215	3/8"-16 FLANGE NUT	12
23	A0645	SMALL 4-BLADE IMPELLER	1
24	S4302	TAPER-LOCK BUSHING	1
25	S3242	PLATED BUSHING	1
26	K1225	1/4"-20 X 1" HHCS GRADE 8	2
27	K0278	TAPER-LOCK BUSHING WASHER	1
28	K1211	3/8"-16 x 1-1/2" HHCS GRADE 8	1
29	B0269	GEAR BOX PULLEY GUARD	1
30	B0270	PTO ARM GUARD	1
31	A0622	PTO ARM ASSY.	1
32	A0624	BASE PLATE ASSY.	1
33	K1191	3/8"-16 x 1" HHCS	6
34	K1197	3/8"-16 X 2 1/2" HHCS	1
35*	M0250	A30K KEVLAR BELT	1
36	E0121	PTO SHAFT HOUSING	1
37	N0147	BEARING 2.0472 OD, 0.9843 ID, 0.5906 W (6205RS PEER)	1
38	N0148	BEARING 1.625 OD, 0.75 ID, 0.4375 W (9R12 PEER)	1
39	B1758	PTO SHAFT	1
40	J0801	1/4"-28 ZIRC FITTING	1

# Unit Model #: 37131507

**Mower:** Scag

**Owner's Manual:** Q0437

**Mower Type:** Freedom Z

**Engine Type:** Kawasaki FS730V

**Deck Size:** 61" Commercial

**Vac Type:** 1.5 Cu. Ft. Pro 3 Bagger

**Deck Type:**

**Drive Type:** PTO-C Drive

**Revision #:** 2 - MY & Weight Kit Update - 1/23/2018

**Fits Year(s):** 2010-Newer



**A1852 Vac Kit**

- (1) A1157 Top Assy
- (2) J0060 6" HOSE CLAMPS
- (1) V0025 6" & 7" PLASTIC INLET
- (1) A2068 Upper Frame Assy.
- (1) HB0479 HARDWARE BAG
- (1) F0060-029 6" x 29" UPPER HOSE
- (3) B0227 BAG RING
- (3) G0002 3.3 CU. FT. COLLECTION BAGS
- (2) B0752 LWR. MNT TUBE

**A1155 61" BAFFLE KIT**

- (1) HB0476 HARDWARE BAG
- (1) B0716 61" LEFT HAND BAFFLE
- (1) A1156 61" RIGHT HAND BAFFLE ASSEMBLY

**A1854 Mount Kit**

- (1) B0729 - Rev. 1 Left Lower Frame Plate
- (1) B0730 - Rev. 1 Right Lower Frame Plate
- (1) J0080 8" HOSE CLAMPS
- (1) E6009 8" BLOWER CONE
- (1) B0734 LT. PTO MNT. PL.
- (1) B0890 Heat Shield
- (1) A1142 PTO HANDLE ASSY.
- (1) B0728 REAR LWR. FRAME PL.
- (1) A0623 PTO ASSEMBLY
- (1) B0736 PTO STOP PLATE
- (1) B0735 RT. PTO MNT. PL.
- (1) HB0481 ENGINE PULLEY HARDWARE BAG
- (1) F0070-039 8" x 39" LOWER HOSE
- (1) 4L570DWK (A55K) Kev. Cord Belt
- (1) M0248

**A1857 Boot Kit**

- (1) E1047 BOOT
- (1) B0751 BOOT PLATE
- (1) HB0247 HARDWARE BAG

**A2121 Dual Weight Kit / Single Caster**

- (1) HB0687 Hardware Bag
- (1) B1014 Dual Weight Bracket Base
- (2) Y0025 28 lb. Weight
- (1) B1015 Weight Bracket Clamp

**A2121 Dual Weight Kit / Single Caster**

- (1) HB0687 Hardware Bag
- (1) B1014 Dual Weight Bracket Base
- (2) Y0025 28 lb. Weight
- (1) B1015 Weight Bracket Clamp



# Unit Model #: 37131508

Mower: Scag

Owner's Manual: Q0437

Mower Type: Freedom Z

Engine Type: Kawasaki FS730V

Deck Size: 61" Commercial

Vac Type: 1.5 Cu. Ft. Pro 3 Bagger

Deck Type:

Drive Type: Briggs & Stratton 900 Series

Revision #: 2 - MY & Weight Kit Update - 1/23/2018

Fits Year(s): 2010-Newer



**A1852 Vac Kit**

(1) A1157 Top Assy

(2) J0060 6" HOSE CLAMPS

(1) V0025 6" & 7" PLASTIC INLET

(1) A2068 Upper Frame Assy.

