# Cub Cadet

PRO-X

DESIGNED TO FIT.

# POWER ASSIST TRIPLE BAG

**MODEL YEAR:** 

**Series:** 

2016-NEWER PRO Z 500, 700, 900 L&S

54" & 60" DECKS

**COLLECTION SYSTEM** 

MODEL # 59A30047150

ALTERNATE MODEL ## 21131509



\*L MODELS: COLLECTION SYSTEM REQUIRES INSTALLATION
OF ADDED WEIGHT KIT P# 59B30037150 (A1149) FOR SAFE OPERATION!

# OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

MANUAL PART#: Q0507 Rev 3.1 - Oct 2020

#### **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 less 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.



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

White letters on **RED** 



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

Black letters on **ORANGE** 

It may also be used to alert against unsafe practices.



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.

Black letters on YELLOW

#### PECO LIMITED WARRANTY FOR NEW PRODUCTS

New PECO, Inc. extends the following warranties to the ORIGINAL PURCHASER of each New PECO, Inc. consumer product purchased from one of our Dealers or directly from New PECO, Inc., subject to the following limitations:

#### A. ITEMS COVERED UNDER WARRANTY

- 1. PRODUCT WARRANTY Any part or parts which are deemed defective in material or workmanship, as delivered to the original purchaser, will either be repaired or replaced, as New PECO, Inc. elects, without charge for parts or labor, if the defect appears within 12 months from the date of purchase of the product to the Original Purchaser.
- 2. PARTS REPLACED DURING WARRANTY Any New PECO, Inc. 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 New PECO, Inc. elects, before the expiration of the original warranty period.

#### **B. WARRANTY DISTINCTIONS**

- RESIDENTIAL Products put to a personal use around a single household or residence are considered Residential.
   Products designated as "Residential" are warrantied for 12 months from the date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in residential applications.
- 2. COMMERCIAL Products put to any business use (agricultural, commercial or industrial) or used at multiple locations are considered Commercial. Products designated as "Commercial" are warrantied for 12 months from the date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in commercial applications. Products designated as "Residential" are warrantied for 90 days from the date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in Commercial applications.
- 3. RENTAL Products used for Rental or Lease Purposes are warrantied for 45 days from date of purchase of the product, to the ORIGINAL PURCHASER with proof of purchase, when used for or in a rental business.

#### C. ITEMS NOT COVERED BY NEW PECO WARRANTY

- 1. ENGINES & BATTERIES: Engines and Batteries attached to New PECO, Inc. products are covered under their respective separate manufacturer warranties and those companies must be contacted directly to file a warranty claim. Briggs & Stratton: <a href="https://www.briggsandstratton.com/na/en\_us/support/warranty.html">https://www.briggsandstratton.com/na/en\_us/support/warranty.html</a>
- 2. UNAPPROVED ALTERATION OR MODIFICATION: All obligations of New PECO, Inc. under this warranty shall be terminated if products are altered or modified in any way not approved by New PECO, Inc.
- 3. ACCIDENTS & NORMAL MAINTENANCE: This warranty covers ONLY manufacturers defective material and workmanship. It does not cover depreciation or damage caused by normal wear & tear, accident, improper maintenance, misuse or abuse of products. New PECO, Inc. products must be operated and maintained in accordance with the instructions furnished in the manuals. The cost of normal maintenance and normal replacement of service items such as belts, cutting blades, hoses, bags, etc., which are not defective shall be paid for by the purchaser.
- 4. NO SERVICE CENTER WARRANTY: The selling Service Center/Dealer makes no warranty on his own on any item warranted by New PECO, Inc. unless he delivers to purchaser a separate written warranty certificate specifically warranting the item. The Service Center or Dealer has no authority to make any representation or promise on behalf of New PECO, Inc. or to modify the terms of the original warranty in any way.
- 5. NO REPRESENTATIONS ADDITONAL WARRANTIES, DISCLAIMER: Neither New PECO, Inc. nor any company affiliated with New PECO, Inc. 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.
- 6. 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 New PECO, Inc. be liable for special incidental or consequential damages.

Warranty service is available through your local authorized service dealer or distributor. If you do not know the dealer or distributor in your area, search by your zip code on <a href="www.lawnvac.com">www.lawnvac.com</a> or contact our Sales Department at New PECO, Inc. 800-438-5823 or email Sales@lawnvac.com.

# 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**

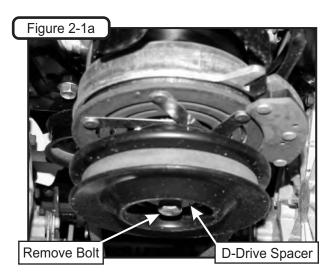
The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves in pre-season and post-season cleanup. The blower, mounted on the right side of the unit, uses a belt and gearbox system 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) - 4 cubic foot collection bags P#(G0013-L) at the rear portion of the mower frame. The operator can engage the blower with a toggle switch mounted on the control panel to the right of the operator. Once the bags are full with clippings, they can be easily released for dumping.

#### Section II - INSTALLATION FOR USE

L Models: Collection system requires installation of added weight kit 59B30037150 (A1149) for safe operation! S Models do not require a weight kit.

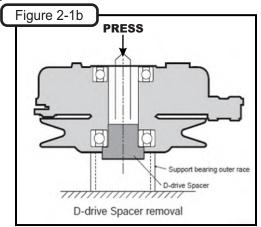
# Collection System May Require Dealer Installation!

Please refer to Page 15 for further details.

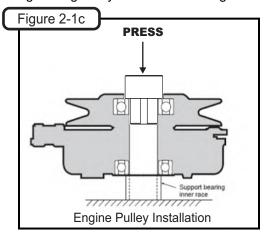


#### **2-1 Preparation Of Mower**

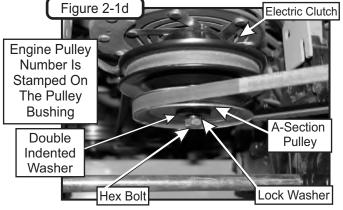
From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Refer to Figure 2-1a. Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer to Figure 2-1b.



The Engine Pulley Bushing #18 P#(S0210) may need to be installed using an arbor press or equivalent. If pressed, opposite bearing inner race must be supported or bearing damage may occur. Refer to Figure 2-1c.



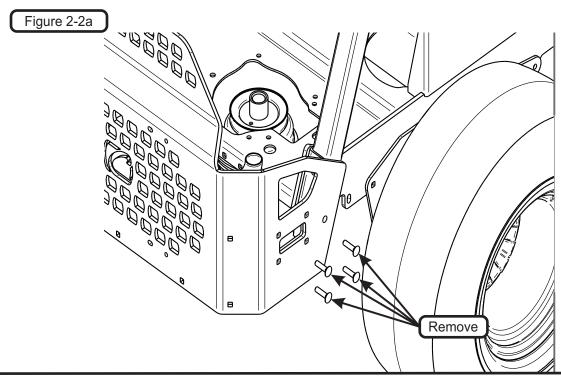
Fasten the A-Section Pulley P#(M0309) to the Pulley Bushing and electric clutch assembly using (1) 7/16" Double Indented Washer P#(K0278), (1) 7/16" Hi-Collar Lock Washer P#(K0140) and (1) 7/16"-20 x 3-3/4" HHCS P#(K0350) as shown in Figure 2-1d. Torque the bolt to 55 ft-lbs. Re-connect the wiring harness to the electric clutch.

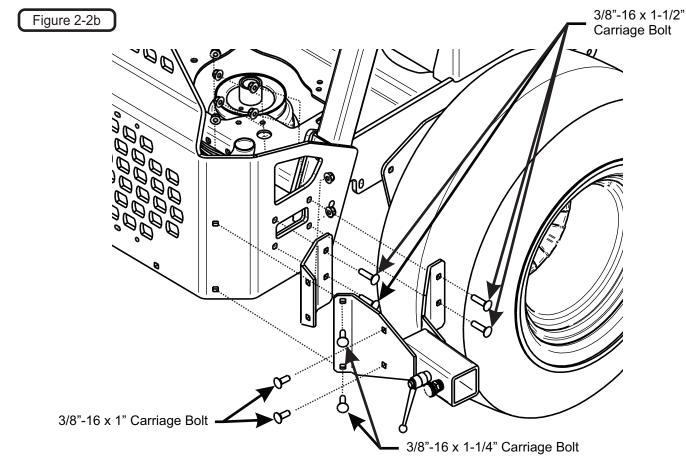


#### 2-2 Mount Arm Preparation and Installation

Remove the (4) 3/8"-16 x 1-1/4" existing Carriage Bolts and (4) 3/8"-16 Ny-Flange Lock Nuts from the right-rear of the mower and discard. Refer to Figure 2-2a.

