

# PTO-X DRIVEN - GRASS COLLECTION SYSTEM Model# 49651202

COUNTRY Charges

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Charger 8000 & Boss XL 9000 Mower Year: 2021

Charger 8005 & Boss XL 9005 Mower Year: 2022-Newer



# **OPERATOR'S MANUAL**

ASSEMBLY • OPERATION • MAINTENANCE

MANUAL PART#: Q0575

Rev.3 - Sep 2022

# **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 vou 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



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** 



Black letters on **YELLOW** 

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

This signal word indicates a potentially hazardous situation which, if not

It may also be used to alert against unsafe practices.

avoided, will result in minor or moderate injury.

It may also be used to alert against unsafe practices.

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### 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.
- 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: <u>https://www.briggsandstratton.com/na/en\_us/support/warranty.html</u>
- 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 <u>www.lawnvac.com</u> or contact our Sales Department at New PECO, Inc. 800-438-5823 or email <u>Sales@lawnvac.com</u>. 2020

# **Section I - INTRODUCTION AND DESCRIPTION**

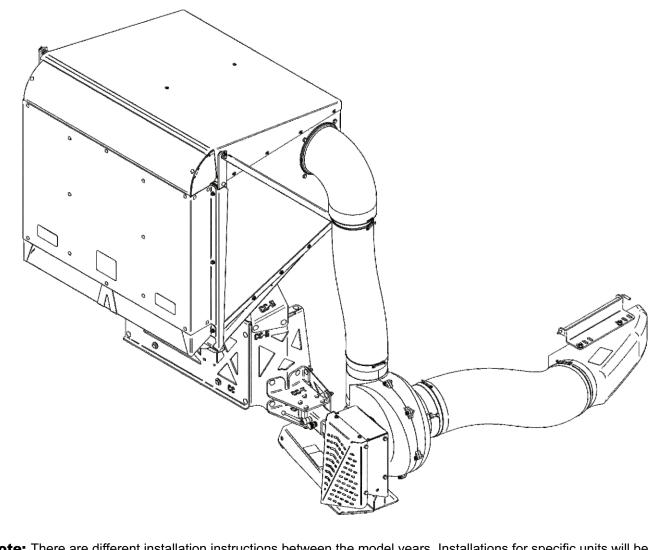
#### Introduction

We are pleased to have you as a 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, operate and maintain 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.

#### 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 collection unit at the rear portion of the mower frame. The operator can engage the blower with a toggle Switch mounted on the right side of the operator. Once the collection unit is full with clippings, it can be easily released for dumping.



**Note:** There are different installation instructions between the model years. Installations for specific units will be specified under the current section heading or where needed as:

MY2021 or MY2022

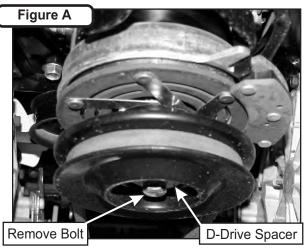
<u>MY2021</u> & <u>MY2022</u> will also share similar installation instructions. These instructions will not have any specification under the section heading.

# **Section II - INSTALLATION FOR USE**

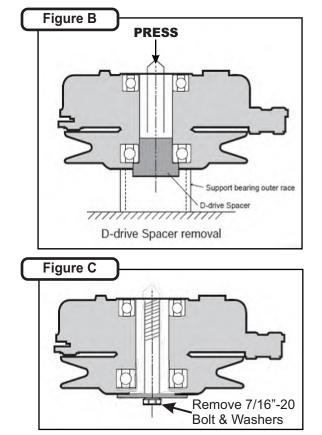
#### **Preparation Of Mower**

**NOTE:** The mower deck PTO belt must be removed from the electric clutch before continuing with the installation. Refer to your mower's owner's manual for instructions on PTO belt removal.

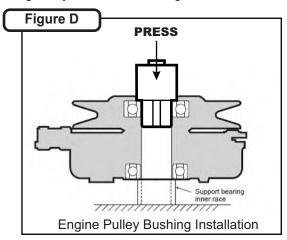
From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Refer to Figure A.



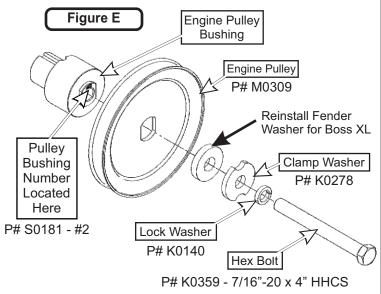
Upon removal of clutch determine if your mower is equipped with a D-drive spacer. If so, then proceed to Figure B. If your mower is equipped with bolt, fender and lock washer without D-drive spacer proceed to Figure C. Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer to Figure B.



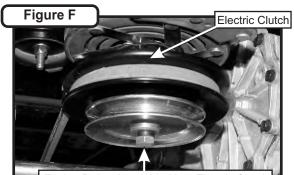
The engine pulley assembly must be installed using an arbor press or equivalent. During installation, opposite bearing inner race must be supported or bearing damage may occur. Refer to Figure D.



Once the Engine Pulley Bushing is installed, reattach the clutch assembly & deck PTO belt to the mower and then review Figure E.



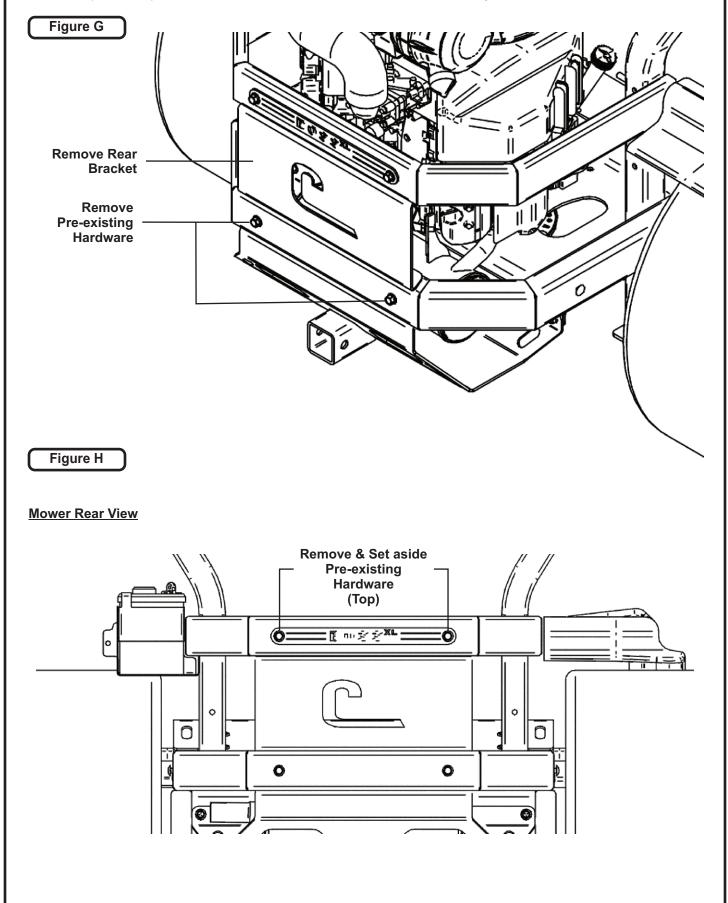
To assemble and fasten the Engine Pulley, align the Engine Pulley Bushing to the mower's clutch pulley and fasten using (1) Clamp Washer, (1) Lock Washer, and (1) Hex Bolt. Torque the bolt to 55 ft./lbs. For **Boss XL** units, reinstall the Fender Washer that was removed during the initial process. The added pulley will power the collection system and should resemble Figure F when installed.



Engine Pulley Assembled Into Electric Clutch

#### **Preparation of Mower (Continued)**

Before the installation of your unit, you will need to remove your mower's rear bracket along with the hardware holding it in place, see Figure G. Set the top set of hardware aside, see Figure H.



#### **Rear Frame Bracket Installation**

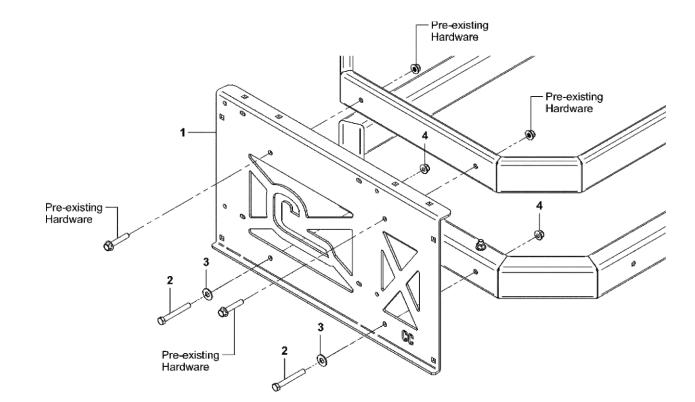
To install the Rear Frame Bracket (Item #1) align the mount holes of the Rear Frame Bracket to those on the Mower's rear frame, see the figure below.

MY2021

Secure the Rear Frame Bracket by using the (2) previously removed hardware along the top of the Rear Frame Bracket, (2) 3/8"-16 x 2-3/4" HHCS (Item #2), (2) 3/8" Flat Washers (Item #3) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #4) along the bottom of the Rear Frame Bracket. See the Figure below.



| Item # | Part # | Desc.   | Qty. |
|--------|--------|---|------|
| 1      | B2073  | Rear Frame Brkt.                              | 1    |
| 2      | K1021  | 3/8"-16 X 2-3/4" HHCS                         | 2    |
| 3      | K0047  | Flat Washer 3/8" / 1.00 OD x .446 ID x .075 T | 2    |
| 4      | K2038  | Ny-Flange Lock Nut 3/8"-16                    | 2    |



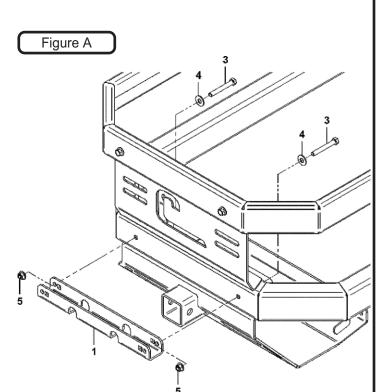
# Rear Frame Bracket Installation (Cont.)

Before installing the Rear Frame Bracket (Item #2) for the MY2022 unit, a Frame Spacer (Item #1) would need to first be installed.

Position the Frame Spacer's (Item #1) mount holes to those on the Mower's rear frame, see Figure A below. Secure the Frame Spacer by using (2) 3/8"-16 x 2-3/4" HHCS (Item #3), (2) 3/8" Flat Washers (Item #4) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #5).

Once the Frame Spacer has been installed, align the mount holes of the Rear Frame Bracket (Item #2) to those on the Mower's rear frame, see Figure A below. Secure the Rear Frame Bracket by using the (2) sets of previously removed hardware along the top of the Rear Frame Bracket, (2) 3/8"-16 x 1" HHCS (Item #6), and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #5) along the bottom of the Rear Frame Bracket.

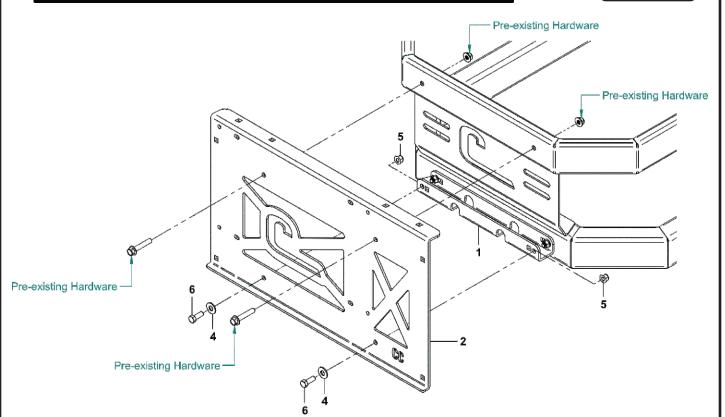
Note: Some parts and part features have been hidden from view for visual clarity.



**MY2022** 

Figure B

| Item # | Part # | Desc.   | Qty. |
|--------|--------|---|------|
| 1      | B2205  | Frame Spacer / Boss XL 2020                   | 1    |
| 2      | B2073  | Rear Frame Brkt.                              | 1    |
| 3      | K1021  | 3/8"-16 X 2-3/4" HHCS                         | 2    |
| 4      | K0047  | Flat Washer 3/8" / 1.00 OD x .446 ID x .075 T | 4    |
| 5      | K2038  | Ny-Flange Lock Nut 3/8"-16                    | 4    |
| 6      | K1191  | HHCS 3/8"-16 x 1" GR5                         | 2    |



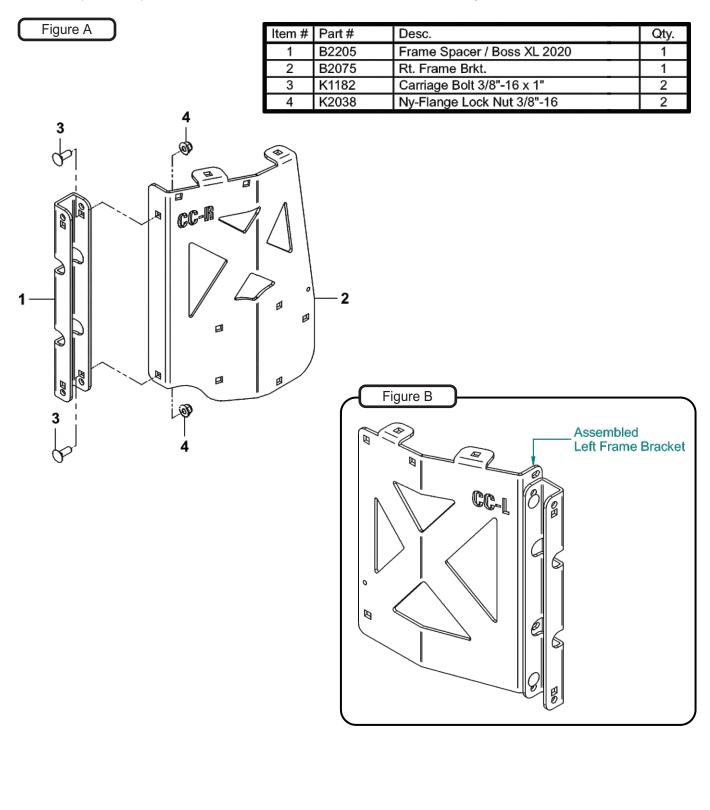
#### Side Frame Spacer Installation

Before the Installation of the Left Frame Bracket P#(B2074) & Right Frame Bracket P#(B2075), pre install (1) Frame Spacer (Item #1) to each Bracket as shown in the Figures below.

