

Cub Cadet®

PTO DRIVEN -

DESIGNED
TO FIT:

GRASS COLLECTION SYSTEM

MODEL YEAR:

2014-Newer

Series:

Z-Force Series

- 48", 54" & 60" DECKS

COLLECTION SYSTEM

MODEL # 59A30045150

ALTERNATE

MODEL # 21120901B



LZ Models:

LZ 48 - 53ATDAGB050
LZ 60 - 53ANDAGD050

SZ Models:

SZ 48 - 53ATDFJB050
SZ 60 - 53ANDFJD050

LX Models:

LX 48 - 17AIDAUB010
LX 54 - 17AIDAUC010
LX 60 - 17AIDAUD010

SX Models:

SX 48 - 17AIDGJB010
SX 54 - 17AIDGJC010
SX 60 - 17AIDGJD010

OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

RESIDENTIAL BAGGING SYSTEM

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SAFETY

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

SAFETY

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

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

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

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

Safety Alert Symbol



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

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

Safety Signs

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



White letters on **RED**

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



Black letters on **ORANGE**

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

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

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

It may also be used to alert against unsafe practices.

PECO LIMITED WARRANTY FOR NEW PRODUCTS

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

1. **RESIDENTIAL** - Products put to a personal use around a single household or residence are considered Residential. Products designated as “Residential” are warranted 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 warranted 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 warranted 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 warranted 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: https://www.briggsandstratton.com/na/en_us/support/warranty.html
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 ADDITIONAL 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 www.lawnvac.com or contact our Sales Department at New PECO, Inc. 800-438-5823 or email Sales@lawnvac.com.

Section I - INTRODUCTION & DESCRIPTION

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.

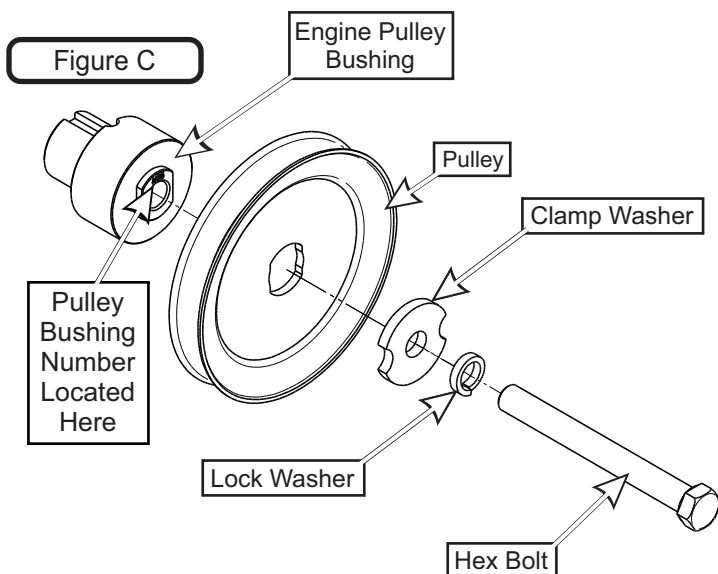
Description

The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves in pre-season and post-season clean-up. The blower, mounted on the right side of the unit, uses a belt and gearbox system from the engine PTO shaft. Drive train protection comes through belt slippage. The blower draws grass clippings from the discharge area of the cutting deck back to the (2) - 4 cubic foot collection bags P#(G0003) at the rear portion of the mower frame. The operator can engage the blower with a spring-lock engagement handle on the right side of the unit. Once the bags are full with clippings, they can be easily released for dumping.

Section II - INSTALLATION FOR USE

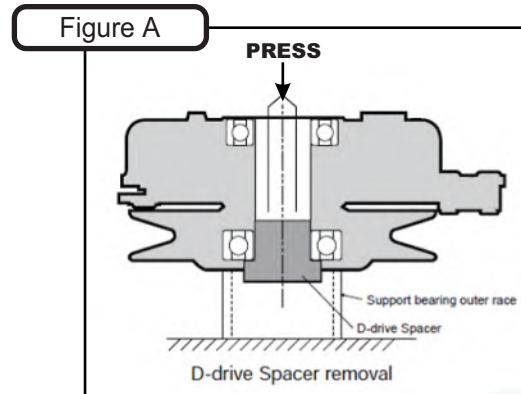
Collection System May Require Dealer Installation!