(1) HB0479 HARDWARE BAG

(1) F0001 6" x 29" UPPER HOSE

(3) B0227 BAG RING

(3) G0002 3.3 CU. FT. COLLECTION BAGS

(2) B0752 LWR. MNT TUBE

**A1155 61" BAFFLE KIT**

(1) HB0476 HARDWARE BAG

(1) B0716 61" LEFT HAND BAFFLE

(1) A1156 61" RIGHT HAND BAFFLE ASSEMBLY

**A1855 Mount Kit**

(1) F0007 8" x 39" LOWER HOSE

(1) B0729 - Rev. 1 Left Lower Frame Plate

(1) B1117 OUTER ENG. MNT. TUBE

(1) B0890 Heat Shield

(1) B0730 - Rev. 1 Right Lower Frame Plate

(1) E6009 8" BLOWER CONE

(1) A1824 ENGINE MNT. ARM ASSY.

(2) J0080 8" HOSE CLAMPS

(1) HB0482 HARDWARE BAG

**A1857 Boot Kit**

(1) E1047 BOOT

(1) B0751 BOOT PLATE

(1) HB0247 HARDWARE BAG

**A2121 Dual Weight Kit / Single Caster**

(1) HB0687 Hardware Bag

(2) Y0025 28 lb. Weight

(1) B1015 Weight Bracket

(1) B1014 Dual Weight Bracket Base

**A2121 Dual Weight Kit / Single Caster**

(1) HB0687 Hardware Bag

(2) Y0025 28 lb. Weight

(1) B1015 Weight Bracket

(1) B1014 Dual Weight Bracket Base

**A0619 Throttle Kit**

(1) A0666 THROTTLE MNT. PL. ASSY.

(1) A0060 70" THROTTLE

(1) HB0249 HARDWARE BAG

(1) A602 ENGINE/ BLOWER/ BLADE ASSY.

(1) B0728 REAR LWR. FRAME PL.



# Unit Model #: 37131509

**Mower:** Scag

**Owner's Manual:** Q0437

**Mower Type:** Freedom Z

**Engine Type:** Kawasaki FS730V

**Deck Size:** 61" Commercial

**Vac Type:** 1.5 Cu. Ft. Pro 3 Bagger

**Deck Type:**

**Drive Type:** Briggs & Stratton 6.5HP Vanguard

**Revision #:** 2 - MY & Weight Kit Update - 1/23/2018

**Fits Year(s):** 2010-Newer



**A1852 Vac Kit**

- (1) A1157 Top Assy
- (2) J0060 6" HOSE CLAMPS
- (1) V0025 6" & 7" PLASTIC INLET
- (1) A2068 Upper Frame Assy.
- (1) F0001 6" x 29" UPPER HOSE
- (1) HB0479 HARDWARE BAG
- (3) B0227 BAG RING
- (3) G0002 3.3 CU. FT. COLLECTION BAGS
- (2) B0752 LWR. MNT TUBE

**A1155 61" BAFFLE KIT**

- (1) HB0476 HARDWARE BAG
- (1) B0716 61" LEFT HAND BAFFLE
- (1) A1156 61" RIGHT HAND BAFFLE ASSEMBLY

**A1856 Mount Kit**

- (1) F0007 8" x 39" LOWER HOSE
- (1) B0729 - Rev. 1 Left Lower Frame Plate
- (1) B1117 OUTER ENG. MNT. TUBE
- (1) B0890 Heat Shield
- (1) B0730 - Rev. 1 Right Lower Frame Plate
- (1) A639 ENGINE/ BLOWER/ BLADE ASSY.
- (1) B0728 REAR LWR. FRAME PL.