**MY2022** 

To install the Frame Spacer (Item #1), align the bolt holes of the Frame Spacer to the side bolt holes of the Right Frame Bracket (Item #2) as shown in Figure A. Secure the Frame Spacer by using (2) 3/8"-16 x 1" Carriage Bolts (Item #3) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #4).

Repeat the steps for the Left Frame Bracket, see Figure B.

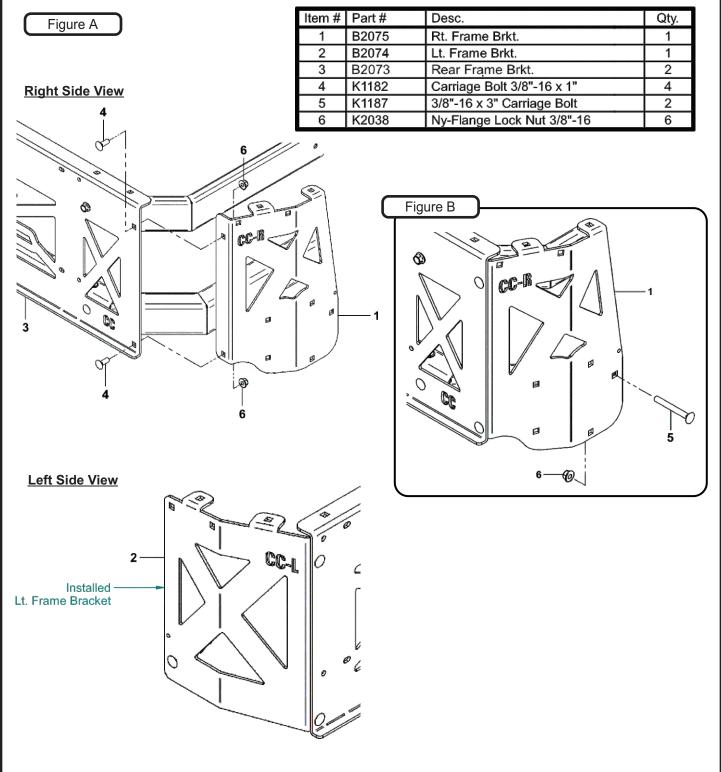


#### **Right & Left Frame Bracket Installation**

To install the Right Frame Bracket (Item #1) align and position the (2) mount holes located on the upright tab of the Right Frame Bracket (Item #1) to those located on the right side of the Rear Frame Bracket (Item #3). Secure the Right Frame Bracket, relatively loosely, by using (2) 3/8"-16 x 1" Carriage Bolt (Item #4) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #6). Refer to Figure A.

Once secured to the Rear Frame Bracket (Item #3), secure the Right Frame Bracket (Item #1) to the Mower by using (1) 3/8"-16 x 3" Carriage Bolt (Item #5) and (1) 3/8"-16 Ny-Flange Lock Nut (Item #6). See Figure B. Tighten All hardware at this time.

Repeat the same procedures for the installation of the Left Frame Bracket (Item #2), see Figure A.

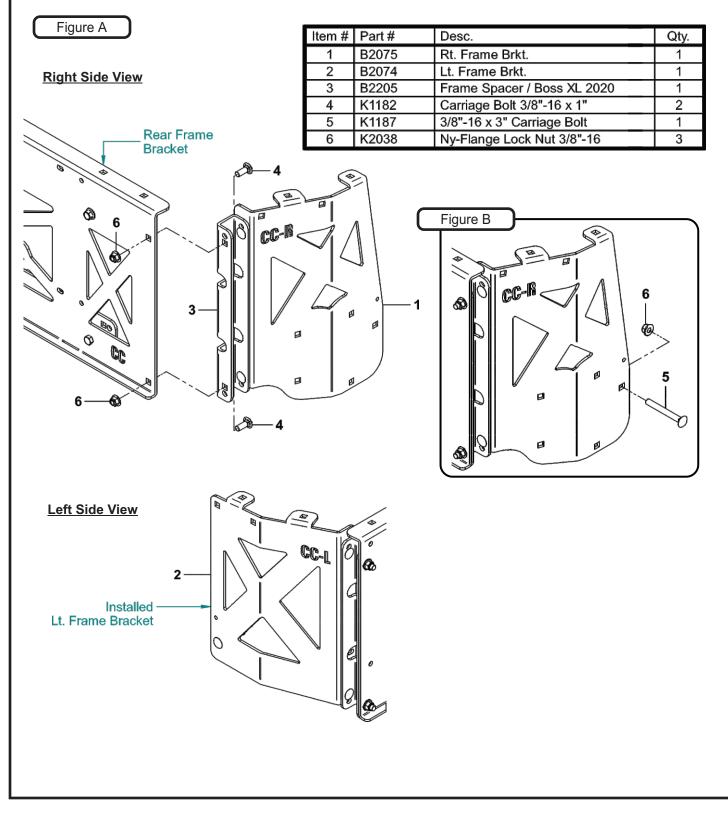


#### Right & Left Frame Bracket Installation (Cont.)

To install the pre-installed Right Frame Bracket (Item #1) from the previous step, align and position the (2) mount holes located on the Frame Spacer (Item #3) of the pre-installed Right Frame Bracket to those located on the right of the Rear Frame Bracket. Secure the Frame Spacer, relatively loosely, by using (2) 3/8"-16 x 1" Carriage Bolt (Item #4) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #6). Refer to Figure A.

Once secured to the Rear Frame Bracket, secure the Right Frame Bracket to the Mower by using (1) 3/8"-16 x 3" Carriage Bolt (Item #5) and (1) 3/8"-16 Ny-Flange Lock Nut (Item #6). See Figure B. Tighten All hardware at this time.

Repeat the same procedures for the installation of the pre-installed Left Frame Bracket (Item #2). See Figure A.



MY2022

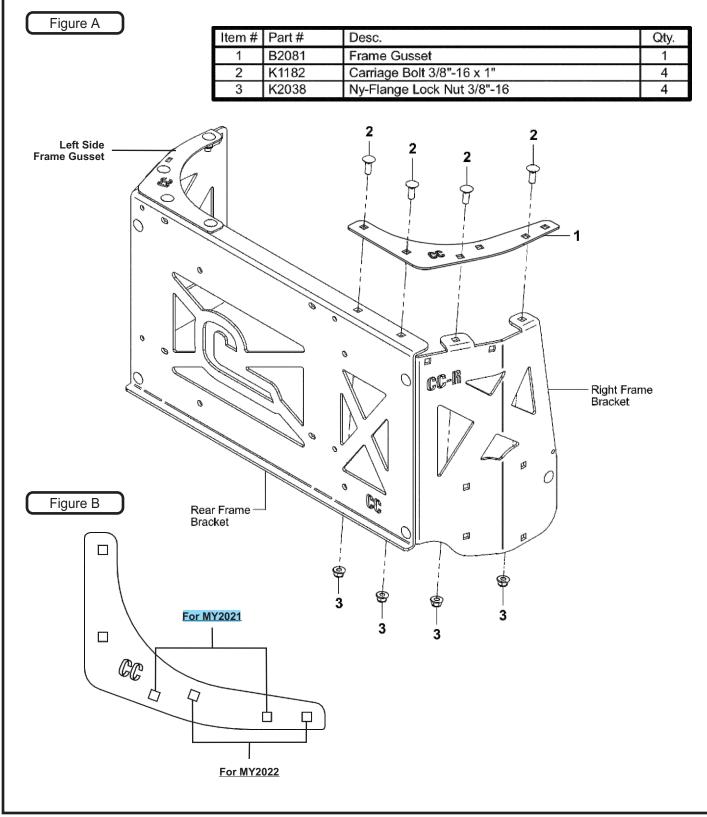
#### **Frame Gusset Installation**



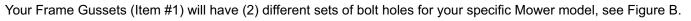
Your Frame Gussets (Item #1) will have (2) different sets of bolt holes for your specific Mower model, see Figure B.

To install the Frame Gusset (Item #1) on the right side, align and position the mount holes of the Frame Gusset over the mount holes located on the top right of the Rear Frame Bracket and the top of the Right Frame Bracket. Secure the Frame Gusset, relatively loosely, by using (4) 3/8"-16 x 1" Carriage Bolt (Item #2) and (4) 3/8"-16 Ny-Flange Lock Nuts (Item #3). Refer Figure A below.

Repeat the same procedures to install the left side Frame Gusset. Once installed, tighten at this time.



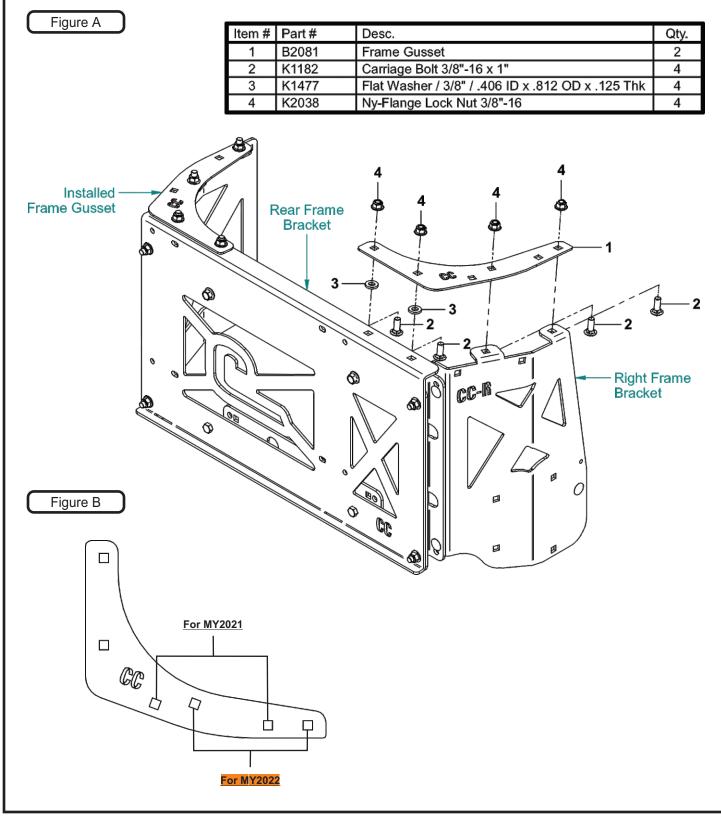
#### Frame Gusset Installation (Cont.)



**MY2022** 

To install the Frame Gusset (Item #1) on the right side, align and position the mount holes of the Frame Gusset over the mount holes located on the top right of the Rear Frame Bracket and the top of the Right Frame Bracket. Secure the Frame Gusset, relatively loosely, by using (4) 3/8"-16 x 1" Carriage Bolt (Item #2), (2) 3/8" Flat Washers (Item #3) and (4) 3/8"-16 Ny-Flange Lock Nuts (Item #4). Refer Figure A below.

Repeat the same procedures to install the left side Frame Gusset. Once installed, tighten at this time.

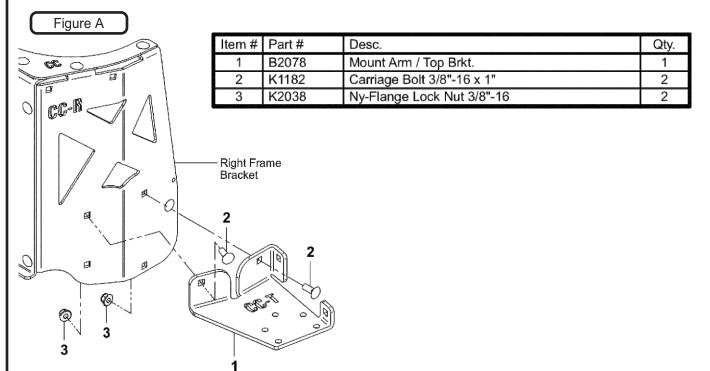


#### Mount Arm / Top Bracket Installation

To install the Mount Arm / Top Bracket (Item #1) align the bolt holes to those on Right Frame Bracket. Secure the Mount Arm / Top Bracket, relatively loose, by using (2) 3/8"-16 x 1" Carriage Bolts (Item #2) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #3). Refer to Figure A.

Keep the hardware relatively loose until after the installation of the Mount Arm / Gusset.

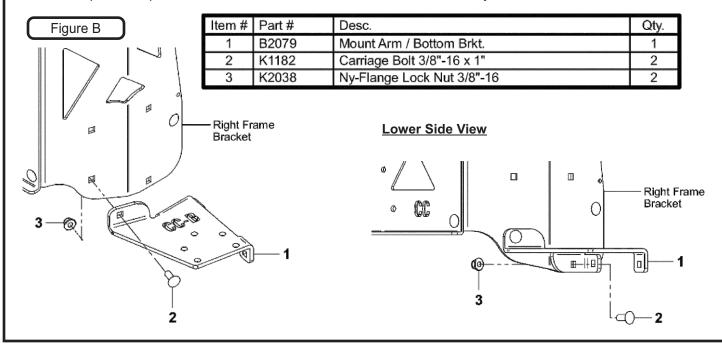
Note: Some parts and part features have been hidden from view for visual clarity.



#### **Mount Arm / Bottom Bracket Installation**

To install the Mount Arm / Bottom Bracket (Item #1) align the bolt holes to those on Right Frame Bracket. Secure the Mount Arm / Bottom Bracket, relatively loose, by using (2) 3/8"-16 x 1" Carriage Bolts (Item #2) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #3). Refer to Figure B.