Please refer to Page 16 for further details.

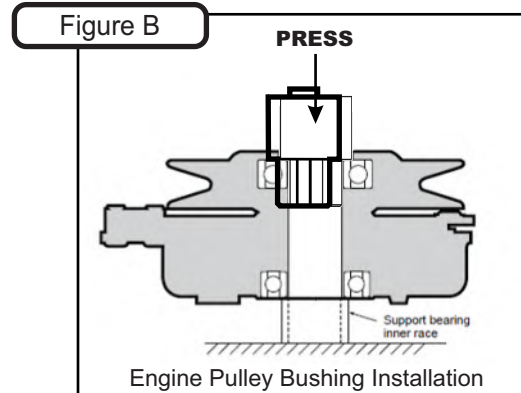


Preparation Of Mower

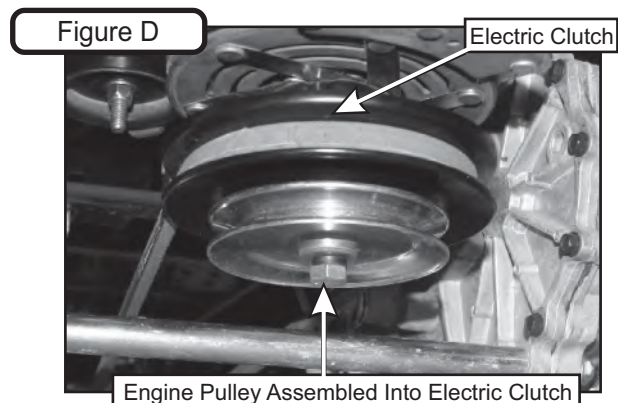
From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Refer to Figure A. Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage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



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



Once the Engine Pulley Bushing P#(S0220) is installed, reattach the clutch assembly to the mower and then review Figure C. To assemble and fasten the Engine Pulley, align Pulley hole to the Engine Pulley Bushing and fasten using (1) Clamp Washer P#(K0278), (1) 7/16" lock washer P#(K0140), and 7/16"-20 x 4" hex bolt P#(K0359). Torque the bolt to 55 ft./lbs. The added pulley will power the collection system and should resemble Figure D when installed.



Rear Frame Bracket & Right Frame Bracket Installation

Figure A

Remove hardware from the rear guard assembly, shown circled in Figure A.

Secure the rear frame bracket P#(A1204) to the rear guard of the mower, using (4) 5/16"-18 x 1" phillips truss head zinc machine screws P#(K0504) and (4) 5/16"-18 flange nuts P#(K1178). Refer to Figure B.

Secure the right frame bracket P#(A1208) to the rear guard of the mower using (2) 5/16"-18 x 1-1/2" HHCS P#(K1157) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Refer to Figure B.