First, loosely attach the Mount Arm Brace P#(B0953) to the Mount Arm Assy. P#(A2071) using (2) 3/8"-16 x 1" Carriage Bolts P#(K1182) and (2) 3/8"-16 Ny-Flange Lock Nuts P#(K2038). Next, attach both parts to the right rear of the mower using (4) 3/8"-16 x 1-1/2" Carriage Bolts P#(K1337), (2) 3/8"-16 x 1-1/4" Carriage Bolts P#(K1183) and (6) 3/8"-16 Ny-Flange Lock Nuts P#(K2038). Once in place tighten all bolts to suggested torque. Refer to Figure 2-2b.

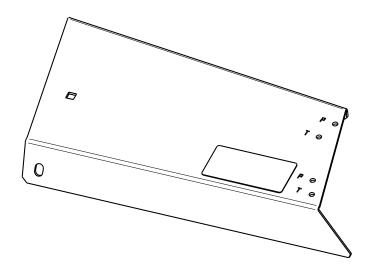




#### 2-3 PTO Drive Assembly

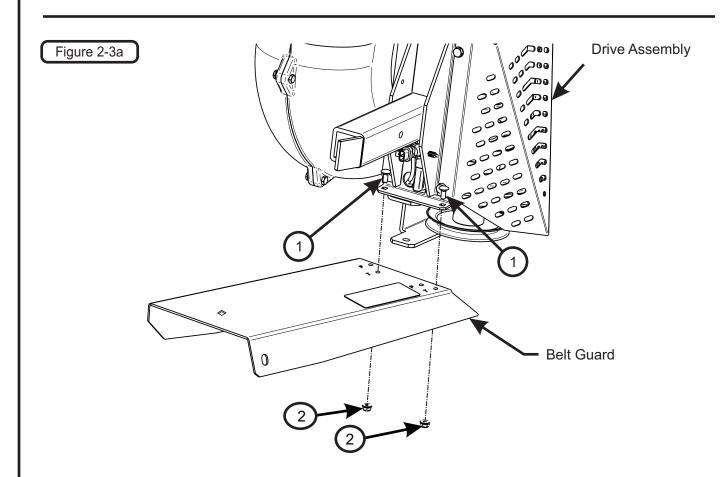
Once the Mount Arm Assembly P#(A2071) is installed and secured to the mower, assemble the Drive Assembly P#(A2072), Belt Guard Assembly P#(A2069\_03), Idler Mount Assembly P#(A2067\_03) & Belt Guard Gusset P#(B1026).

First, attach the Belt Guard Assembly P#(A2069\_03) to the Drive Assembly P#(A2072) using (2) 1/4"-20 x 5/8" Carriage Bolts P#(K1010) and (2) 1/4"-20 Ny-Flange Lock Nuts P#(K2014). Refer to Figure 2-3a. **Leave Bolts Loose.** 



#### **BELT GUARD ASSY. HOLES**

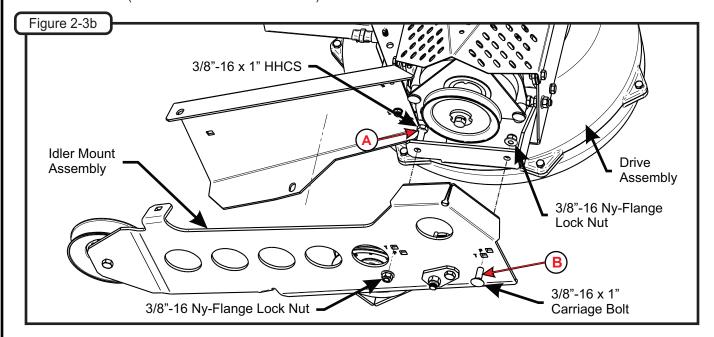
Notice Marked Holes Below;
(Use corresponding holes with type of mower that is being fitted up)
T = Pro Z 500, 700 & 900 Series Mounting Hole
P = Pro Z 100 Series Mounting Hole



Item #	Part #	Desc.	Qty.
1	K1010	1/4"-20 x 5/8" Carriage Bolt	2
2	K2014	1/4"-20 Ny-Flange Lock Nut	2

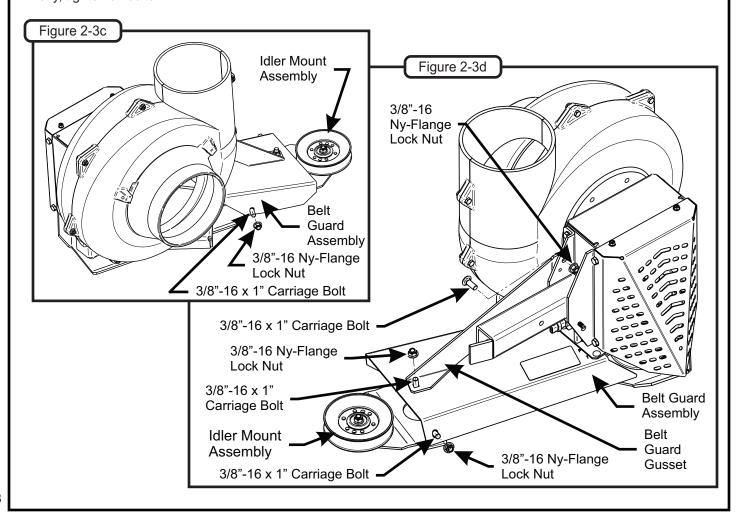
#### 2-3 PTO Drive Assembly (Continued)

Attach the Idler Mount Assembly P#(A2067\_03) to the Drive Assembly using (1) 3/8"-16 x 1" HHCS (A) P#(K1191), (1) 3/8"-16 x 1" Carriage Bolt (B) P#(K1182) and (2) 3/8"-16 Ny-Flange Lock Nuts P#(K2038). Refer to Figure 2-3b. Leave Bolts Loose (Note: Orientation of bolts A & B).



Next, secure the Idler Mount Assembly P#(A2067\_03) to the Belt Guard Assembly P#(A2069\_03) using (2) 3/8"-16 x 1" Carriage Bolts P#(K1182) and (2) 3/8"-16 Ny-Flange Lock Nuts P#(K2038).

Then, secure the Belt Guard Gusset P#(B1026) to the Belt Guard Assembly using (2) 3/8"-16 x 1" Carriage Bolts P#(K1182) & (2) 3/8"-16 Ny-Flange Lock Nuts P#(K2038). Refer to Figure 2-3c & 2-3d. Finally, tighten all bolts.

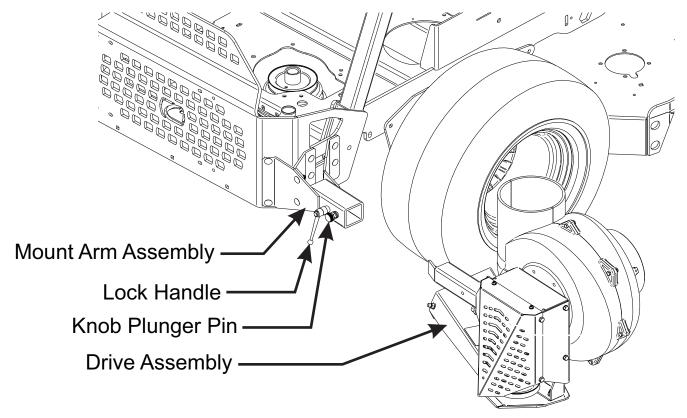


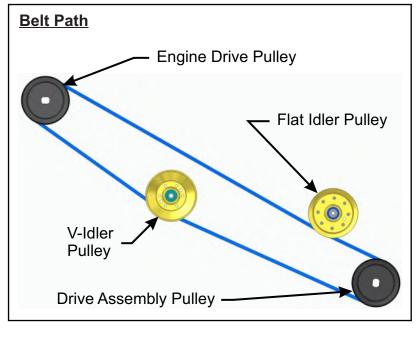
#### 2-4 Drive Assembly and Belt Installation

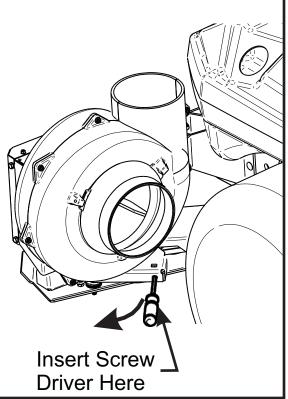
(Note: It is recommended that someone assist during this step.)

Insert the Drive Assembly into the receiver tube on the Mount Arm Assembly until the Knob Plunger Pin engages. Once in place, turn Lock Handle clockwise until tight. Next, feed the AK83 Belt P#(M0315) between the Belt Guard and the Idler Mount Assembly. Place belt around the Engine Drive Pulley on the underside of the mower. While one person inserts a screw driver (or similar tool) into the Idler Mount Assembly and rotates lever arm clockwise, enough to relieve all tension from belt, place belt around the Drive Assembly Pulley. Once the belt is in position, carefully release the tension to tighten belt.