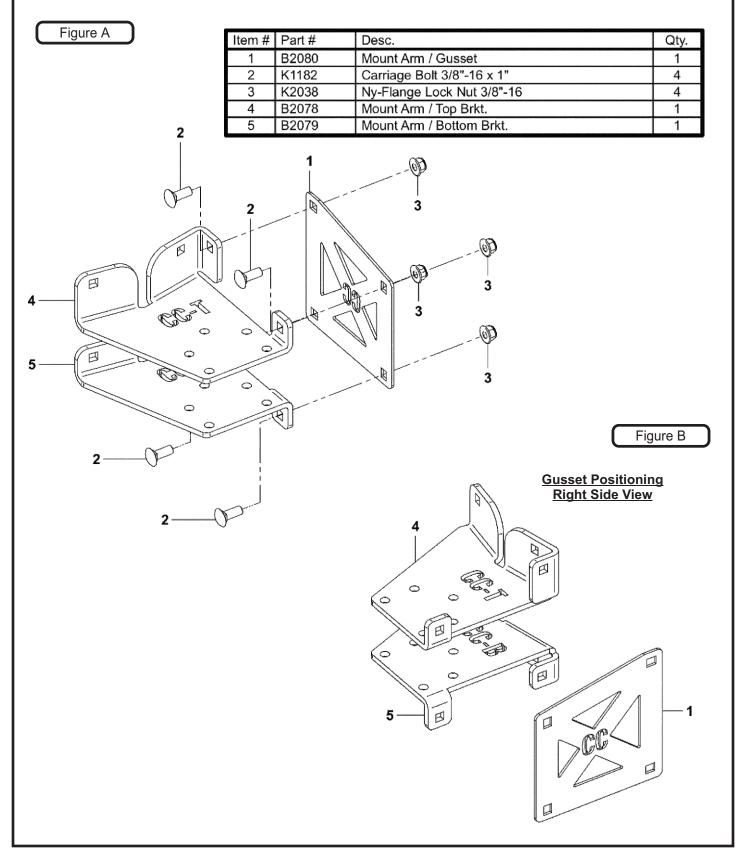
Keep the hardware relatively loose until after the installation of the Mount Arm / Gusset.



#### Mount Arm / Gusset Installation

After the installation of the Top (Item #4) and Bottom (Item #5) Mount Arm Brackets align the Mount Arm / Gusset (Item #1) mount holes to those located on the side of both Top and Bottom Mount Arm Brackets, refer to Figure B. Secure the Mount Arm / Gusset by using (4) 3/8"-16 x 1" Carriage Bolts (Item #2) and (4) 38"-16 Ny-Flange Lock Nuts (Item #3). Refer to Figure A.

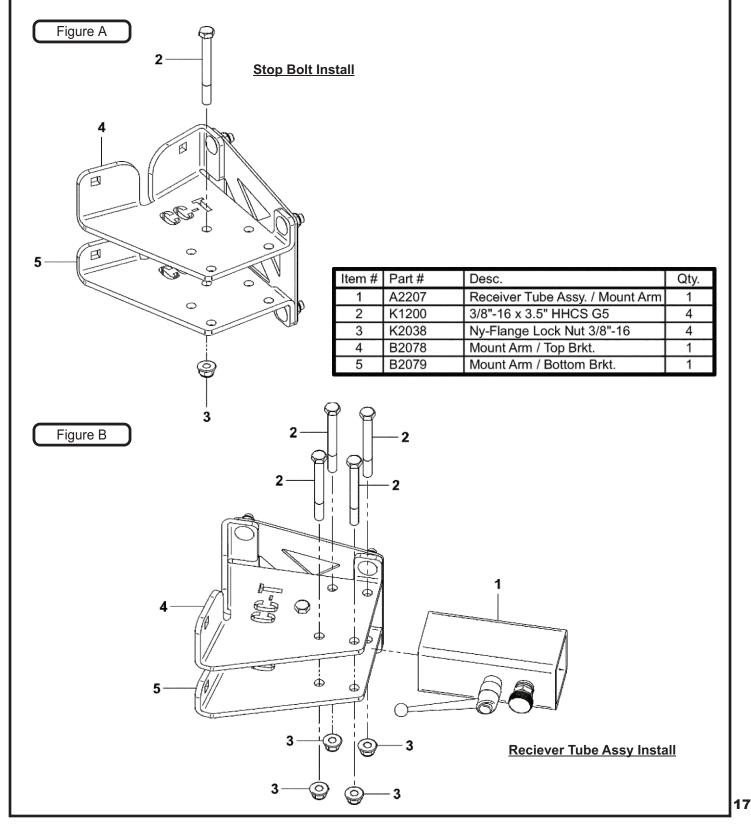
Tighten all hardware at this time.



#### Mount Arm / Tube Assembly Installation

First, use (1) 3/8"-16 x 3-1/2" HHCS (Item #2) and (1) 3/8"-16 Ny-Flange Lock Nut (Item #3) to install a stop bolt between both the Top / Mount Arm (Item #4) and Bottom / Mount Arm (Item #5). See Figure A. This will help with the installation of the Mount Arm / Receiver Tube Assy (Item #1).

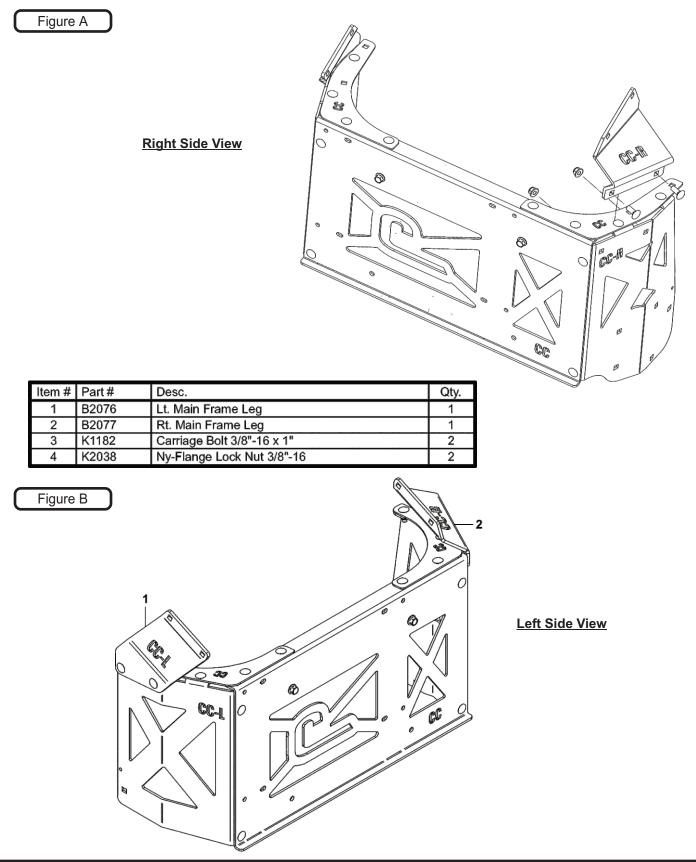
Insert the Receiver Tube Assy (Item #1) in between the Top & Bottom Mount Arms using the Stop Bolt previously installed as a stopping point. Position the Receiver Tube between the (2) sets of bolt holes on the left and right side. Secure the Receiver Tube Assy by using (4) 3/8"-16 x 3-1/2" HHCS (Item #2) and (4) 3/8"-16 Ny-Flange Lock Nuts (Item #3), refer to Figure B.



#### **Main Frame Leg Installation**

To Install the Right Main Frame Leg (Item #2), align the (2) lower bolt holes to those one the top Right Frame Bracket. Secure the Right Main Frame Leg by using (2) 3/8"-16 x 1" Carriage Bolts (Item #3) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #4). Leave the hardware relatively loose. Refer to Figure A.

Repeat the procedure to the Left Main Frame Leg (Item #1) onto the Left Frame Bracket.

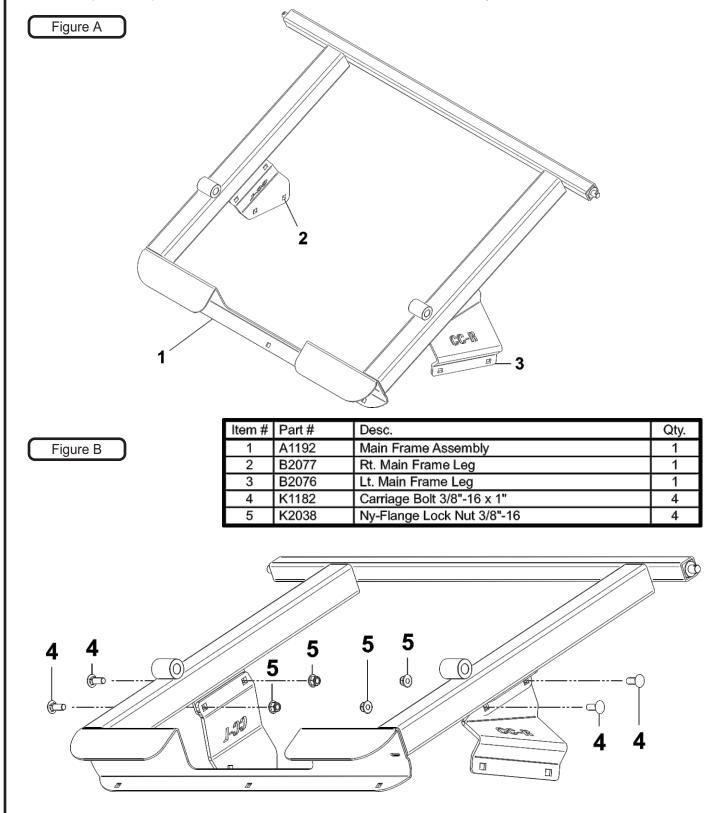


#### **Main Frame Assembly Installation**

It is recommended to have another person assist in the installation of the Main Frame Assembly (Item #1).

To install the Main Frame Assy (Item #1), position the Main Frame Assy so that both the Rt. Main Frame leg (Item #2) and the Lt. Main Frame leg (Item #3) is in between the Main Frame Assy, refer to Figure A.

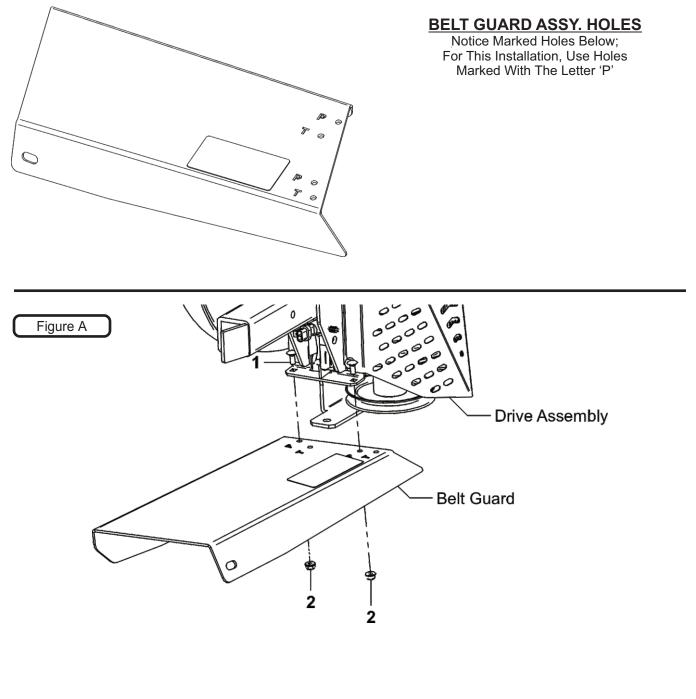
Next, align the bolt holes of the Main Frame Assy to the Carriage Bolt holes of both the Main Frame Legs. Then secure the Main Frame Assy using (2) 3/8"-16 x 1" Carriage Bolts (Item #4) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #5) PER Leg. Refer to Figure B.



#### **PTO Drive Assembly**

Once the Mount Arm Assembly is installed and secured to the mower, assemble the Drive Assembly P#(A2061\_02), Belt Guard Assembly P#(A2069\_02) & Idler Mount Assembly P#(A2067\_02).

First, attach the Belt Guard Assembly P#(A2069\_02) to the Drive Assembly P#(A2061\_02) 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 A. Leave Bolts Loose.



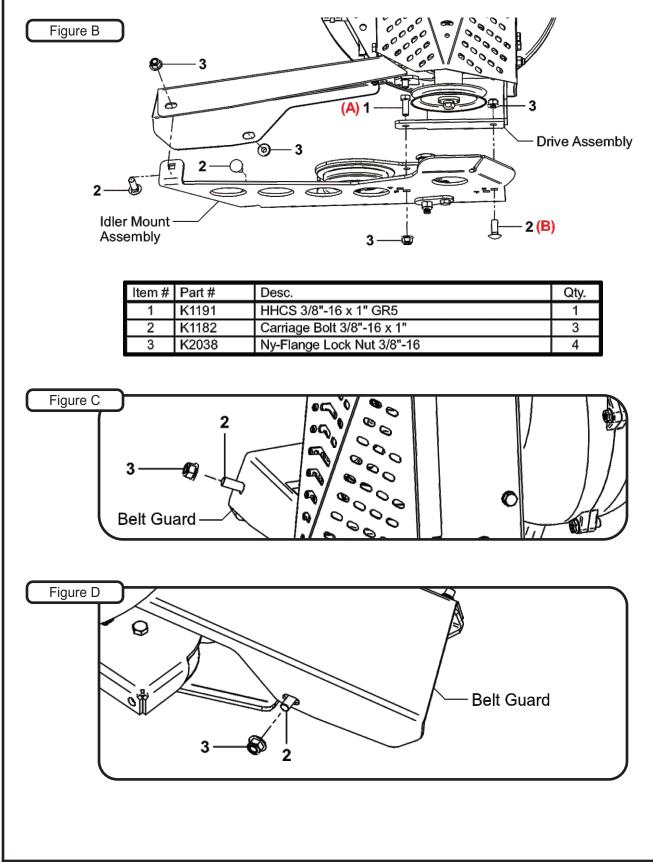
| Item # | Part # | Desc.                        | Qty. |
|--------|--------|------------------------------|------|
| 1      | K1010  | 1/4"-20 x 5/8" Carriage Bolt | 2    |
| 2      | K2014  | 1/4"-20 Ny-Flange Lock Nut   | 2    |

#### **PTO Drive Assembly (Continued)**

Attach the Idler Mount Assembly P#(A2067\_02) to the Drive Assembly using (1) 3/8"-16 x 1" HHCS (A) (Item #1), (1) 3/8"-16 x 1" Carriage Bolt (B) (Item #2) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #3). Refer to Figure B.