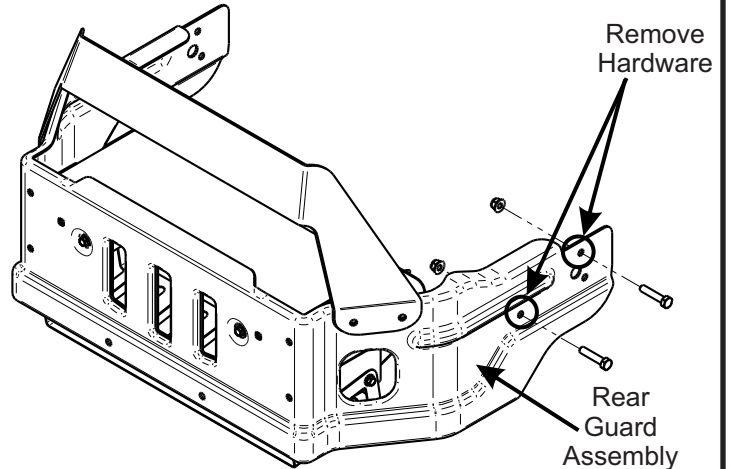
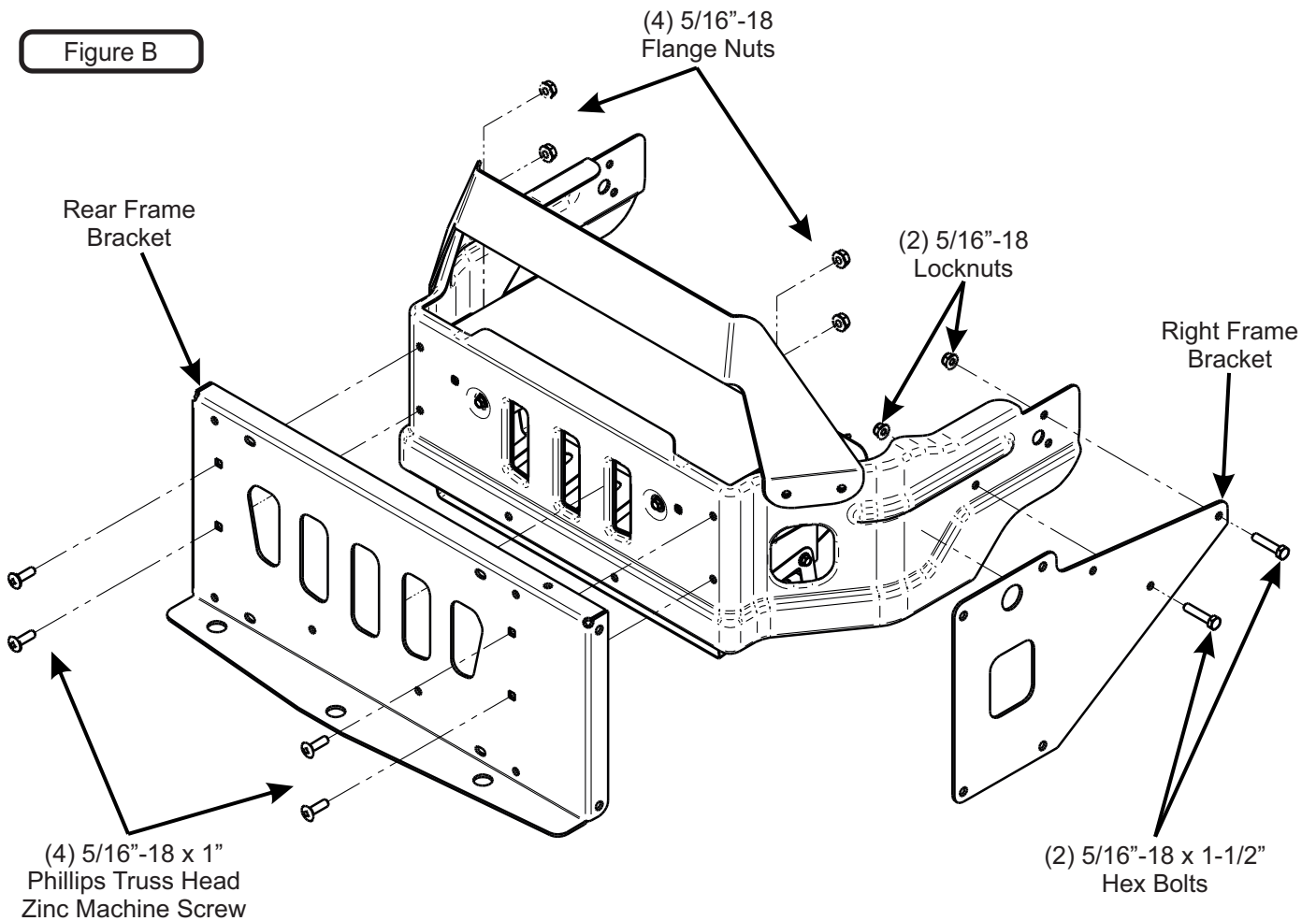


Figure B

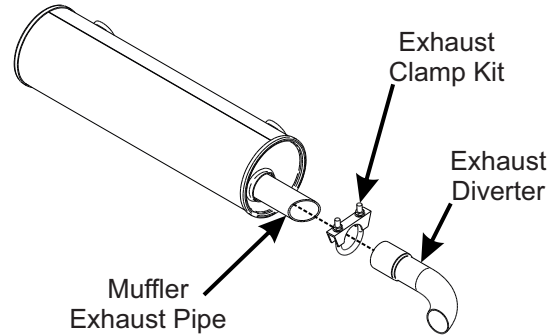


Exhaust Diverter Installation

For LZ & SZ Models Only With Round Exhaust Pipe -

Attach (1) exhaust diverter P#(B0693) to the muffler exhaust pipe. Secure the diverter using (1) exhaust clamp kit P#(X1064). Do not tighten the exhaust clamp until the PTO mount plate components have been installed and the exhaust diverter has been positioned correctly. Refer to Figure A for positioning.