Refer to the images below.

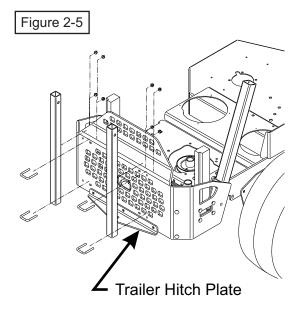






#### 2-5 Lower Mount Tube Installation

Secure the (2) Lower Mount Tubes P#(B0752) to the rear frame using (2) 5/16"-18 U-bolts P#(K1098) and (4) 5/16"-18 Ny-Flange Lock Nuts P#(K2516) PER TUBE. Refer to Figure 2-5. Note: Bottom of Tubes should rest on the top edge of the Trailer Hitch Plate.

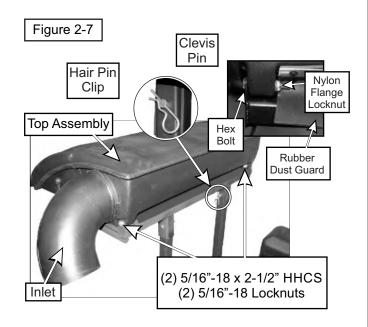




Lift the Upper Frame Assembly P#(A2068) into position, and slide onto the Lower Mount Tubes as shown in Figure 2-7 and secure with (2) 1/2" x 2-1/4" Clevis Pins P#(K0133) and (2) Hair Pin Clips P#(K0088). **Note:** It is recommended that someone assist you when installing the upper frame assembly.

#### 2-7 Top Assembly To Upper Frame Assembly Installation

Position the Top Assembly P#(A2081) above the Upper Frame Assembly with the Rubber Dust Guard positioned towards the seat 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 Ny-Flange Lock Nuts P#(K2516). Leave the lock nuts slightly loose, to allow the top assembly to open and close easily. Refer to Figure 2-7 for hardware location.

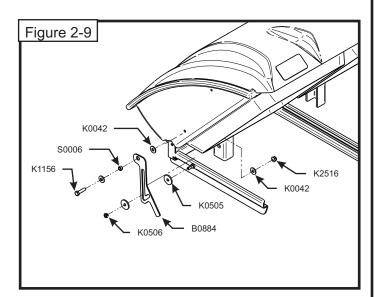


#### 2-8 Inlet Installation

Insert the Inlet P#(A2074) into the hole on the Top Assembly from the inside and then snap the Inlet into place. The Inlet should pivot freely about the hole.

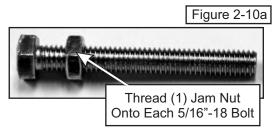
#### 2-9 Hinge Kit Assembly Installation

Assemble the Hinge Kit as shown in Figure 2-9, using (1) Latch Plate P#(B0884), (1) 5/16"-18 x 1-1/4" HHCS P#(K1156), (1) 5/16"-18 Ny-Flange Lock Nut P#(K2516), (3) 5/16" Flat Washers P#(K0042), (1) Latch Spacer P#(S0006), (2) Extra Heavy 5/16" Fender Washers P#(K0505) and (1) 5/16"-18 Lock Nut P#(K0506). Leave the nuts loose enough to allow fluid movement of the top when opening and closing. When opened, the top should rest in the Latch Plate Slot.

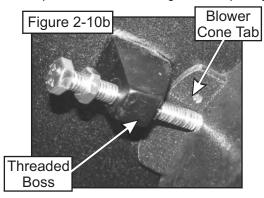


#### 2-10 Blower Cone Installation

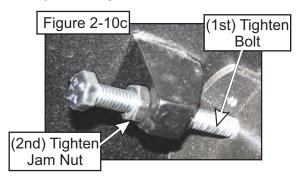
Thread (1) 5/16"-18 jam nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) as shown in Figure 2-10a.



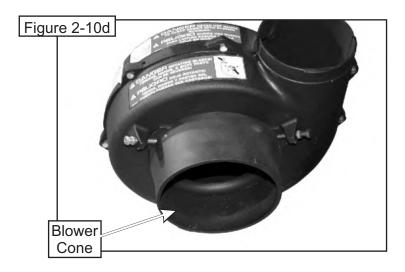
Now partially thread (1) bolt into each of the two threaded bosses located on the blower housing. Place 8" Blower Cone P#(E6009) so the two tabs line up with the bolts and tighten completely as shown in Figure 2-10b.



Once the (2) bolts are tight, tighten the jam nuts against the threaded boss as shown in Figure 2-10c.

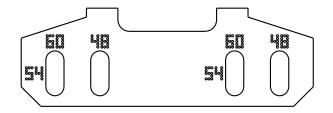


Refer to Figure 2-10d for proper blower cone installation reference.



#### 2-11 Boot To Mower Deck Installation

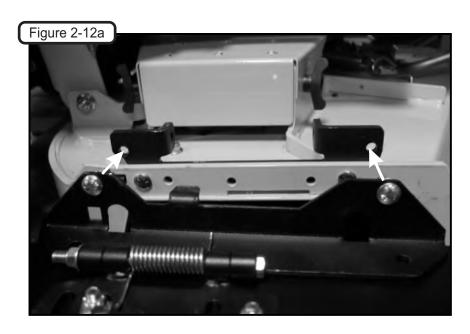
**NOTE:** The Boot Kit Assembly is designed to fit the 54" and 60" deck. To ensure a snug fit between the boot and the mower deck, follow the instructions in this step thoroughly, and remove and tighten all hardware in the sequence specified.



According to deck size, align marked holes and Boot holes. Secure the Boot Mounting Assembly P#(A2045) to the Aluminum Boot P#(E0028A) using (2) 3/8"-16 x 1" Carriage Bolts P#(K1182) and (2) 3/8"-16 Ny-Flange Lock Nuts P#(K2038). Insert the Carriage Bolts from the inside of the Boot so the threads are on the outside of the Boot (Figure 2-12a). This will prevent grass clippings from collecting on the bolt threads. Leave bolts loose for alignment once installed on mower.

After removing only the Wing Knobs, align the threaded mount posts on the Boot Mounting Assembly with the mounting holes located above the mowers discharge chute and insert into the mounting holes. Secure with the (2) Wing Knobs P#(J0018). Press Boot against discharge chute, to ensure a snug fit and tighten the two nuts on top of the boot. Refer to Figure 2-12b.

Note: Deflector not shown for clarity but must be installed during normal operation.





#### 2-12 Length Of Hose Adjustment

The hoses in the following steps 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 need to be long enough to allow for the opening and closing of the collection system as well as allowing ample clamping surface between each component.

#### 2-13 Upper Hose Installation

Slide a pre-assembled Hose Clamp P#(J0070) over one end of the 7" Upper Hose. Secure this end of the 7" Upper Hose to the Blower Outlet. See Figure below for details. Secure opposite end of the 7" Upper Hose to the Inlet. Make sure both ends are securely fastened by tightening the Hose Clamp and rotating the Inlet Snap Fastener towards the hose to lock in place.

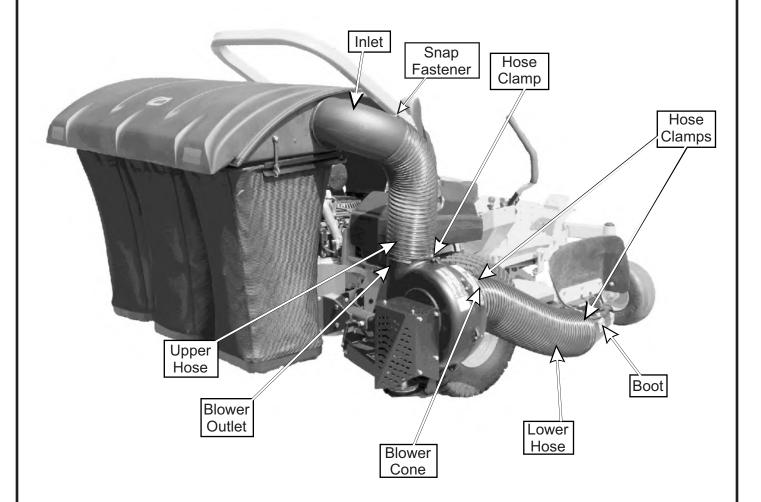
# **2-14 Lower Hose To Blower Cone Installation**

Slide a pre-assembled Hose Clamp P#(J0080) over both ends of the Lower Hose. Secure one end of the Lower Hose to the Blower Cone and fasten by tightening the Hose Clamp.

#### 2-15 Lower Hose To Boot Installation

Take the unattached end of the Lower Hose and secure it to the circular end of the Boot and fasten by tightening the Hose Clamp (Figure 2-13). Tip: Before securing Hose Clamp fully, rotate Lower Hose counter-clockwise (away from yourself) approximately 1" to aid in retaining Boot to mower deck.