Leave Bolts Loose (Note: Orientation of bolts A & B.)

Next, secure the Idler Mount Assembly P#(A2067\_02) to the Belt Guard Assembly P#(A2069\_02) using (2) 3/8"-16 x 1" Carriage Bolts (Item #2) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item #3). Refer to Figures C & D. Tighten All Bolts.

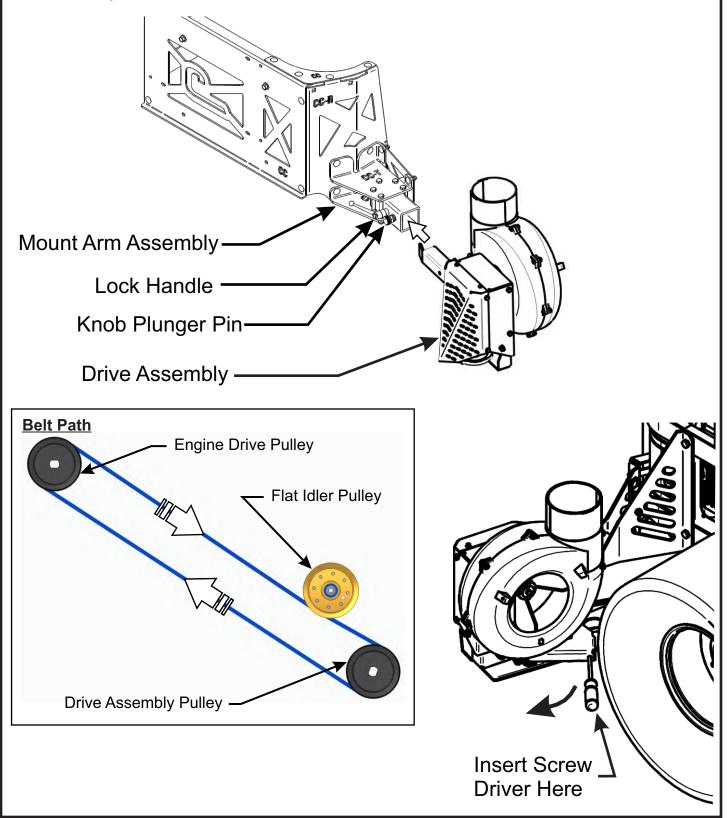


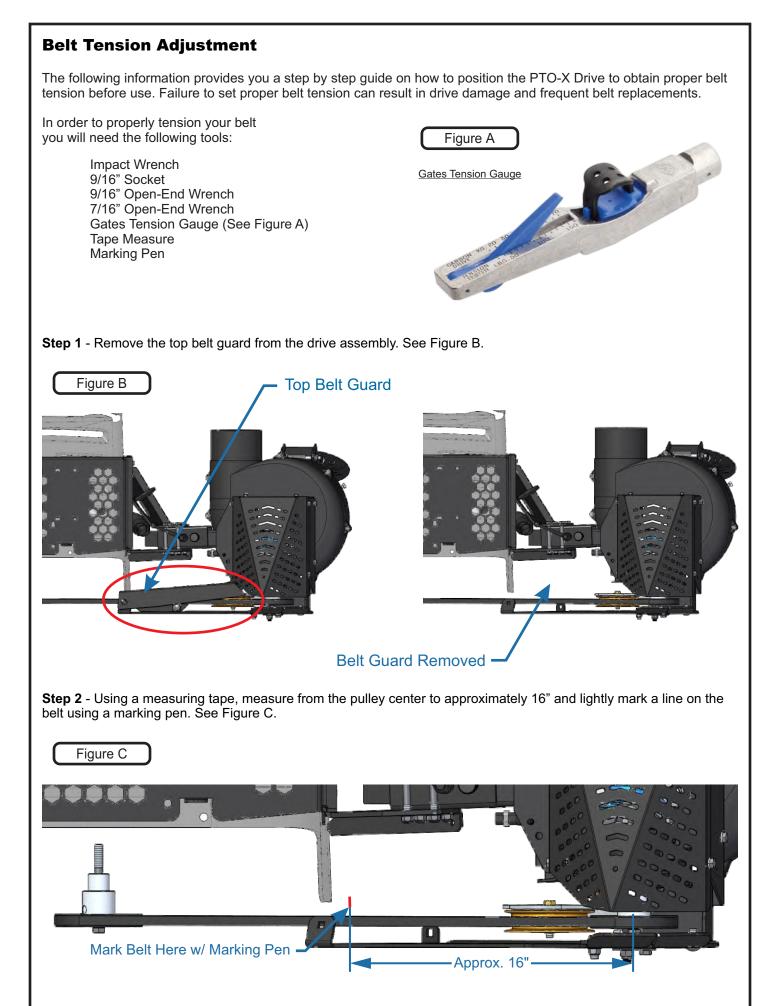
#### **Drive Assembly and Belt Installation**

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 AK81 Belt P#(M0316) 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.





#### **Belt Tension Adjustment (Cont.)**

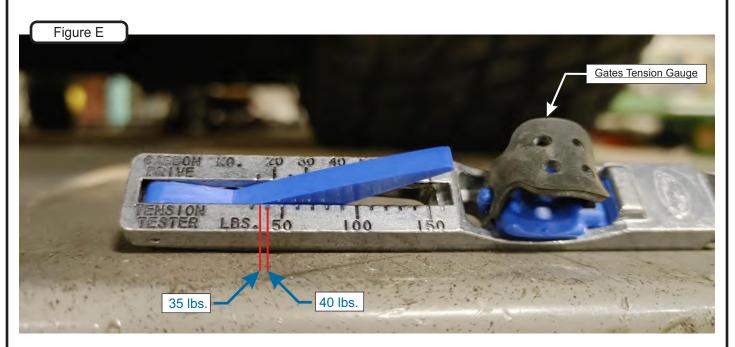
**Step** 3 - Place index finger into the loop on the Gates tension gauge. Position your finger over the line marked previously and keep the lower lip of the gauge below the belt. See Figure D.

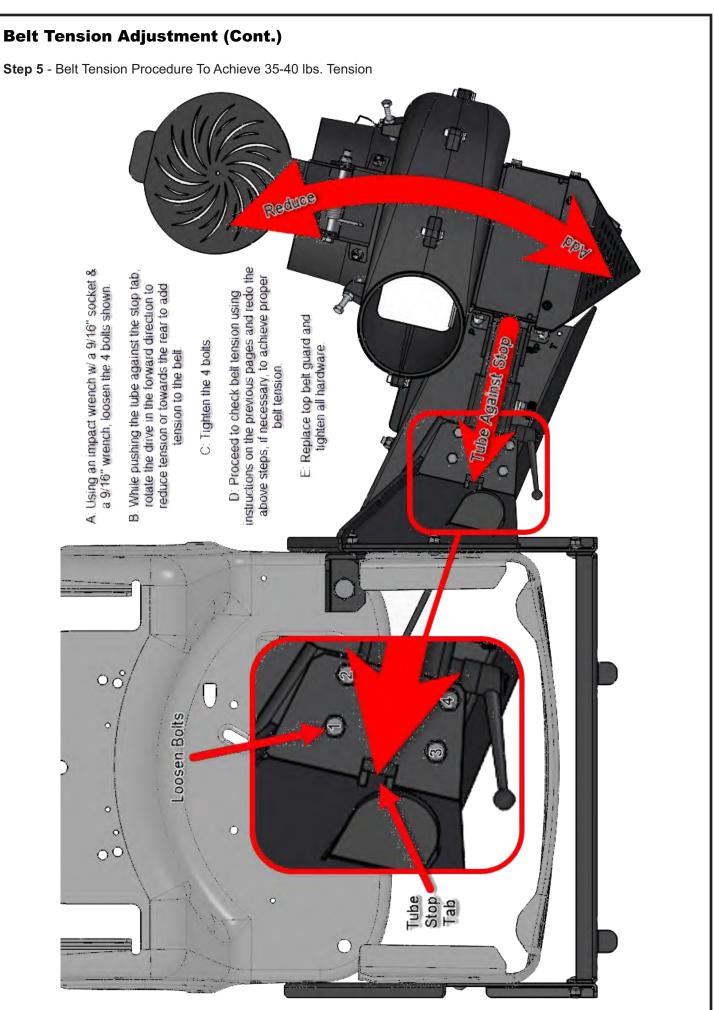
Press inward until you feel a click. Remove the gauge and see the next step on how to determine the reading.



**Step 4** - To determine the tension, position the gauge at an angle to see where the edge of the blue dial intersects with the gauge markings. In Figure E below, the gauge is reading approximately 35 lbs. of tension.

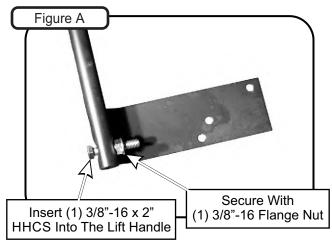
The proper belt tension should measure between 35 lbs. minimum and 40 lbs. maximum. If your reading is within this range, you can replace the top belt guard and forego the next steps.



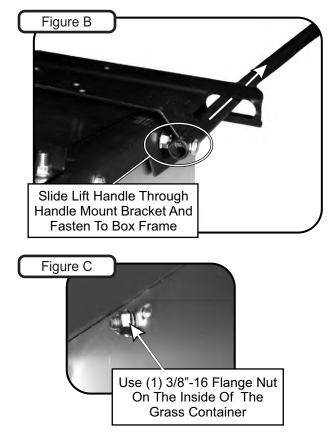


#### Lift Handle Installation

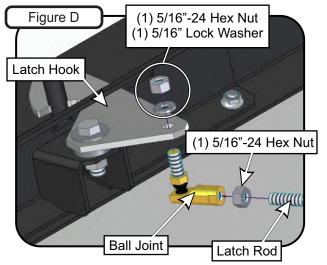
**NOTE:** Before continuing the Lift Handle installation, have someone assist you in turning the Box Assembly upside down. Insert (1) 3/8"-16 x 2" HHCS P#(K1208) into the Lift Handle P#(A0897), and secure with (1) 3/8"-16 Flange Nut P#(K1215). Thread the flange nut onto the bolt upside down, as shown in Figure A. Do not tighten the nut fully at this time.



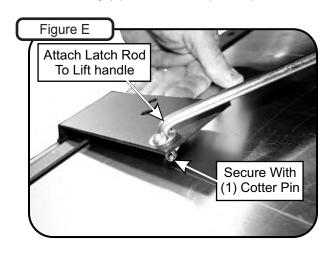
Slide the Lift Handle through the slot on the Handle Mount Bracket. Insert the Lift Handle into the Box Frame as shown in Figure B, and secure using (1) 3/8"-16 Flange Nut P#(K1215) on the inside of the Box as shown in Figure C. Now test the movement of the handle. It should have full-range of movement in the slot. If the handle does not have full-range of movement, adjust the 3/8"-16 Flange Nut from step A. Once achieved, tighten the fasteners.

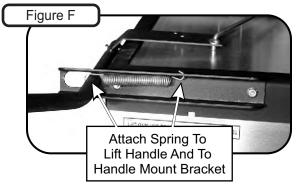


Fasten the Ball Joint P#(K1442) to the end of the Latch Rod P#(A2107). Thread (1) 5/16"-24 Hex Nut P#(K1444) all the way down onto the Latch Rod then tighten the Ball Joint to approximately half-way down the threads on the Latch Rod. Readjust the Hex Nut so it'll be right under the Ball Joint. Attach the Ball Joint to the Latch Hook as shown in Figure D, using (1) 5/16"-24 Hex Nut P#(K1444) and (1) 5/16" Lock Washer P#(K0043).



Attach the other end of the Latch Rod to the Lift Handle, as shown in Figure E. Attach one end of the Spring P#(J0176) to the Lift Handle and the other end of the Spring to the Handle Mount Bracket as shown in Figure F. Adjust the Ball Joint up or down on the Latch Rod threads until the Latch Hook closes completely. After adjusting the Latch Hook, secure the Latch Rod to the Lift Handle using (1) Cotter Pin P#(K0094).





#### **Aluminum Box Assembly Installation**

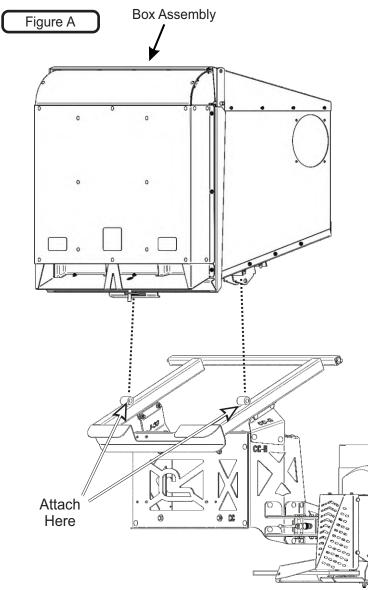
**NOTE:** It is recommended that two extra people assist in mounting the Box Assembly.