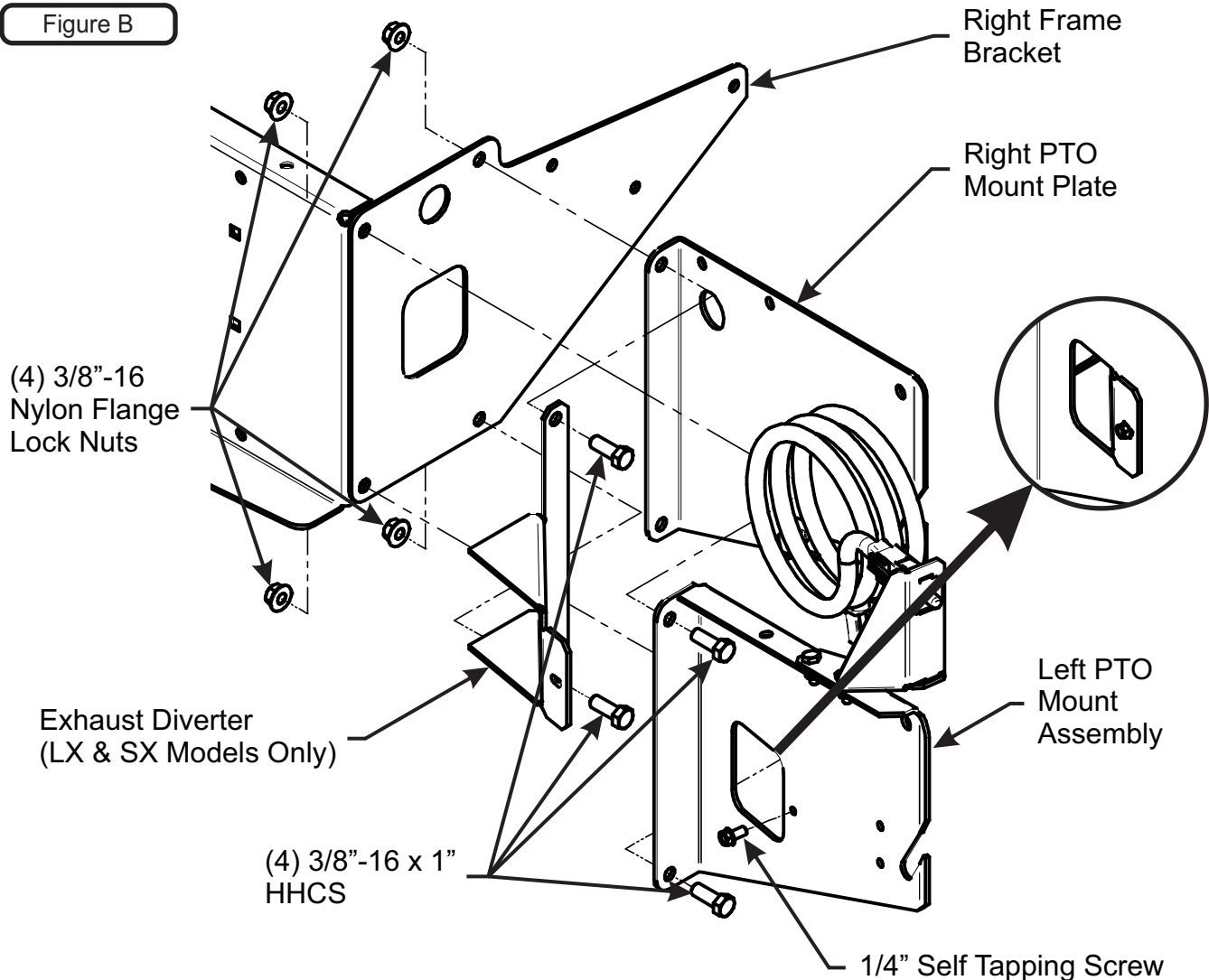
Figure A



PTO Mount Plate Component Installation

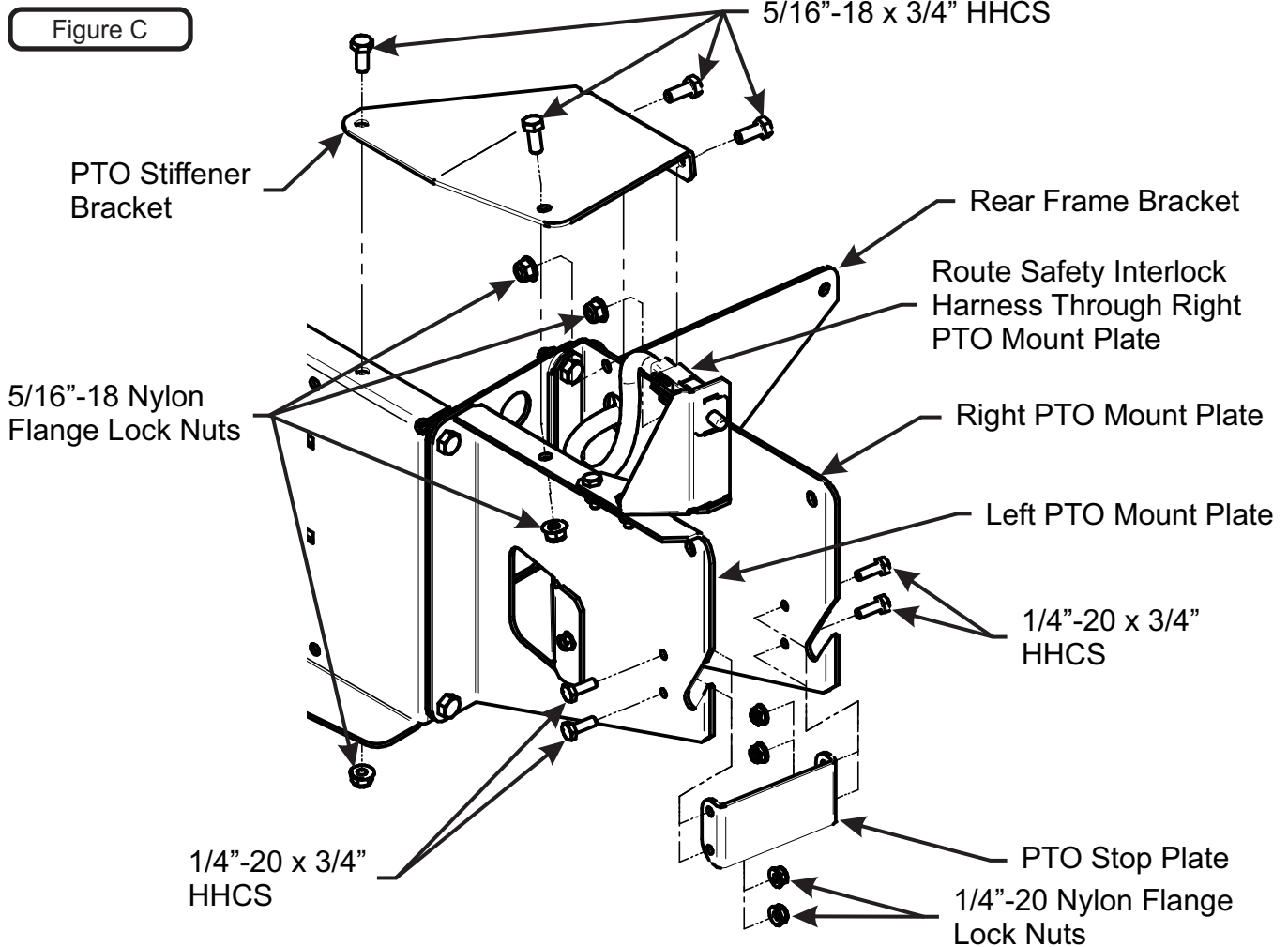
Secure the right PTO mount plate P#(B0859) & exhaust diverter P#(C0091) to the right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange lock nuts P#(K2038). Secure the left PTO mount assembly P#(A1991) to the right frame bracket using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange lock nuts P#(K2038). Do not tighten the hardware completely until all the components have been installed. Secure the exhaust diverter P#(C0091) to the left PTO mount assembly using (1) 1/4" self tapping screw P#(K0353). Refer to Figure B.