**A1857 Boot Kit**

- (1) E1047 BOOT
- (1) B0751 BOOT PLATE
- (1) HB0247 HARDWARE BAG

**A0619 Throttle Kit**

- (1) A0666 THROTTLE MNT. PL. ASSY.
- (1) A0060 70" THROTTLE
- (1) HB0249 HARDWARE BAG

**A2121 Dual Weight Kit / Single Caster**

- (1) Y0025 28 lb. Weight
- (2) B1015 Weight Bracket
- (1) HB0687 Hardware Bag
- (1) B1014 Dual Weight Bracket Base

**A2121 Dual Weight Kit / Single Caster**

- (2) Y0025 28 lb. Weight
- (1) B1015 Weight Bracket
- (1) HB0687 Hardware Bag
- (1) B1014 Dual Weight Bracket Base



## 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

##### PTO MODELS

- 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, rotate the engagement handle of the collection system away from the mower. Continue to rotate the handle until it stops in an over center position. With the blower engaged, you can proceed to operate the control levers of the mower.

##### ENGINE DRIVEN MODELS

- A. Perform BEFORE EACH USE maintenance list in paragraph 4-1.
- B. Start the engine/blower/blade assembly.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. 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 blower, engage the parking brake and turn the mower off. Check the upper hose, lower hose, top screen and boot for 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 5 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 Blower

##### PTO MODELS

- A. To disengage the blower, rotate the engagement handle towards the mower.

**WARNING:** The blower will continue to spin. DO NOT TOUCH the blower, 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 2-13 of the manual.

##### ENGINE DRIVEN MODELS

- B. (Briggs & Stratton 900 Series) To stop the engine, throttle the engine to the stop position.
- C. (6.5HP Briggs & Stratton Vanguard) To stop the engine, move the fuel lever to the OFF position.

#### 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 blower, or stop the blower engine.
- 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 lifting the plastic hood. Load in bags should not exceed the height of the installed bag.
- F. To release bags from frame, open the plastic top and slide bags out, then turn bags over to deposit clippings.
- G. Follow steps on page 18 to re-attach bags back to the bagger.

**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

**NOTE: REMOVE PTO ASSEMBLY BEFORE RAISING DECK FOR MAINTENANCE.**

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. **PTO MODELS ONLY:** 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 with genuine PECO parts.

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. **PTO MODELS ONLY:** Check belt for proper tension.

THE SERIAL NUMBER PLATE IS LOCATED ON THE TOP ASSEMBLY P#(A1157)

<b>PECO</b>	
<b>OUTDOOR POWER EQUIPMENT</b>	
<b>Model Number</b>	<input style="width: 70%;" type="text"/>
<b>Serial Number</b>	<input style="width: 70%;" type="text"/>
<b>Arden, North Carolina 28704</b>	

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

## 4-2 Lubrication For PTO Models

Gearbox:

1. Every 20 hours of use: Check oil levels in gearbox.
2. First 60 hours of use: Change oil.
3. Every 100 hours of use: Change oil.

**NOTE:** Oil in gearbox should cover the gears. If not, drain the gearbox and fill using an 80W-90 gear oil. The gearbox ships with 6.0 oz. of oil, but we recommend replacing with a measured 5.5 oz. to fill the gearbox. **DO NOT OVERFILL!**

Blower Assembly:

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

## 5-1 Parts And Service Information

PECO 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 and include the following information on the chart below.

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

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

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

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

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

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

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

# SAFETY DECALS

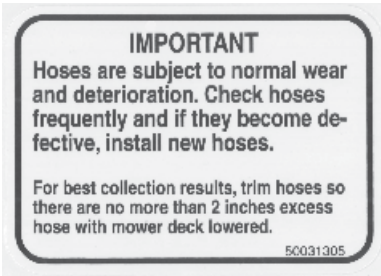
To promote safe operation, PECO supplies safety decals on all products manufactured. Damage can occur to safety decals either through shipment, use or reconditioning. Contact your local Service Center for replacement decals.



Part #: R1090  
Peco Pro Bagger Label



Part #: R1051  
Warning: Hearing Protection Label



Part #: R1054  
Important: Check Hoses Label



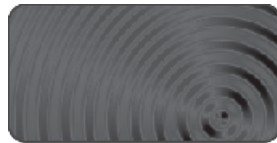
Part #: R4015  
Danger: Rotating Blades Label