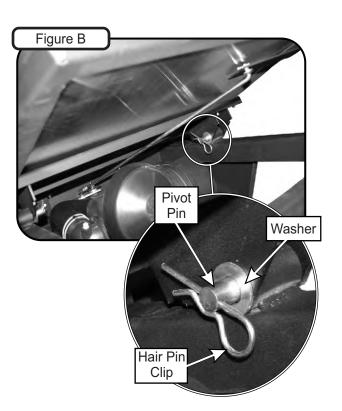
Have two people lower the Box onto the frame while a third person inserts the Pivot Pins P#(K0172) through the pivot holes. Insert the Pins from the outside to the inside.

Secure with (1) 5/8" Washer P#(K0058) and (1) 5/32" x 2-5/8" Hair Pin Clip P#(K0088) per Pivot Pin (Figure B).

Reattach the bottom ends of the door opening linkages to the Main Frame by using (1) Rue-Ring Cotter Pin P#(K1437) per side.

To test the functionality of the dump mechanism, pull the Lift Handle away from the unit, and lift upward. The Door of the Box Assembly should open and the Box should pivot clockwise towards the ground.



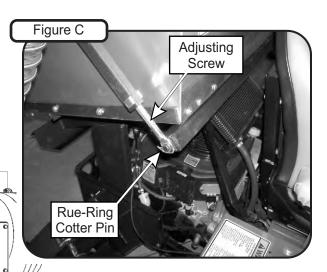


#### **Dump Mechanism Adjustment**

The Dumping Mechanism may be adjusted in three places, at the Adjusting Screw P#(K1435), at the Latch Hook Pivot Bolt and the linkage Ball Joint.

To change the door closure tightness, thread the Adjusting Screw (Figure C) in or out or by adjusting the Latch Hook Pivot Bolt within its' mounting slot.

To adjust the Latch Hook closure angle, thread the



#### Inlet, Inlet Ring & Debris Deflector Installation

Open box door. From inside box, slide Inlet (Item #3) halfway into inlet hole (See Figure A). Take each half of the Inlet Ring (Item #1) and attach around matching groove in Inlet (Item #3). Slide Inlet (Item #3) & Inlet Ring (Item #1) against inlet hole and align four holes. Fasten Inlet Ring (Item #1) bottom holes using (2) 5/16" IT Tooth Lock Washers (Item #4) & (2) 5/16"-18 x 1/2" HHCS (Item #6) (See Figure B). Fasten Inlet Ring (Item #1) top holes using (2) 5/16" IT Tooth Lock Washers (Item #4) & (2) 5/16"-18 x 1-1/4" HHCS (Item #5). Slide Debris Deflector (Item #2) over inside top bolt threads (Item #5). Fasten Debris Deflector (Item #3) using (2) 5/16"-18 Ny-Flange Lock Nuts (Item #7). Final assembly should resemble Figure C.

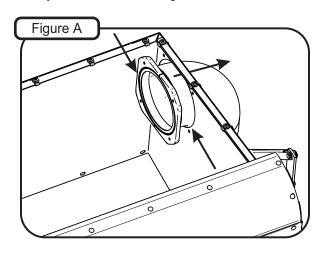


Figure B

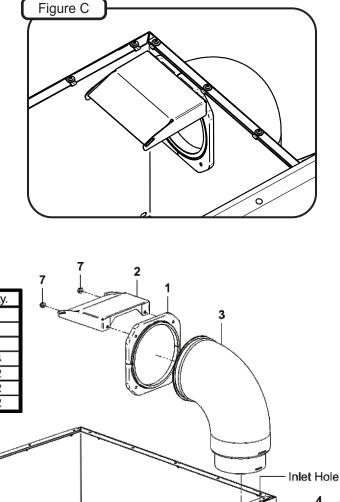
| Item # | Part # | Desc.                       | Qty. |
|--------|--------|-----------------------------|------|
| 1      | C0074  | Inlet Ring                  | 1    |
| 2      | C0088  | Debris Deflector            | 1    |
| 3      | V0025  | Universal Inlet / 6" & 7"   | 1    |
| 4      | K0044  | I/T Tooth Lock Washer 5/16" | 4    |
| 5      | K1152  | HHCS 5/16"-18 x 1/2"        | 2    |
| 6      | K1156  | 5/16"-18 x 1-1/4" HHCS      | 2    |
| 7      | K2516  | Ny-Flange Lock Nut 5/16"-18 | 2    |

Open Box Door to Install Inlet, \_\_\_\_\_ Inlet Ring & Debris Deflector

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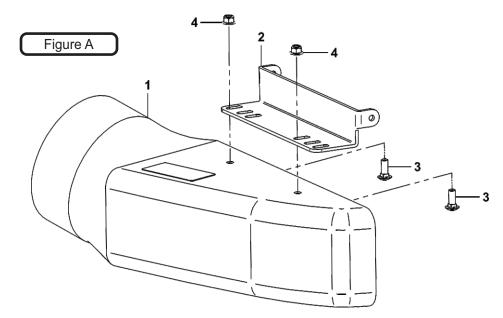
Note: Box Top & Screen Removed in Figure for visual clarity.



#### **Boot Kit Assembly & Installation**

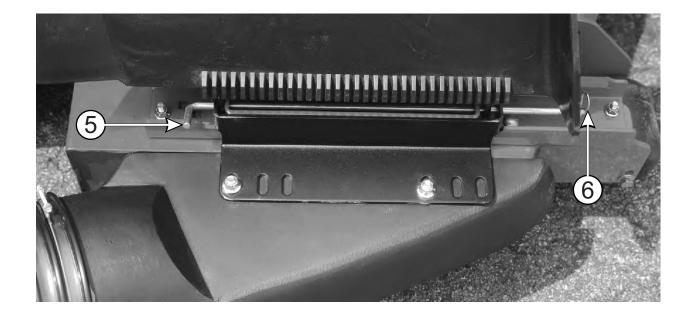
Secure the Boot Plate (Item#2) to the Aluminum Boot (Item#1) using (2) 3/8"-16 x 1" Carriage Bolts (Item#3) and (2) 3/8"-16 Ny-Flange Lock Nuts (Item#4). Insert the Carriage Bolts from the inside of the Boot so the threads are on the top of the Boot. This will prevent grass clippings from collecting on the threads. Leave the hardware loose until the Boot Plate has been attached to the mower deck. Refer to Figure A.

Remove the hardware from the grass deflector and insert (1) Boot Rod (Item#5) into the grass deflector mounting holes as shown in Figure B. Secure the Boot Rod using (1) Hair Pin Clip (Item#6). With the Carriage Bolts still loose, adjust the position of the Boot so that there is no gap between the mower deck and the Boot. Tighten the hardware at this time.



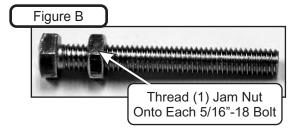
| Item # | Part # | Desc.                      | Qty. |
|--------|--------|----------------------------|------|
| 1      | E0032A | Modified E0032             | 1    |
| 2      | B0820  | Boot Plate                 | 1    |
| 3      | K1182  | Carriage Bolt 3/8"-16 x 1" | 2    |
| 4      | K2038  | Ny-Flange Lock Nut 3/8"-16 | 2    |
| 5      | B4331  | Boot Rod                   | 1    |
| 6      | K0099  | Hair Pin Clip 3/32"        | 1    |

Figure B

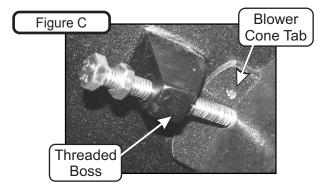


#### **Blower Cone Installation**

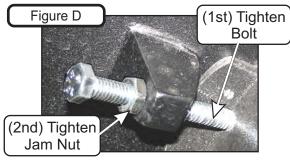
Thread (1) 5/16"-18 Jam Nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) as shown in Figure B.



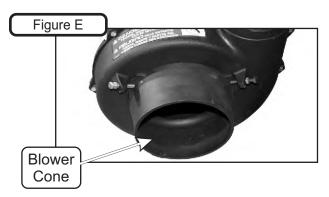
Now partially thread (1) bolt into each of the two threaded bosses located on the Blower Housing. Place 8" Blower Cone P#(E6009) so the two tabs line up with the bolts and tighten completely as shown in Figure C.



Once the (2) bolts are tight, tighten the Jam Nuts against the threaded boss as shown in Figure D.



Refer to Figure E for proper Blower Cone installation reference.



#### 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.

#### **Upper Hose Installation**

Slide a Hose Clamp P#(J0060) over one end of the 6" Upper Hose. Secure this end of the 6" Upper Hose to the Blower Outlet. See Figure below for details. Secure opposite end of the 6" Upper Hose to the Inlet. Make sure both ends are securely fastened by tightening the Hose Clamp.

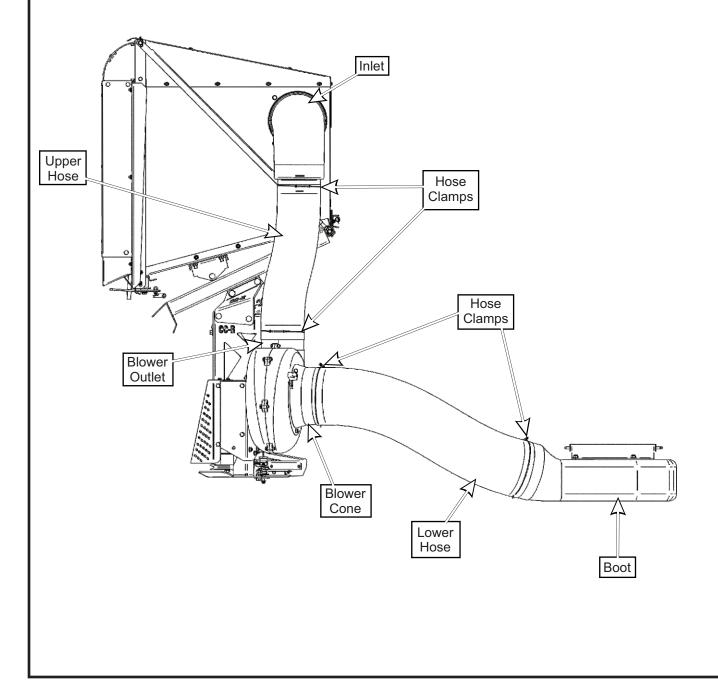
#### Lower Hose To Blower Cone Installation

Slide a 8" Hose Clamp P#(J0080) over both ends of the 8" Lower Hose. Secure one end of the Lower Hose to the Blower Cone and fasten by tightening the Hose Clamp.

#### **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.

Tip: Before securing Hose Clamp fully, rotate Lower Hose counter-clockwise (away from yourself) approximately 1" to aid in retaining Boot to mower deck.



#### Wire Harness Installation

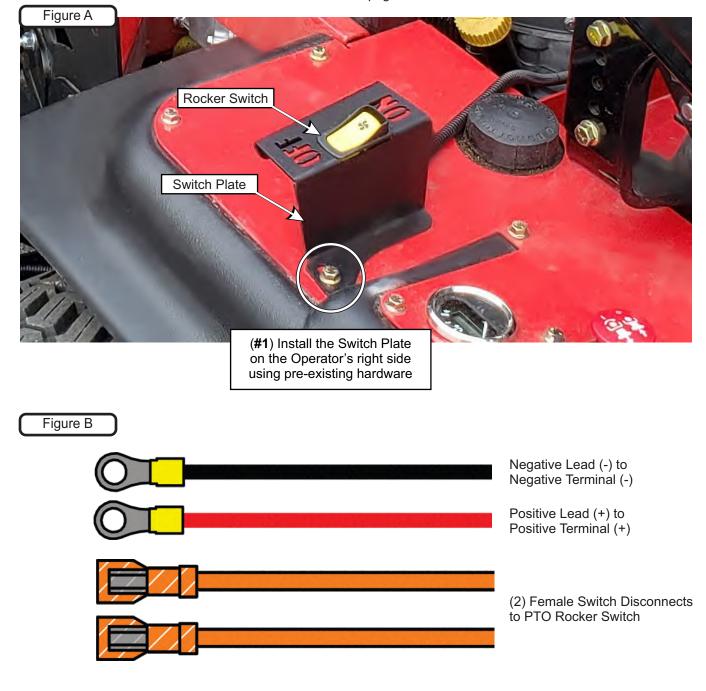
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**To Prevent Serious Injury-**Proper Installation Of Safety Interlock Harness Is Mandatory. Please Check That All Interlock Points Work Correctly Once Installed.

Before installing the PTO Switch Plate, install the PTO Rocker Switch by positioning it over the Switch Plate and firmly pressing the Rocker Switch down until it is seated in place. Make sure the 'FAN' Symbol is positioned to the 'ON' side of the PTO Switch Plate. Refer to Figure A. Once installed, connect the Wire Harness' (2) Female Switch Disconnects to the PTO Rocker Switch. Refer to Figure B for the Wire Harness components and Figure C on the next page for installation diagram.

To install the PTO Switch Plate , (**#1**) remove the corner hardware to the right of the operator's seat as shown in Figure A on the panel cover and set it aside. Next, Place the PTO Switch Plate over the mount hole on the panel cover aligning the slot with the corner mount hole. Secure the Switch Plate by using the previously removed hardware. Refer to Figure A below.