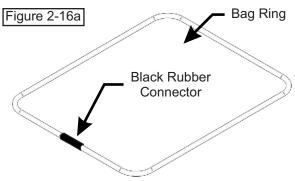
Figure 2-13



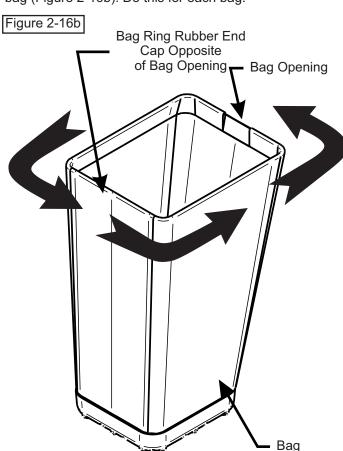
# 2-16 Installation/Removal Of Collection Bags

#### **IMPORTANT!**

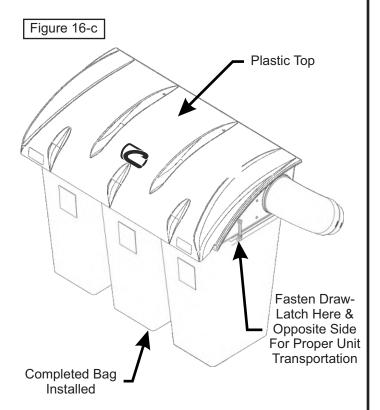
To prevent bag wear, install (1) black rubber end cap P#(F0010), as shown in Figure 2-16a, on each bag ring after rotating bag 360°.



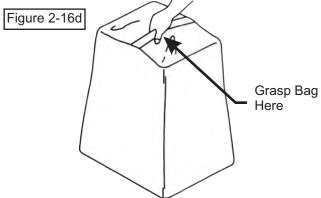
To complete the bag installation, place the seam openings of the bag and the bag ring openings together. Place the rubber bag ring connector on both ends of the bag ring and turn the bag one half turn (180) so the rubber end cap is located opposite to the opening in the bag (Figure 2-16b). Do this for each bag.



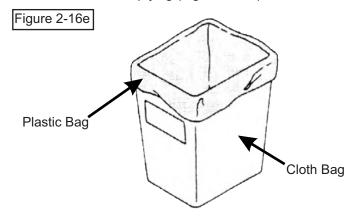
Install the completed assemblies onto the support frame and close the plastic top. Fasten the draw-latches to hold the plastic top closed (Figure 2-16c).



To empty the bag, first unlatch and lift top, next remove the bag and bag ring by sliding rearward, then grasp the handle on the bottom of the bag, and lastly turn it upside down to empty the collected debris (Figure 2-16d). Repeat for the other bags. Reinstall all bags, line with plastic bags if desired, close the plastic top and reattach the draw latches.



Plastic lawn and leaf bags, 33 gallon size, may be used inside the cloth bags. Be sure to leave enough plastic bag hanging over the frame so the plastic bags can be twist tied before emptying (Figure 2-16e).



# 2-17 Safety Interlock Harness Installation

#### Collection System May Require Dealer Installation!

Before installing, please verify the presence of an auxiliary 5-way female connector in the mower's electrical harness. The connector is located underneath the operator's seat in between the two hydraulic pump cooling fans.

### **WARNING**

**To Prevent Serious Injury- Proper Installation Of Safety Interlock Harness** 

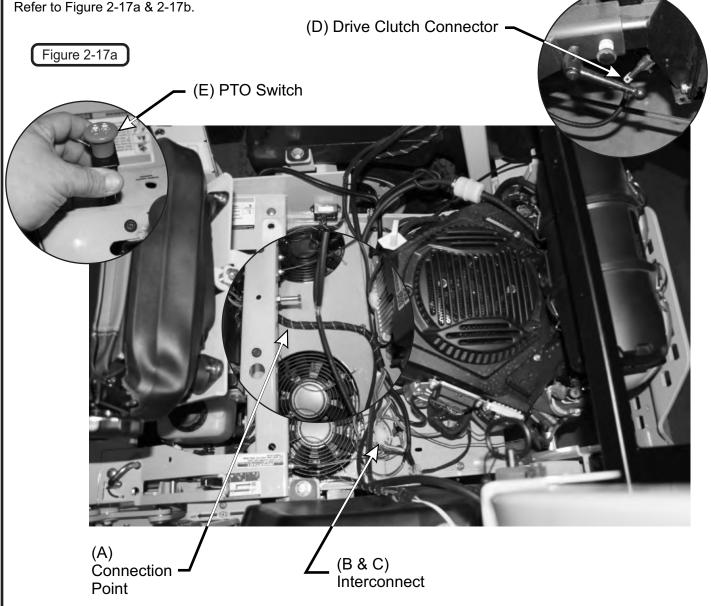
Is Mandatory. Please Check That All Interlock
Points Work Correctly Once Installed.

Connect (A) the Delphi 5-way Male Connector, on the harness, to the connection point under the seat and between the two cooling fans. Next, on the left side of the engine locate and separate the engine harness from the mower's main harness. Connect (B) to the engine side connector and (C) to the main harness connector.

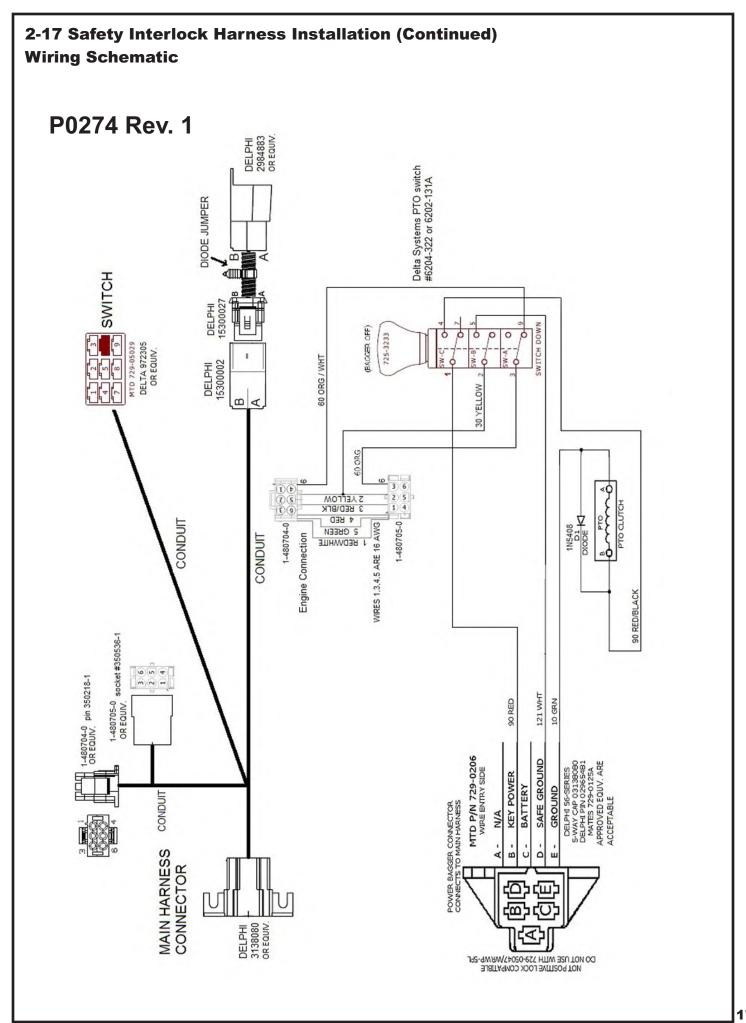
Route the Drive Clutch Connector (D) around the front side of the engine, between the ROPS and gas tank and through the opening in the rear bumper connecting to the guick connect plug located on the PTO Drive.

Before routing the PTO Switch (E), locate and remove knock out on the mower's control panel. The control panel is easily accessed by removing the (9) hex head screws around the outside of the control panel housing. Route (E) through the frame and up to the underside of the control panel. Insert switch into the hole, previously knocked out, and snap the provided retaining plate to the underside of the control panel. The retainer plate (F) should be seated fully over the snap wings of switch from the underside of the panel after the switch is installed. Connect the switch to connector and reattach control panel.

Use the zip ties that are provided to secure in place.