Part #: R1069  
Warning: Turn Off Blower Label



Part #: R4008  
Caution: Rotating Blades Label



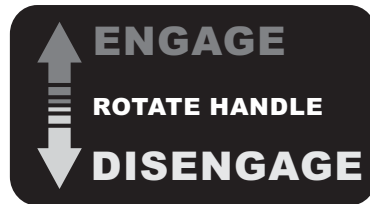
Part #: R1057  
Red Reflector Label



Part #: R1065  
Made In America Label



Part #: R1052  
Small Warning: Turn Off Blower Label



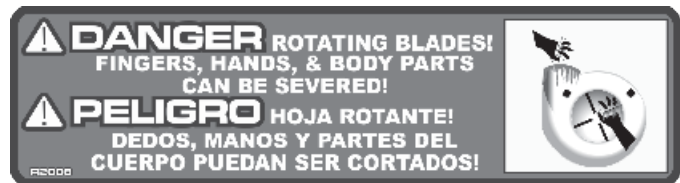
Part #: R1083  
Engage/Disengage Label



Part #: R4037  
Warning: Hot Surface Label



Part #: R2007  
Danger: Never Use Hands Label

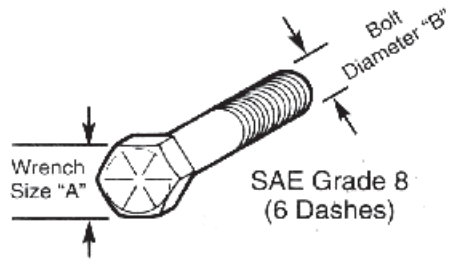


Part #: R2008  
Danger: Rotating Blades Label

# TORQUE SPECIFICATIONS

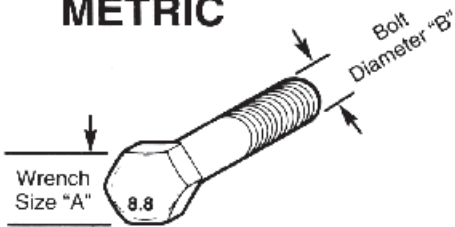
Proper torque for American fasteners used on Peco equipment.  
Recommended Torque in Foot Pounds (Newton Meters).\*

## AMERICAN Bolt Head Markings



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.

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

Proper torque for metric fasteners used on Peco equipment.  
Recommended torque in foot pounds (newton Meters).\*

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.8	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)



# Troubleshooting

## Collection System Performance

<b>Problem</b>	<b>Possible Cause</b>	<b>Corrective Action</b>
Abnormal Vibration	<ul style="list-style-type: none"> <li>• Cutting blades are bent or unbalanced</li> <li>• Loose blower pulley or pulley assembly</li> <li>• Impeller blade out of balance</li> </ul>	<ul style="list-style-type: none"> <li>• Install new cutting blade</li> <li>• Tighten the pulley</li> <li>• Contact dealer to replace</li> </ul>
Reduced collection system performance	<ul style="list-style-type: none"> <li>• Low engine speed</li> <li>• Plugged screen</li> <li>• Loose belt</li> <li>• Full collection bags</li> </ul>	<ul style="list-style-type: none"> <li>• Always operate collection system at full throttle</li> <li>• Remove debris, leaves, or grass clippings from the screen</li> <li>• Replace/tighten belt</li> <li>• Empty the collection bags</li> </ul>
Blower and hoses plugging too frequently	<ul style="list-style-type: none"> <li>• Collection bags are too full</li> <li>• Low engine speed</li> <li>• Grass is too wet</li> <li>• Grass is too long</li> <li>• Ground speed is too fast</li> <li>• Worn belt</li> <li>• Loose belt</li> </ul>	<ul style="list-style-type: none"> <li>• Dump more frequently</li> <li>• Always operate collection system at full throttle</li> <li>• Cut grass when it is dry</li> <li>• Cut the grass several times</li> <li>• Drive slower at full throttle</li> <li>• Replace belt</li> <li>• Adjust the pulley and tighten belts</li> </ul>
Debris blowout	<ul style="list-style-type: none"> <li>• Collection bags are too full</li> <li>• Plug/clog in the collection system</li> <li>• Ground speed is too fast</li> </ul>	<ul style="list-style-type: none"> <li>• Dump more frequently</li> <li>• Clean the collection system</li> <li>• Drive more slowly at full throttle</li> </ul>
Impeller doesn't rotate freely	<ul style="list-style-type: none"> <li>• Plug in the blower housing</li> <li>• Worn impeller blade</li> <li>• Shaft bearings bad/failing</li> </ul>	<ul style="list-style-type: none"> <li>• Clean the blower housing</li> <li>• Contact dealer to replace</li> <li>• Contact dealer to replace</li> </ul>



**10 WALDEN DRIVE  
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