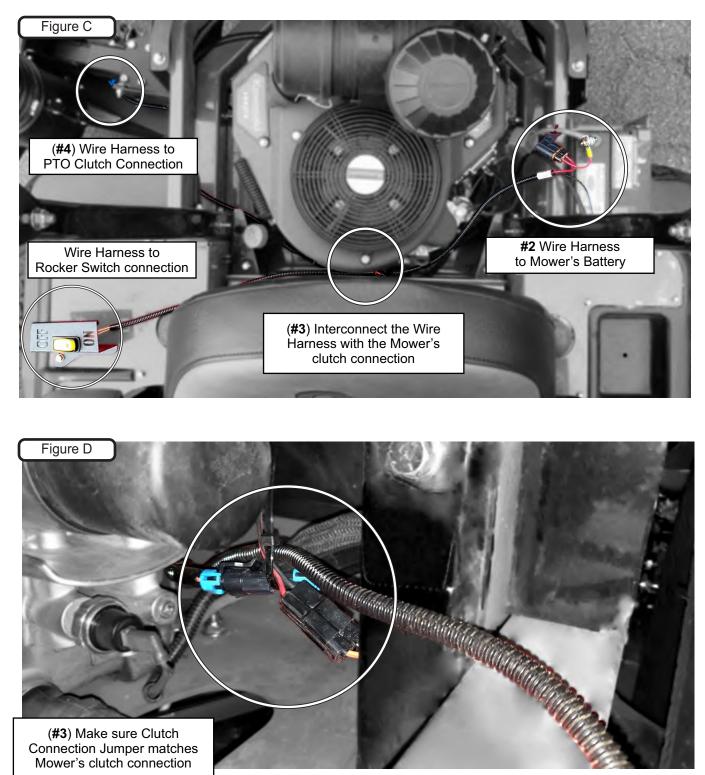
Next, route the (**#2**) Negative Lead (-) and the Positive Lead (+) of the Wire Harness to the negative & positive terminal of the mower's battery. Refer to Figure B for the Wire Harness components, refer to Figure C on the next page for the Wire Harness to mower connection.



#### Wire Harness Installation (Continued)

Route the Wire Harness back towards the engine located behind the operator's seat. Disconnect the mower's clutch connector and (**#3**) interconnect it with the Wire Harness' Clutch Connection Jumper. Refer to Figure C & Figure D. Refer to the Wiring Diagram on Page 28 for the Connection Jumper Types.

Lastly, route the (#4) Wire Harness back towards the rear of the mower positioning the Wire Harness under the Bottom Bracket / Mount Arm. Then connect the Wire Harness to the PTO Unit. Refer to Figure C and Figure E on the next page.

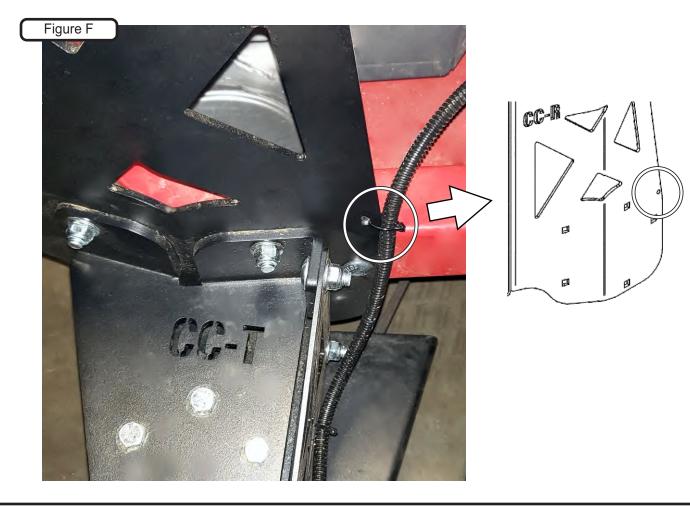


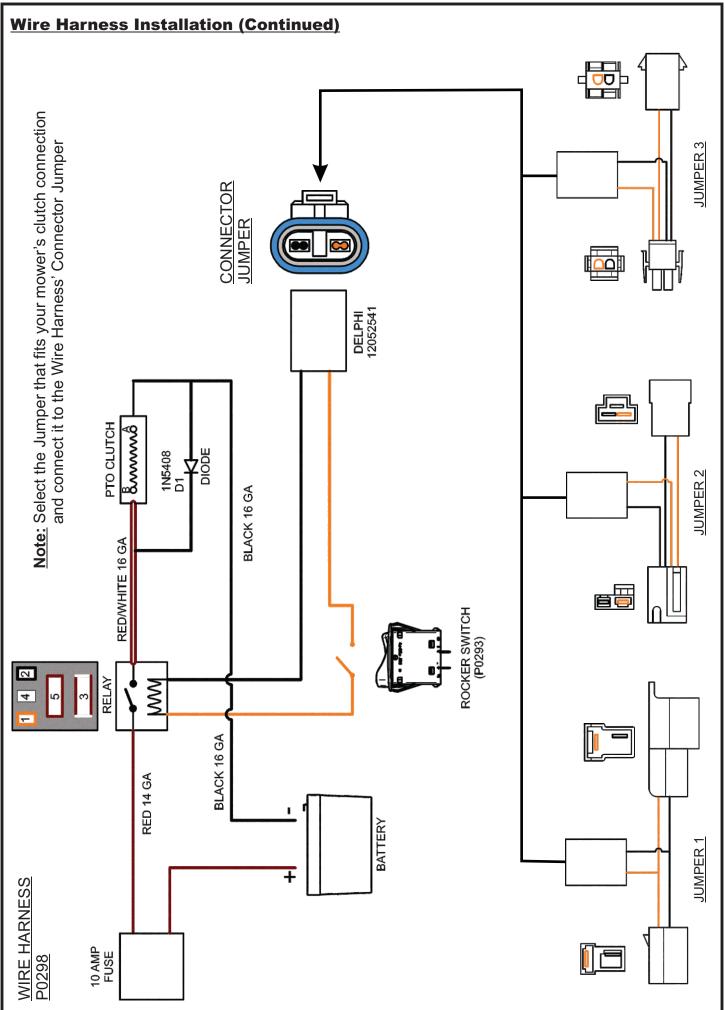
#### Wire Harness Installation (Continued)



<u>Note</u>: It is recommended to secure the Wire Harness to the mower by using the included Cable Ties once you have the Wire Harness installed. Be sure the Wire Harness is routed so that it does not obstruct any part of the mower that may damage the Harness.

When routing the Wire Harness back towards the PTO unit, it is recommended to use the Cable Tie point to secure the Wire Harness to the Right Frame Bracket to prevent the Wire Harness from moving. See Figure F below.





#### **Weight Kit Installation**

Position the Quad Weight Bracket Base (Item #2) under the caster tubing w/ opening towards caster fork. Next, position the Weight Bracket Clamp (Item #3) on top of caster tubing w/ opening towards caster fork.

Align the (4) holes of the Weight Bracket Clamp (Item #3) to the holes in the Quad Weight Bracket Base (Item #2). Loosely fasten the Weight Bracket Clamp (Item #3) to the Weight Bracket Base (Item #2) using (4) 5/16"-18 x 3" Bolts (Item #4.1) & (4) 5/16"-18 Ny-Flange Lock Nuts (Item #4.2).

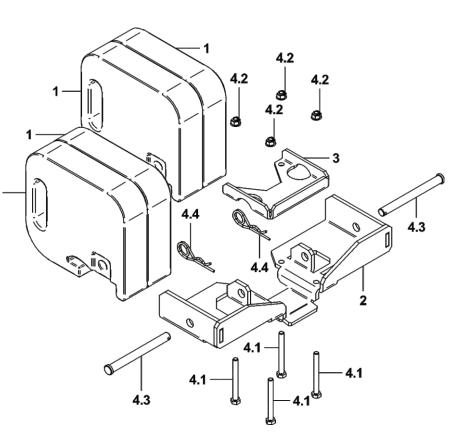
Position the Weight Bracket Base and the Weight Bracket Clamp assembly along the caster tubing to prevent interference from caster forks or any other objects. Tighten the fasteners in an 'X' pattern until assembly is firmly clamped to caster tubing. Do not over tighten which may result in bending Weight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

To Install the Weights, insert (2) Weights (Item #1) Into the Weight Bracket Base (Item #2) & align the holes of the Weights w/ the holes of the Weight Bracket Base (Item #2). Fasten the Weights (Item #1) to the Weight Bracket Base Using (1) Clevis Pin (Item #4.3) & (1) Hair Pin Clip (Item #4.4). Repeat for additional Weights.

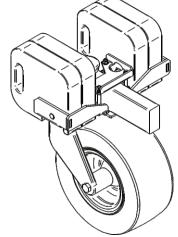
Refer to the Figure Below.

MY2021 : Install all (4) Weights (Item #1) on the Left Caster & ONLY (2) Weights (Item #1) on the Right Caster.

**MY2022** : Install all (4) Weights (Item #1) on <u>BOTH</u> the Left & Right Caster.



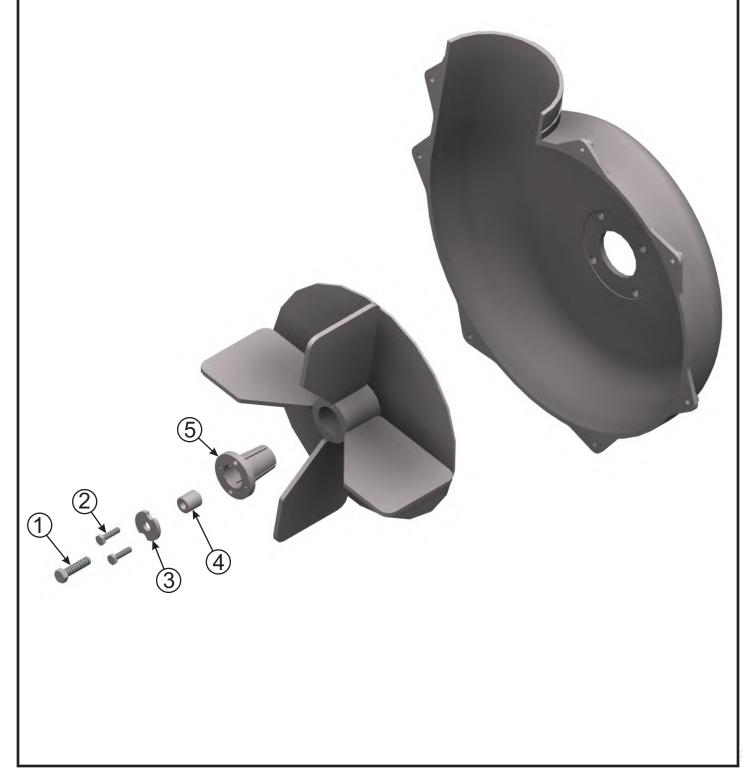


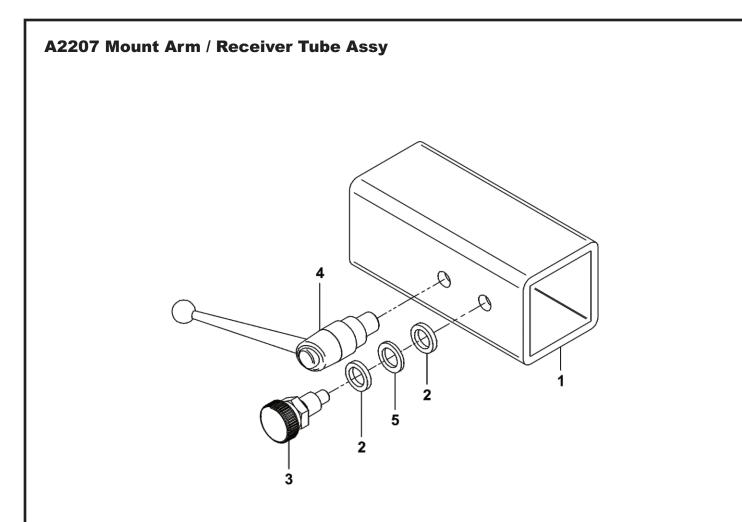


#### Impeller Blade Removal/Replacement

**To Remove:** First remove the 5/16"-24 x 1" HHCS **(#1)**, Taper Lock Bushing Washer **(#3)**, (2) 5/16 Flat Washers and Spacer Bushing **(#4)** from the Taper-Lock Bushing **(#5)**. 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 blade to break-away from the Taper-Lock Bushing. If the Impeller will not move, carefully hit the base of the Impeller, between each vein, with a hammer, then try again.

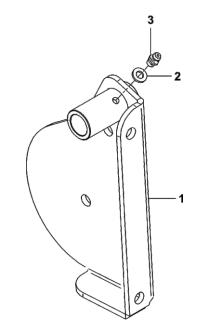
**To Replace:** Place Impeller Blade over the engine shaft. Slide the Taper-Lock Bushing **(#5)** on to the engine shaft and into the Impeller Blade, aligning the **non-threaded** holes of the Taper-Lock Bushing to the threaded holes of the Impeller Blade. Fasten by using (2) 1/4"-20 x 1" HHCS **(#2)**, (1) Spacer Bushing **(#4)** (1) Taper-Lock Bushing Washer **(#3)**, and (1) 5/16"-24 x 1" HHCS **(#1)**. Torque to the proper specifications in the torque chart on the back of this manual. Next, rotate the Impeller Blade to ensure that the blade is clear of contact on all sides of the blower housing.