# 2-17 Safety Interlock Wiring Harness Installation (Continued) Figure 2-17b F D Drive Ε Retainer Plate Bagger PTO Switch Clutch Connector A 5-Way Male Main Harness Connector **Engine Connector** B Engine Side Engine Connector

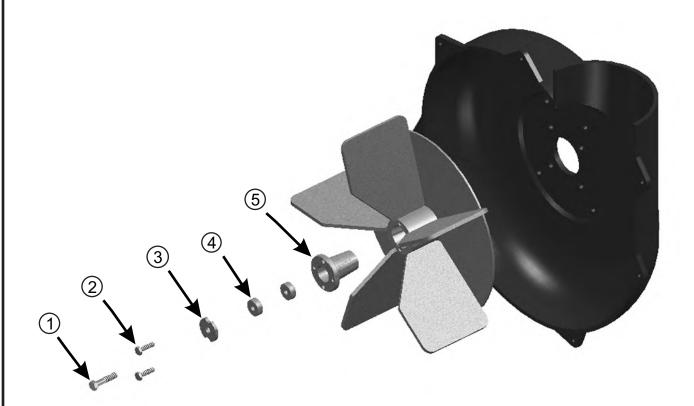


#### 2-18 Impeller Blade Removal/Replacement

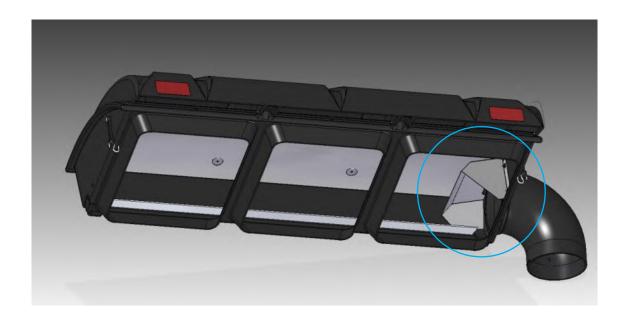
<u>To Remove:</u> First remove the 5/16"-24 x 1-1/2" HHCS GR8 P#(K1465) **(#1)**, Taper-Lock Bushing Washer P#(K0284) **(#3)** and (2) Spacer Bushings P#(S0159) **(#4)** from the Taper-Lock Bushing P#(S0157) **(#5)**. See Figure 2-18. Next remove the (2) 1/4"-20 x 1" HHCS **(#2)** and place them into the threaded holes of the Taper-Lock Bushing **(#5)**. Gradually thread each bolt evenly into the Taper-Lock Bushing, forcing the Impeller Blade to break-away from the Taper-Lock Bushing. If the Impeller Blade will not move, carefully hit the base of the Impeller Blade, between each vein, with a hammer, then try again.

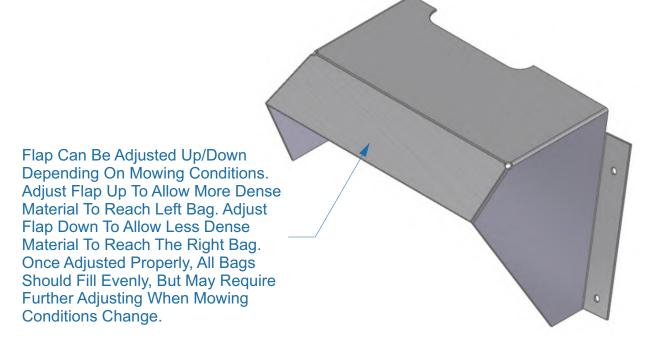
<u>To Replace</u>: Place Impeller Blade over the engine shaft. Slide the Taper-Lock Bushing P#(S0157) (#5) on to the engine shaft and into the Impeller Blade, aligning the **non-threaded** holes of the Taper-Lock Bushing to the threaded holes of the Impeller Blade. Fasten by using (2) 1/4"-20 x 1" HHCS (#2), (2) Spacer Bushing P#(S0159) (#4) (1) Taper-Lock Bushing Washer P#(K0284) (#3), and (1) 5/16"-24 x 1-1/2" HHCS P#(K1465) (#1). Torque to the proper specifications in the torque chart within the last pages of this manual. Next, rotate the Impeller Blade to ensure that the Blade is clear of contact on all sides of the Blower Housing.

Figure 2-18



#### 2-19 Even Bag Fill Adjustment

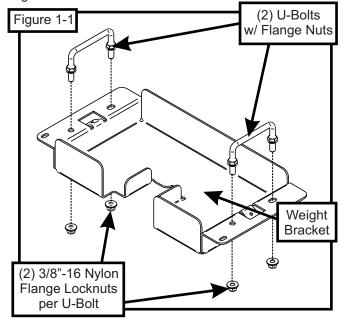




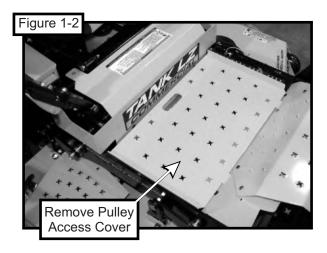
#### 52B500B7150 (AM142) -Weight Kit Installation Instructions

<u>Cub Cadet Tank LZ & L Models -</u> Installing a weight kit is mandatory for safe operation of the collection system. SZ & S Models do not require a weight kit.

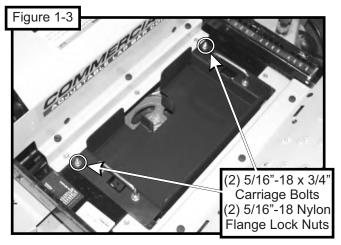
Completely thread (2) 3/8"-16 flange nuts P#(K1215) onto (1) 3/8"-16 U-bolt P#(K0407). Repeat process again to create two sets. Secure each U-Bolt, w/ attached flange nuts, to the weight bracket P#(B0703) using (2) 3/8"-16 nylon flange locknuts P#(K2038) as shown in Figure 1-1.



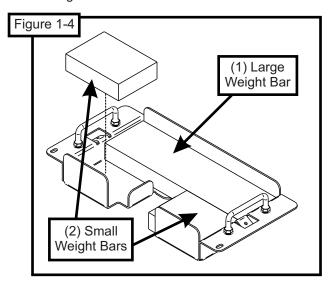
Remove the mower's pulley access cover shown in Figure 1-2.



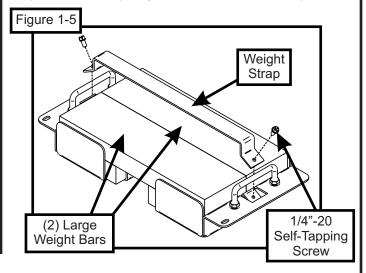
Insert the weight bracket assembly into the recess as shown in Figure 1-3. Align the weight bracket's mounting holes to the mower's frame and secure using (2) 5/16"-18 x 3/4" Carriage Bolts P#(K1142) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Insert the bolts from the bottom of the weight bracket so that the nuts fasten to the top of the bracket as shown in to Figure 1-3.



One at a time, add (1) large weight bar P#(B0704) to the weight bracket, then (2) small weight bars P#(B0741). Refer to Figure 1-4.

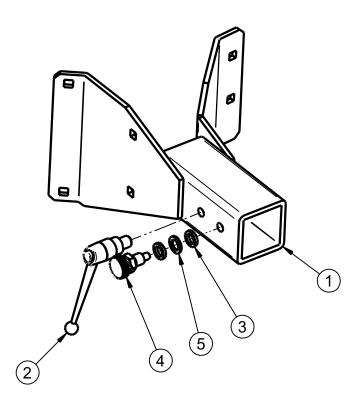


Add the remaining (2) large weight bars P#(B0704) to the weight bracket. Secure the weights to the weight bracket with (1) weight strap P#(B0719) and (2) 1/4"-20 self-tapping screws P#(K0353). Refer to Figure 1-5. Replace mower's pulley access cover when completed.



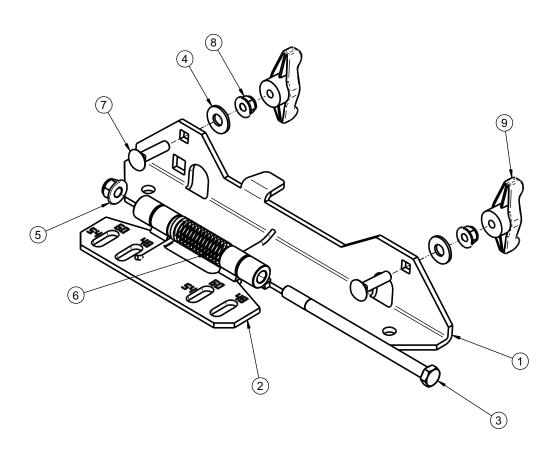
#### **A2071 Mount Arm Assembly**

Item #	Part #	Desc.	Qty.
1	A2040	Mount Arm Sub-Assy	1
2	J0009	Adjustable Handle 1/2"-13 x .59 Male	1
3	J0013	Nylon Flat Washer 1/2" x .750" OD Grade 6/6	2
4	J0020	Knob Plunger Pin 1/2"-13	1
5	K0027	Flat Washer 1/2" / .787 OD x .512 ID x .090 T	1