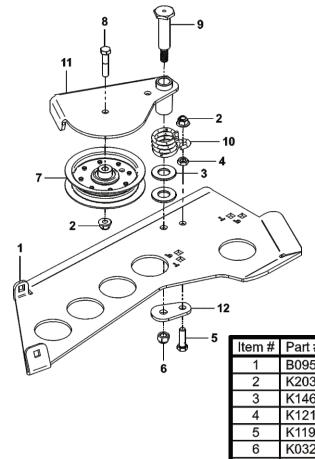
| Item # | Part # | Desc.   | Qty. |
|--------|--------|---|------|
| 1      | B0931  | Tube / Mount Arm                              | 1    |
| 2      | J0013  | Nylon Flat Washer 1/2" x .750" OD Grade 6/6   | 2    |
| 3      | J0020  | Knob Plunger Pin 1/2"-13                      | 1    |
| 4      | J0009  | Adjustable Handle 1/2"-13 x .59 Male          | 1    |
| 5      | K0027  | Flat Washer 1/2" / .787 OD x .512 ID x .090 T | 1    |

# A2092 Idler Arm Assembly

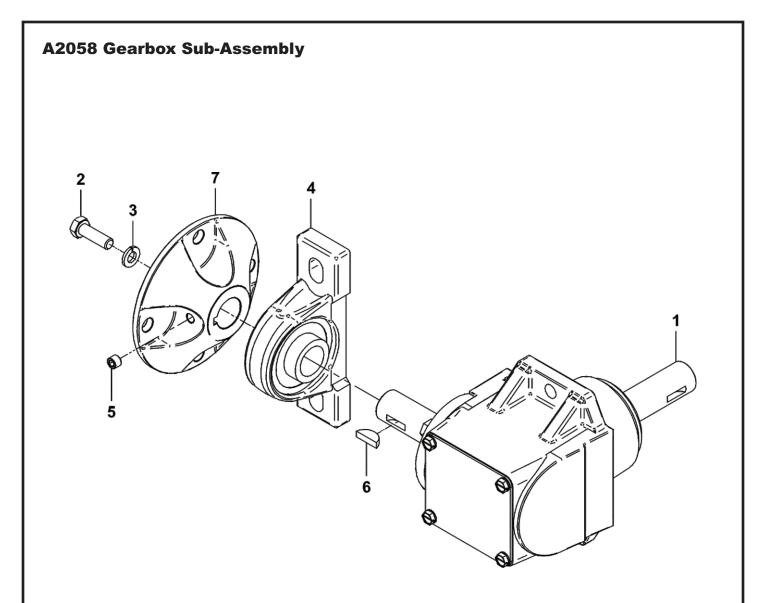


| Item # | Part #   | Desc.                    | Qty. |
|--------|----------|--------------------------|------|
| 1      | A2070_01 | Idler Arm Weldment       | 1    |
| 2      | K1467    | Flat Washer M6 x 12mm OD | 1    |
| 3      | J0801    | 1/4"-28 Zirc Fitting     | 1    |

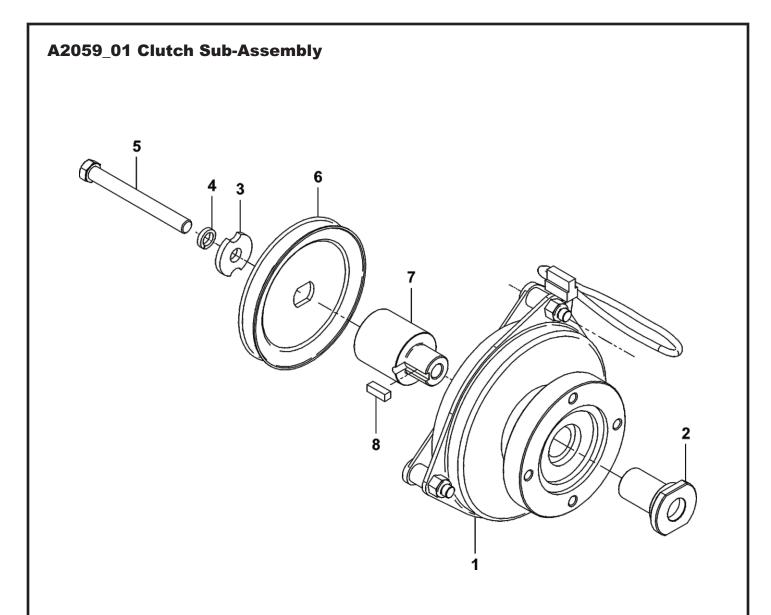
# A2067\_02 Idler Mount Assembly



| Item # | Part #   | Desc.                                   | Qty. |
|--------|----------|---|------|
| 1      | B0958_02 | Idler Mnt PI                            | 1    |
| 2      | K2038    | Ny-Flange Lock Nut 3/8"-16              | 2    |
| 3      | K1463    | Flat Washer .720 ID x 1.500 OD x .250 T | 2    |
| 4      | K1219    | Jam Nut 3/8"-16                         | 1    |
| 5      | K1192    | HHCS 3/8"-16 x 1-1/4" GR5               | 1    |
| 6      | K0329    | Nylock Nut 7/16"-14 GR8                 | 1    |
| 7      | M0003    | Idler Pulley                            | 1    |
| 8      | K1462    | HHCS 3/8"-16 x 1-3/4" GR8               | 1    |
| 9      | K1464    | Shoulder Bolt 7/16"-14 / Idler          | 1    |
| 10     | J0024    | Torsion Spring                          | 1    |
| 11     | A2092    | Idler Arm Assy.                         | 1    |
| 12     | B0974    | Idler Base Plate                        | 1    |

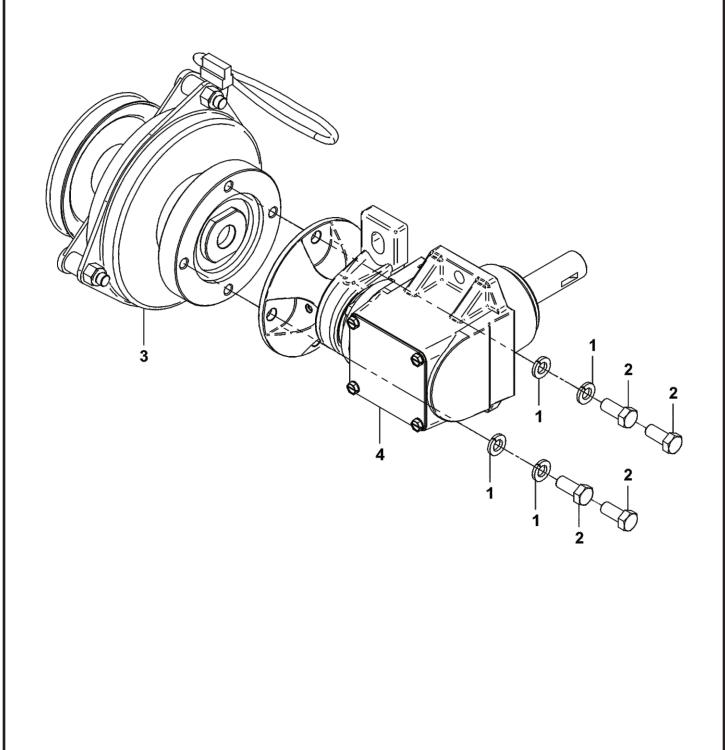


| Item # | Part # | Desc.                               | Qty. |
|--------|--------|-------------------------------------|------|
| 1      | M0002  | Gearbox                             | 1    |
| 2      | K0428  | HHCS 5/16"-24 x 1" GR8              | 1    |
| 3      | K0043  | Lock Washer 5/16"                   | 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    |



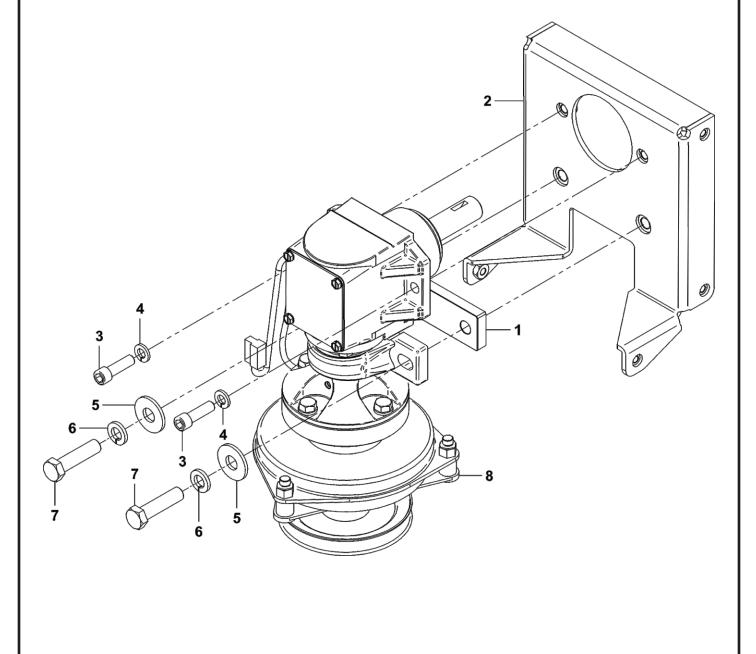
| Item # | Part # | Desc.  | Qty. |
|--------|--------|--|------|
| 1      | M0001  | Electric Clutch  | 1    |
| 2      | S0007  | Clutch Shaft   | 1    |
| 3      | K0278  | Double Indented Washer 7/16" / 1.375 OD x .440 ID x .179 T | 1    |
| 4      | K0140  | Lock Washer 7/16" / High-Collar Helical Spring             | 1    |
| 5      | K0550  | 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    |

| 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    |



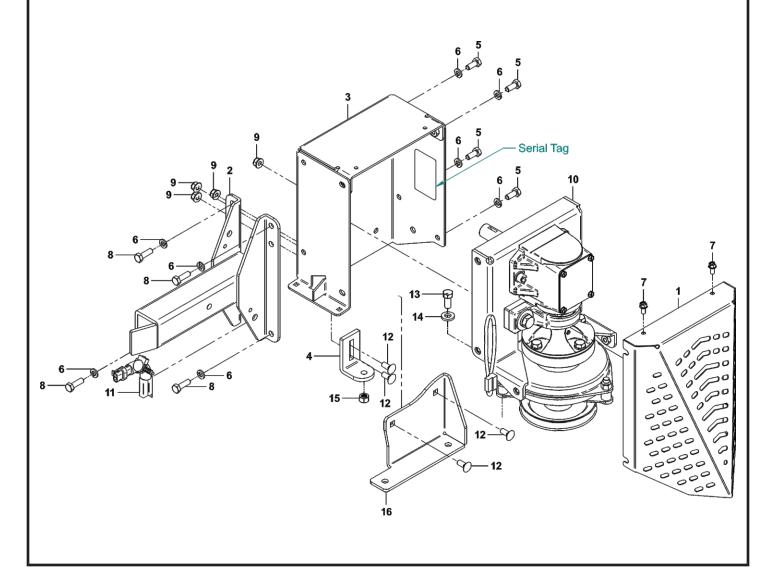
# A2060\_01 Mounted Drive Assembly

| 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    |



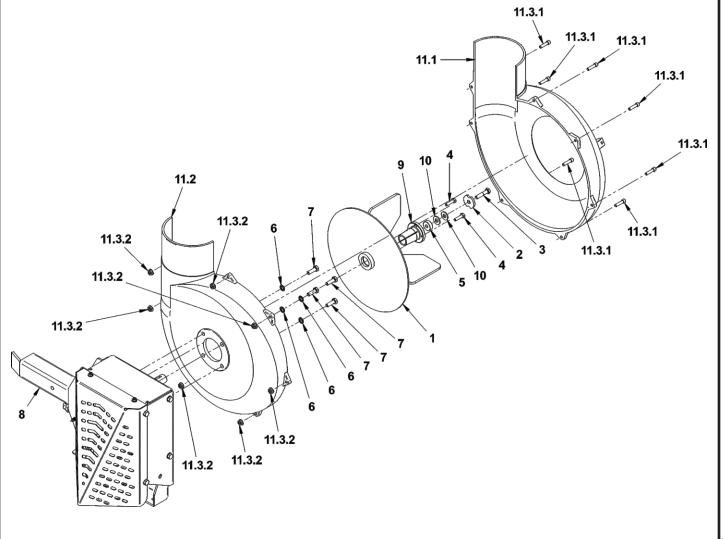
#### A2039\_02 Base Drive Assembly

| 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    |

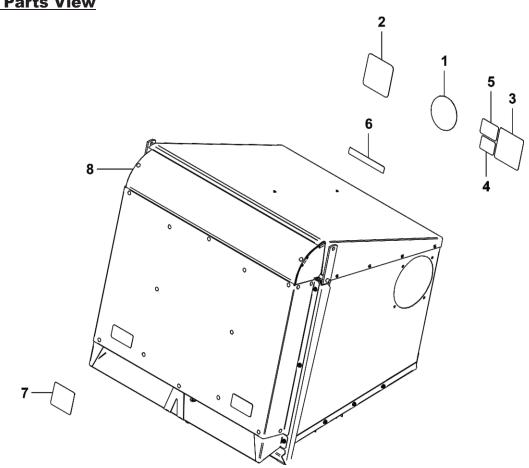


#### A2061\_02 Drive Assembly / 4-Blade Impeller

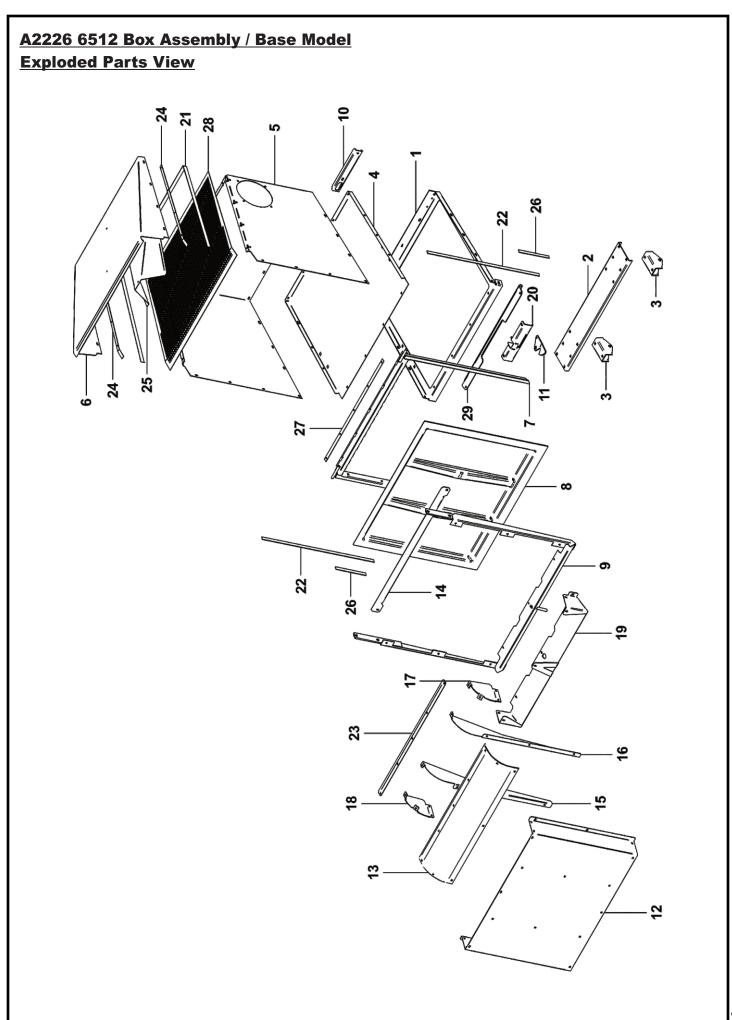
| Item # | Part #   | Desc.   | Qty. |
|--------|----------|---|------|
| 1      | A0645    | 4-Blade Impeller Weldment                                 | 1    |
| 2      | K0284    | Double Indented Washer 3/8" / 1.375 OD x .380 ID x .179 T | 1    |
| 3      | K1465    | HHCS 5/16"-24 x 1-1/2" GR8                                | 1    |
| 4      | K1225    | HHCS 1/4"-20 X 1" GR8                                     | 2    |
| 5      | S0159    | Spacer Bushing .938 OD x .325 ID x .375 T                 | 1    |
| 6      | K0044    | I/T Tooth Lock Washer 5/16"                               | 4    |
| 7      | K1154    | HHCS 5/16"-18 x 1"  | 4    |
| 8      | A2039_02 | Drive Assy / Base   | 1    |
| 9      | S0157    | Taperlock Bushing 7/8"                                    | 1    |
| 10     | K0042    | Flat Washer 5/16" / .875 OD x .380 ID x .075 T            | 2    |
| 11     | E4052A   | Blower Hsg Assy   | 1    |
| 11.1   | E4052F   | Blower Hsg Front  | 1    |
| 11.2   | E4052B   | Blower Hsg Back   | 1    |
| 11.3   | HB0462   | HW Bag / E4004A & E4052A Housings                         | 1    |
| 11.3.1 | K1401    | 1/4"-20 x 1" SHCS / Zinc / GR8                            | 7    |
| 11.3.2 | K1126    | Flange Nut 1/4"-20  | 7    |



# A2100 6512 Box Assembly / Standard Exploded Parts View



|        | D 1 11 | 5  | 01   |
|--------|--------|--|------|
| Item # | Part # | Desc.                                    | Qty. |
| 1      | R0022  | Decal / Built In The USA / Lg            | 1    |
| 2      | R0026  | Decal / Operation                        | 1    |
| 3      | R1069  | Decal / Warning - Turn Off Blower        | 1    |
| 4      | R1051  | Decal / Warning - Use Hearing Protection | 1    |
| 5      | R1054  | Decal / Important Check Hoses            | 1    |
| 6      | R1055  | Decal / To Dump Grass                    | 1    |
| 7      | R1053  | Decal / Caution                          | 1    |
| 8      | A2226  | 6512 Box Assy. / Base Model              | 1    |



# A2226 6512 Box Assembly / Base Model Exploded Parts List

| Item # | Part # | Desc.                           | Qty. |
|--------|--------|---------------------------------|------|
| 1      | B1750  | Base Frame                      | 1    |
| 2      | B1727  | Base Frame Pivot Mount          | 1    |
| 3      | B1574  | Pivot Bracket                   | 2    |
| 4      | C0024  | Box Bottom                      | 1    |
| 5      | C0080  | Box Back & Sides                | 1    |
| 6      | C0081  | Вох Тор                         | 1    |
| 7      | A0938  | Frame Weldment / Box Opening    | 1    |
| 8      | V1131  | 12 Box Door                     | 1    |
| 9      | A0738  | Frame Weldment / Door Stiffener | 1    |
| 10     | B1730  | Latch Handle Mount Bracket      | 1    |
| 11     | B0996  | Latch Hook                      | 1    |
| 12     | C0075  | Dust Diverter                   | 1    |
| 13     | V0051  | Dust Flap                       | 1    |
| 14     | B3688  | Upper Door Member               | 1    |
| 15     | C0076  | Left Dust Diverter Brace        | 1    |
| 16     | C0077  | Right Dust Diverter Brace       | 1    |
| 17     | C0079  | Right Outer Dust Flap Brace     | 1    |
| 18     | C0078  | Left Outer Dust Flap Brace      | 1    |
| 19     | B0991  | Dust Diverter Guard Bracket     | 1    |
| 20     | A2104  | Latch Mount Plate Assy.         | 1    |
| 21     | V0052A | Dust Seal / Top Sides           | 1    |
| 22     | V0052B | Dust Seal / Long Door Sides     | 2    |
| 23     | B1006  | Dust Flap Stiffener             | 1    |
| 24     | B1007  | Screen Clamp Strip / Side       | 2    |
| 25     | C0087  | Screen Support                  | 1    |
| 26     | V0052C | Dust Seal / Short Door Sides    | 2    |
| 27     | B1008  | Screen Clamp Strip / Rear Door  | 1    |
| 28     | B8113  | Screen / Steel Wire Mesh        | 1    |
| 29     | B2021  | Box Stop / 6512                 | 1    |

#### A2107 Latch Rod Assembly Exploded Parts View

| Item # | Part # | Desc.  | Qty. |
|--------|--------|--|------|
| 1      | B1000  | Latch Rod / Hook Side                        | 1    |
| 2      | J0303  | Spring                                       | 1    |
| 3      | K0400  | 1/2" Flat Washer 1.084 OD x .528 ID x .120 T | 1    |
| 4      | K0086  | Hair Pin Clip .125 OD x 2.50                 | 1    |
| 5      | A2106  | Latch Rod Weldment                           | 1    |

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|                         | Owner's Manual: Q0575 | series   | ro12 DFS            | : PTO-X           | Fits Year(s): 2021-Newer                  | A2159 Boot Kit<br>Boot Plate Boot Kit<br>Boot Rue<br>Boot Rue<br>(1) B0032A<br>Boot Rod<br>(1) B4331<br>Boot Rod<br>(1) B4331<br>A2162 Ouad Weight Kit<br>Veight (1) B105<br>(1) B10 |
|-------------------------|-----------------------|--|---------------------|-------------------|---|--|
| 0                       |                       | XL 9000 & 9005 series                            | Vac Type: Pro12 DFS | Drive Type: PTO-X | Fits Year(s)                              | 316 FEG Pulley<br>Belt FEG Pulley<br>Belt FEG Pulley<br>Mount Kit<br>Harness<br>HW Bag<br>(1) HB0827<br>(1) HB08240<br>Mount Kit<br>Harness<br>HW Bag<br>Harness<br>HW Bag<br>(1) B2078<br>(1) B2078<br>(1) B2078<br>(1) B2078<br>(1) B2079<br>(1) B2070<br>(1) B2079<br>(1) B2079<br>(   |
| odel #: <b>49651202</b> | untry Clipper         | Mower Type: Charger 8000 & 8005 series / Boss XL | 60"                 |                   | 1 - Updated for 2022 MY - XY (April 2021) | A2327 Mount Kit     (1) B2073     AX61 Belt     Pt       (1) B2073     AX61 Belt     Pt       Right Frame     Bracket     (1) B2075     Pt       Night Frame     Bracket     (1) HB0     Wirin       Night Frame     Bracket     (1) B2074     (1) HB0       Night Frame     Bracket     Arm     Nour       Night Frame     Bracket     Arm     Nour       (1) B2074     (1) B2074     (1) B2078     (1) E0009       Nourt Arm     Nourt Arm     Nourt Arm     Nourt Arm       (2) B2069_02     Ret Guard     (1) A22079     (1) E0009       Sr Blower     (1) A2069_02     Nourt Arm     Nourt Arm       (1) E6009     (1) A2069_02     Nourt Arm     Nourt Arm       (1) A2067_02     Nourt Arm     Nourt Arm     Nourt Arm       (1) A2069_02     Nourt Arm     Nourt Arm   |
| Unit Model              | Mower: Country Clip   | Mower Typ  | Deck Size: 60"      | Deck Type:        | Rack Drawing Revision #: 1                | A2329 Vac Kit     PELO     (1) HB0841       Vac Kit     Vac Kit     Vac Kit       Hww Bag     (1) C0074     Debris       Deflector     (1) C0074     Deflector       (1) A2100     (1) V0025     Frame       12 Cu: Fi.     (1) A1192     (1) V0025       Main Frame     (1) A1192     (1) B2077       Main Frame     (1) A1192     (1) B2077       Main Frame     (1) B2077     (1) B2077       Main Frame     (1) B2076     (1) B2076       Main Frame     (1) B2076     (1) A0897       Main Frame     (1) B2076     (1) A0897       Main Frame     (1) B2060     (1) A0897       Main Frame     (1) B2060     (2) J0060       Main Frame     (2) J0060     (2) J0060       Massi  |

# 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.



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# 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:** DO NOT TOUCH the PTO assembly, pulleys, or the belt until the tractor is turned off.

#### **Unloading The Collection System**

- A. Stop the forward movement of the mower, engage the parking brake.
- B. Disengage the mower deck.
- C. Disengage the blower.
- D. Verify that the dump area is clear.
- E. Push the dump handle, on the left of the operator, away from the unit. While holding the handle pushed away, move the handle upward. The container door will swing upward and the container will rotate downward. The container will release its contents.
- F. Once the contents of the container have fallen out, the container is ready to move back into its normal operating position. Pull the handle downward until positive latching is achieved.
- **NOTE:** Do not allow collection system to become overfilled as potential damage may occur to your equipment. Also, be sure to clean the screen as needed.

# SECTION IV MAINTENANCE

#### **Maintenance Checklist**

Before each use:

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

- 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.
- 6. With the engine off, engage the blower assembly. Check the belt tension and inspect the pulley belt for cracks or tears.
- 7. Check for wear or deterioration of the upper or lower hoses. If there are any portions of the hose that have been torn or worn through, replace immediately.

After Each Use:

- 1. Clean all debris from machine especially from the container, underneath the belt shields, and safety decals. Replace any missing or illegible decals.
- 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 collection unit is subject to deterioration and wear. 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.
- 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 <u>not</u> overfill.

Blower Assembly:

- **NOTE:** The following is for older PTO models that contain a greaseable zerk 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.

| <b>DOCUMENT THE FOLLOWING INFORMATION FOR FUTURE REFERENCE</b> |
|--|
|--|

| Unit Engine Size:        |                             |       |      |
|--------------------------|-----------------------------|-------|------|
| Jnit Serial Number:      |                             |       |      |
| Date of purchase:        | _II                         |       |      |
| Dealer/Distributor Name: | ŧ                           |       |      |
| Address:                 | Stat                        | e:    | Zip: |
| Phone Number:            |                             |       |      |
|                          | New PECO, Inc.              |       |      |
| 10 Walden Dr             | r   Arden, North Carolina   | 28704 | 4    |
|                          | 300-438-5823   828-684-1    |       |      |
| F                        | Fax: 828-684-0858           |       |      |
| Emai                     | il: <u>peco@lawnvac.com</u> |       |      |
|                          | ite: www.lawnvac.com        |       |      |

# TORQUE SPECIFICATIONS

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

| olt Head Markings          | WRENCH<br>SIZE (IN.) "A" | BOLT DIAMETER<br>(IN.) "B" AND<br>THREAD SIZE | SAE<br>GRADE 2 | SAE<br>GRADE 5 | SAE<br>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)        |
| SAE Grade 2<br>(No Dashes) | 1/2                      | 5/16 - 24 UNF                                 | 13 (17)        | 19 (26)        | 27 (37)        |
| (No Dashes)                | 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)      |
| SAE Grade 5                | 7/8                      | 9/16 - 18 UNF                                 | 79 (107)       | 122 (165)      | 172 (233)      |
| (3 Dashes)                 | 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)      |
| Diameter E                 | 1-1/8                    | 3/4 - 16 UNF                                  | 192 (260)      | 297 (402)      | 420 (569)      |
| Boller B                   | 1-5/16                   | 7/8 - 9 UNC                                   | 166 (225)      | 430 (583)      | 606 (821)      |
| Dian                       | 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)     |
| T III                      | 1-1/2                    | 1 - 12 UNF                                    | 274 (371)      | 705 (955)      | 995 (1348)     |
| SAE Grade 8                | 1-1/2                    | 1 - 14 UNF                                    | 280 (379)      | 721 (977)      | 1019 (1381)    |
| (6 Dashes)                 | 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 Wrench Size "A" Numbers appearing on bolt heads indicate ASTM class.

Wrench Size "A" **AMERICAN** 

\*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<br>SIZE<br>(mm) "A" | BOLT<br>DIA.<br>(mm) "B" | ASTM<br>4.6 | ASTM<br>8.8 | ASTM<br>9.8 | ASTM<br>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)   | 1           | 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

2017 (v1.0)

# **Collection System Performance**

| Problem                                  | Possible Cause  | <b>Corrective Action</b>  |  |  |
|--|---|---|--|--|
|  | <ul> <li>Cutting blades are bent or<br/>unbalanced</li> </ul> | <ul> <li>Install new cutting blade</li> </ul>                                     |  |  |
| 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    | <ul> <li>Plugged screen</li> </ul>                            | <ul> <li>Remove debris, leaves, or<br/>grass clippings from the screen</li> </ul> |  |  |
|  | Loose belt  | Replace/tighten belt  |  |  |
|  | Full collection bags  | • Empty the collection bags   |  |  |
|  | Collection bags are too full                                  | Dump more frequently  |  |  |
|  | <ul> <li>Low engine speed</li> </ul>                          | <ul> <li>Always operate collection<br/>system at full throttle</li> </ul>         |  |  |
|  | 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  | <ul> <li>Adjust the pulley and tighten<br/>belts</li> </ul>                       |  |  |
|  | Collection bags are too full                                  | Dump more frequently  |  |  |
| Debris blowout                           | <ul> <li>Plug/clog in the collection<br/>system</li> </ul>    | Clean the collection system   |  |  |
|  | Ground speed is too fast                                      | 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   |  |  |



New PECO, Inc. 10 Walden Dr | Arden, North Carolina 28704 Phone: 1-800-438-5823 | 828-684-1234 Fax: 828-684-0858 Email: <u>peco@lawnvac.com</u> Website: www.lawnvac.com