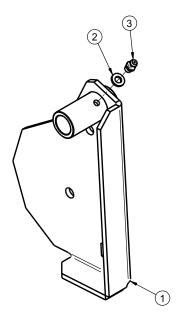


#### **A2045 Boot Mounting Assembly**

Item #	Part #	Desc.	Qty.
1	A2044	Deck Plate Assy	1
2	A2043	Boot Plate Assy	1
3	K1429	3/8"-16 x 6" HHCS GR5	1
4	K0042	Flat Washer 5/16" / .875 OD x .380 ID x .075 T	2
5	K2038	Ny-Flange Lock Nut 3/8"-16	1
6	J0017_1	Torsion Spring	1
7	K1146	5/16"-18 x 1-1/4" Carriage Bolt	2
8	K2516	Ny-Flange Lock Nut 5/16"-18	2
9	J0018	Wing Knob / 5/16-18 Thru Nut	2

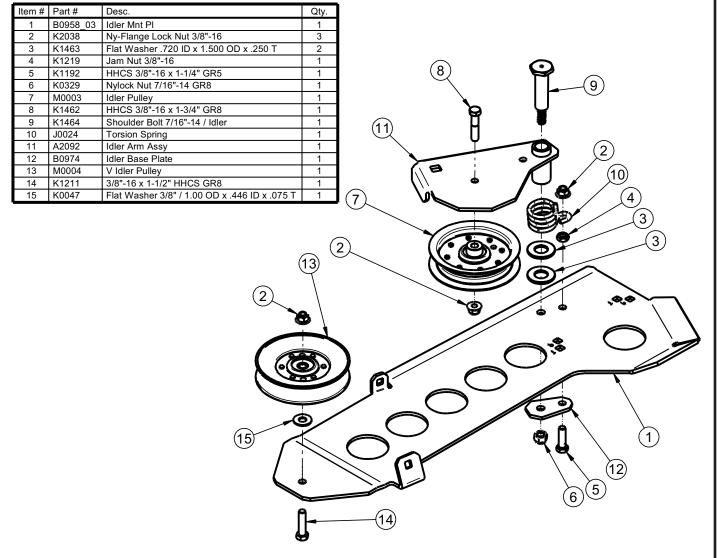


#### **A2092 Idler Arm Assembly**



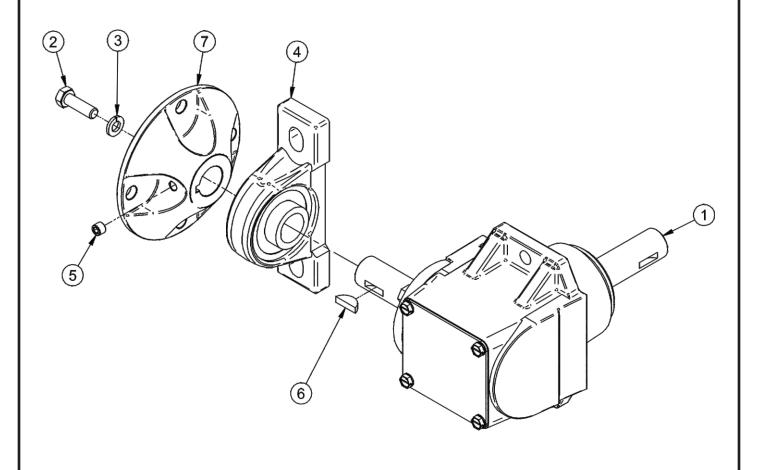
Item #	Part #	Desc.	Qty.
1	A2070_01	Idler Arm Weldment	1
2	K1467	Flat Washer M6 x 12mm OD	1
3	J0801	1/4"-28 Zirc Fitting	1

#### A2067\_03 Idler Mount Assembly



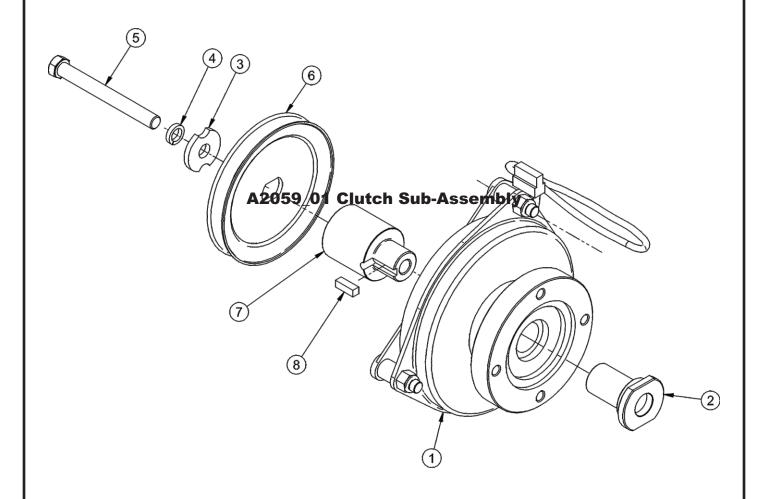
#### **A2058 Gearbox Sub-Assembly**

Item#	Part #	Desc.	Qty.
1	M0002	Gearbox	1
2	K0428	HHCS 5/16"-24 x 1" GR8	1
3	K0043	Lock Washer 5/16"	1
4	N0002	Pillow Block Bearing 7/8"	1
5	K0035	Set Screw 5/16"-18 x 1/4" Cup Point	1
6	J0272	Woodruff Key #9	1
7	A2048	Clutch Flange	1



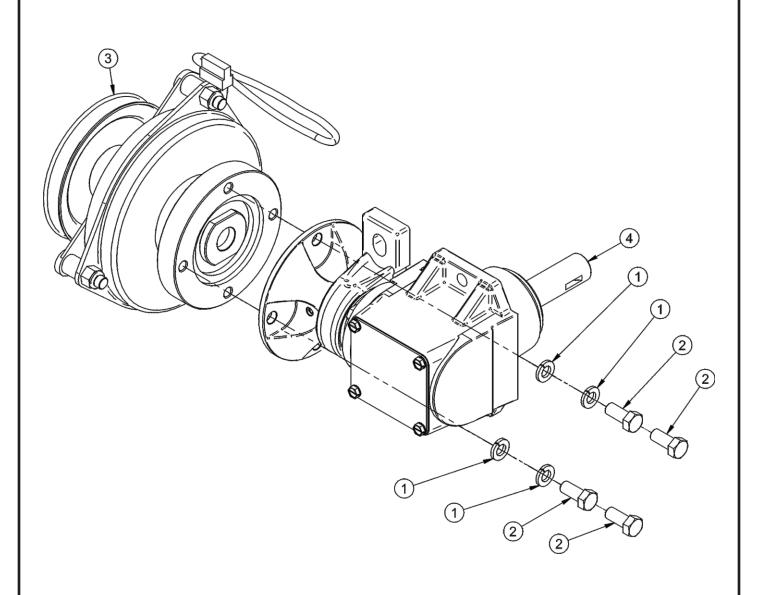
#### A2059\_01 Clutch Sub-Assembly

Item #	Part#	Desc.	Qty.
1	M0001	Electric Clutch	1
2	S0007	Clutch Shaft	1
3	K0278	Double Indented Washer 7/16" / 1.375 OD x .440 ID x .179 T	1
4	K0140	Lock Washer 7/16" / High-Collar Helical Spring	1
5	K0359	HHCS / 7/16"-20 x 3.50" w/ Patch	1
6	M0309	A-Section Pulley / 4.75 OD (PTO-X)	1
7	S0221	Eng. Pulley Bushing #27	1
8	K0076	Key 1/4" x 3/4" Long	1



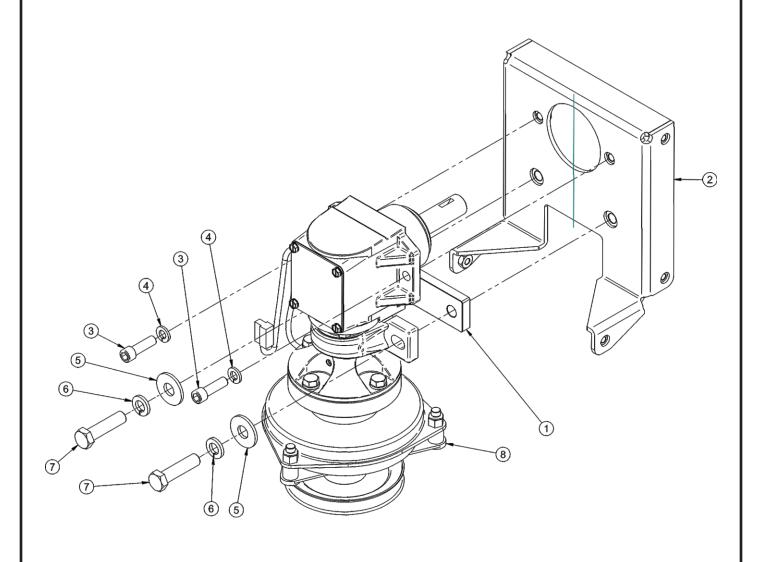
#### A2057\_01 Drive Assembly Exploded Parts View

Item #	Part #	Desc.	Qty.
1	K0048	Lock Washer 3/8"	4
2	K0343	HHCS 3/8"-16 x 7/8" GR8	4
3	A2059_01	Clutch Sub-Assy	1
4	A2058	Gearbox Sub-Assy	1



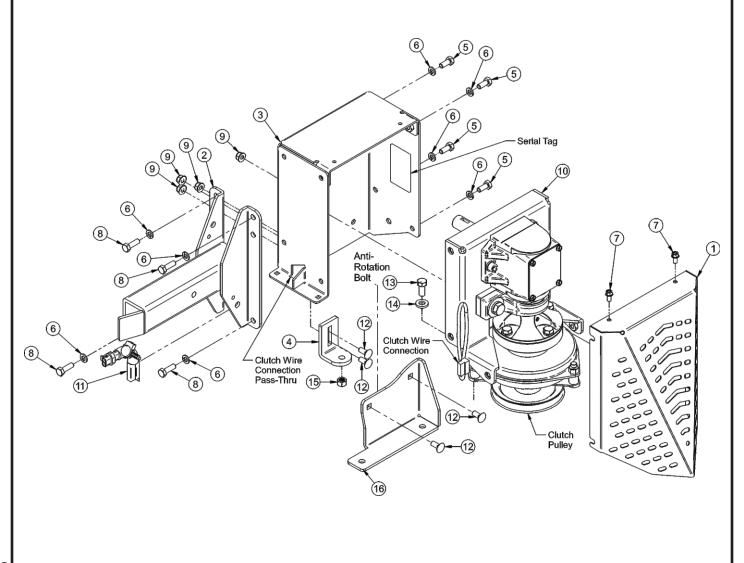
#### A2060\_01 Mounted Drive Assembly

Item#	Part #	Desc.	Qty.
1	B0940	Spacer Plate	1
2	A2034	Drive Mnt Assy	1
3	K0309	3/8"-16 x 1-1/4" SHCS	2
4	K0048	Lock Washer 3/8"	2
5	K0055	Flat Washer 1/2" / 1.383 OD x .560 ID x .120 T	2
6	K0056	Lock Washer 1/2"	2
7	K1234	HHCS 1/2"-13 x 2"	2
8	A2057_01	Drive Assy	1



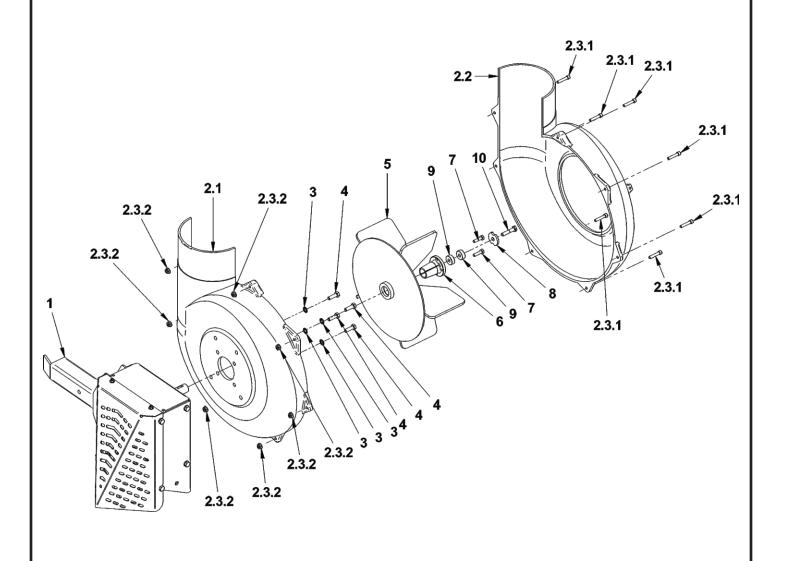
#### A2039\_02 Base Drive Assembly

Item #	Part #	Desc.	Qty.
1	B0938_01	Drive Guard	1
2	A2032	Drive Arm Assy	1
3	A2035_02	Housing Mnt Assy	1
4	B0942_02	Anti-Rotation Brkt	1
5	K1153	HHCS 5/16"-18 x 3/4"	4
6	K0043	Lock Washer 5/16"	8
7	K0353	HWHTCS 1/4"-20 x 1/2"	2
8	K1154	HHCS 5/16"-18 x 1"	4
9	K2516	Ny-Flange Lock Nut 5/16"-18	4
10	A2060_01	Mounted Drive Assy	1
11	P0271	Quick Connect Wire Harness	1
12	K1142	5/16"-18 x 3/4" Carriage Bolt	4
13	K0343	HHCS 3/8"-16 x 7/8" GR8	1
14	K1477	Flat Washer / 3/8" / .406 ID x .812 OD x .125 Thk	1
15	K1476	Reverse Lock Nut / 3/8"-16 Grade C	1
16	B1100	Idler Assy Mount Plate	1



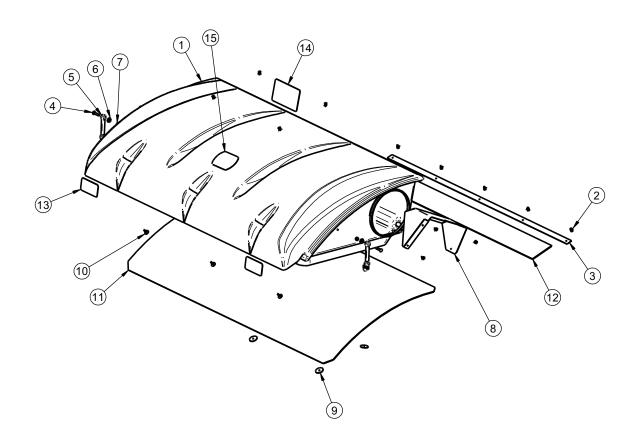
#### A2072\_01 Drive Assembly / 5 Blade Impeller

Item #	Part #	Desc.	Qty.
1	A2039_02	Drive Assy / Base	1
2	E5007A	Blower Housing Assembly	1
2.1	E5007B	Blower Hsg Back	1
2.2	E5007F	Blower Hsg Front	1
2.3	HB0275	HW Bag / E5007A Housing	1
2.3.1	K1402	1/4"-20 x 1-1/4" SHCS / Zinc / GR8	7
2.3.2	K1126	Flange Nut 1/4"-20	7
3	K0044	I/T Tooth Lock Washer 5/16"	4
4	K1154	HHCS 5/16"-18 x 1"	4
5	A0644	5-Blade / Impeller	1
6	S0157	Taperlock Bushing 7/8"	1
7	K1225	HHCS 1/4"-20 X 1" GR8	2
8	K0284	Double Indented Washer 3/8" / 1.375 OD x .380 ID x .179 T	1
9	S0159	Spacer Bushing .938 OD x .325 ID x .375 T	2
10	K1465	HHCS 5/16"-24 x 1-1/2" GR8	1



# A2081 Top Assembly Exploded Parts View

Item #	Part #	Desc.	Qty.
1	V0022	PRO 3 BAGGER TOP	1
2	K0114	Black Plastic Rivet	13
3	C0069	Dust Guard Brace	1
4	K1030	1/4"-20 x 1-1/4" Carriage Bolt	2
5	J4009	Short Rubber Strap w/ S-Hook	2
6	K0037	Flat Washer / 1/4" (.75 OD x .312 ID x .060 T)	2
7	K1128	1/4"-20 Nyloc Nut	2
8	C0026	Grass Deflector	1
9	K0062	3/16" x 1-1/2" Fender Washer, Z	3
10	K1265	Black Panel Retainer	3
11	V1120	Black Plastic Screen	1
12	V1118	DUST GUARD	1
13	R1057	2" x 4" Red Reflector Label	2
14	R1065	Made In America Decal	1
15	R0023	Decal / Cub Cadet 'C'	1



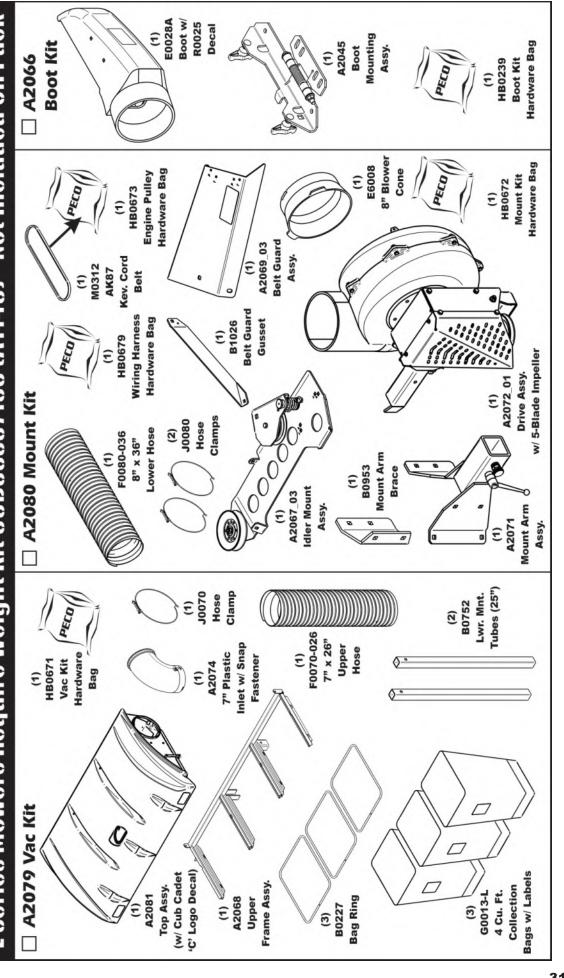
# 509 M N Unit Model #: **59A30047150**

Mower & Type: Cub Cadet Pro Z 500, 700 & 900 Series

Mower Models: Pro Z 554L, Pro Z 560L, Pro Z 554S, Pro Z 560S, Pro Z 760L, Pro Z 760S, Pro Z 960L & Pro Z 960S

Vac/Drive Type: P3B (15 Cu. Ft.) PTO-X Driven Revision #:2 - New PTO-X Drive Assy - XY Oct 2020 | Fits Year(s): 2016 & Newer Owner's Manual: Q0507

# L Series Mowers Require Weight Kit 59B30037150 (A1149) - Not Included On Pack



#### SAFETY DECALS

To promote safe operation, New 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# R0023 Cub Cadet Logo



Part# R0022 Designed & Built In The USA



TO CLEAR DEBRIS WITH BLOWER RUNNING!

PELIGRO NUNCA USE MANOS
PARA LINPIAR BASURA CON LA
HOJA EN MARCHA!

Part #: R2007 Danger - Never Use Hands

FINGER ROTATING BLADES!
FINGERS, HANDS, & BODY PARTS
CAN BE SEVERED!

PELIGRO HOJA ROTANTE!
DEDOS, MANOS Y PARTES DEL
CUERPO PUEDAN SER CORTADOS!



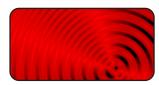
Part #: R2008 Danger - Rotating Blades

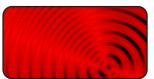
#### **IMPORTANT**

Hoses are subject to normal wear and deterioration. Check hoses frequently and if they become defective, install new hoses.

For best collection results, trim hoses so there are no more than 2 inches excess hose with mower deck lowered.

Part #: R1054 Important - Hose Wear





Part #: R1057 - (2) Red Reflectors



Part #: R1069 Warning - Turn Off Blower



Part # R0024 Danger - Keep Hands Clear



Part #: R1051 Warning - Hearing Protection



Part # R0025 Danger - Rotating Blades

## SECTION III OPERATING INSTRUCTIONS

#### **General Safety**

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

#### **Operation And Tips On Mowing**

- A. Perform BEFORE EACH USE the maintenance list referenced in Section IV.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. While seated in the operator's seat, move Bagger PTO switch to the on position. 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, 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.

#### **Disengagement Of The PTO Assembly**

A. To disengage the PTO assembly, move Bagger PTO switch to the off position.

**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 the Belt Installation section of the manual.

#### **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 overfilled as potential damage may occur to your equipment. Also, be sure to clean the hood screen as needed.

# SECTION IV MAINTENANCE

#### **Maintenance Checklist**

Before each use:

- Check blades and spindles to be sure that no foreign objects, such as wire or steel strapping bands, are wrapped around them.
- 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 instructions.
- 5. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
- 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:

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

#### Lubrication

Gearbox:

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

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

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

Blower Assembly:

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

#### **Parts And Service Information**

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

THE SERIAL NUMBER PLATE IS LOCATED ON THE TOP ASSEMBLY  WRITE THE MODEL AND SERIAL NUMBER IN THE BOX TO THE LEFT FOR FUTURE REFERENCE.

<b>Dealer/Distributor Name:</b>	
<b>Date of purchase:</b> /	
Unit Serial Number:	
Unit Engine Size:	

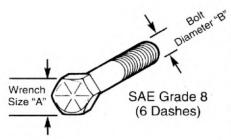
#### **TORQUE SPECIFICATIONS**

#### **AMERICAN**

**Bolt Head Markings** 

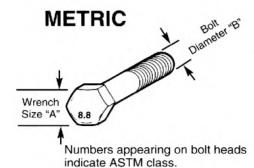






Proper toque for American fasteners used on Peco equipment. Recommended Torque in Foot Pounds (Newton Meters).\*

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)



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

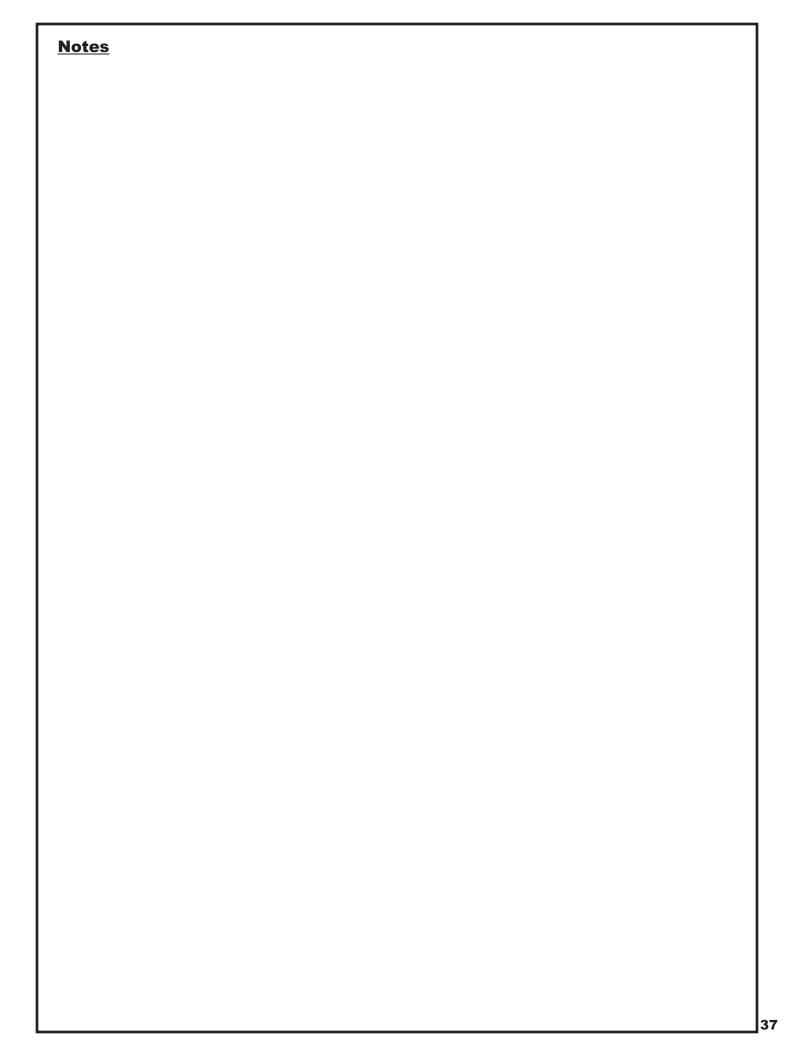
Proper torque for metric fasteners used on Peco equipment.

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

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	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

# Troubleshooting Collection System Performance

Problem	Possible Cause	Corrective Action			
	Cutting blades are bent or unbalanced	Install new cutting blade			
Abnormal Vibration	Loose blower pulley or pulley assembly	Tighten the pulley			
	Impeller blade out of balance	Contact dealer to replace			
	Low engine speed	Always operate collection system at full throttle			
Reduced collection system performance	Plugged screen	Remove debris, leaves, or grass clippings from the screen			
·	Loose belt	Replace/tighten belt			
	Full collection bags	Empty the collection bags			
	Collection bags are too full	Dump more frequently			
	Low engine speed	Always operate collection system at full throttle			
	Grass is too wet	Cut grass when it is dry			
Blower and hoses plugging too frequently	Grass is too long	Cut the grass several times			
	Ground speed is too fast	Drive slower at full throttle			
	Worn belt	Replace belt			
	Loose belt	Adjust the pulley and tighten belts			
	Collection bags are too full	Dump more frequently			
Debris blowout	Plug/clog in the collection	Clean the collection system			
	<ul><li>system</li><li>Ground speed is too fast</li></ul>	Drive more slowly at full throttle			
	Plug in the blower housing	Clean the blower housing			
Impeller doesn't rotate freely	Worn impeller blade	Contact dealer to replace			
	Shaft bearings bad/failing	Contact dealer to replace			





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