Figure B

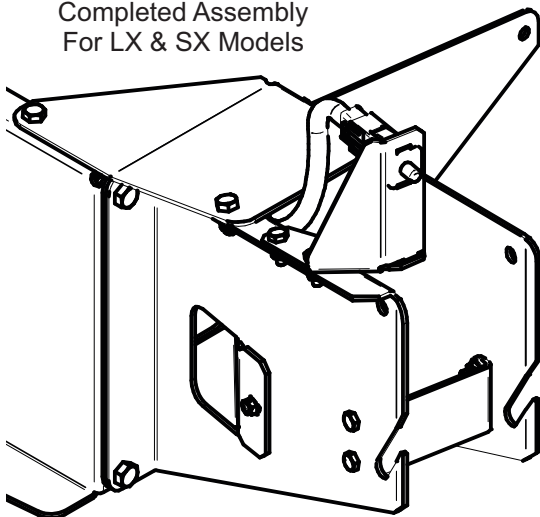


PTO Mount Plate Component Installation (Cont.)

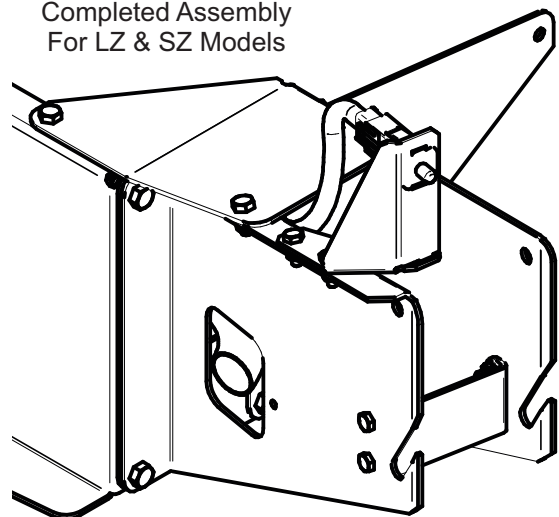
Secure the PTO stiffener bracket P#(B0861) to the rear frame bracket and left and right PTO mount plates using (4) 5/16"-18 x 3/4" HHCS P#(K1153) and (4) 5/16"-18 nylon flange locknuts P#(K2516). Secure the PTO stop plate P#(B0733) to the left and right PTO mount plates using (4) 1/4"-20 x 3/4" HHCS P#(K1222) and (4) 1/4"-20 nylon flange locknuts P#(K2014). Tighten all PTO mount plate component hardware at this time. Refer to Figure C.



Completed Assembly
For LX & SX Models

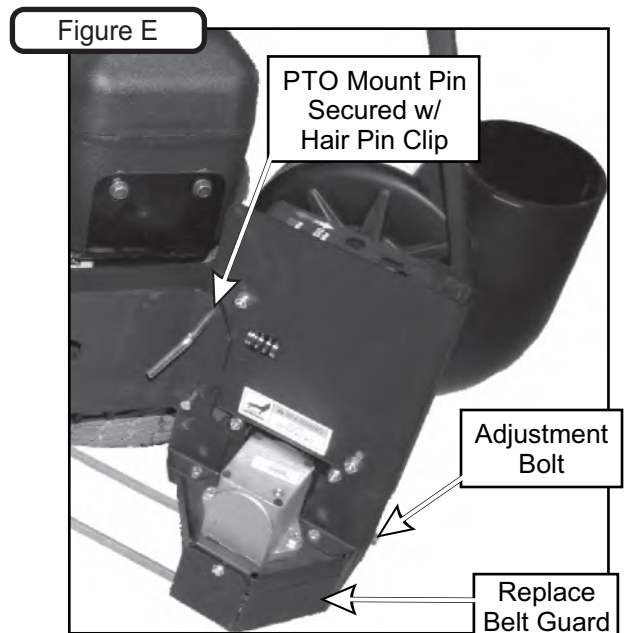
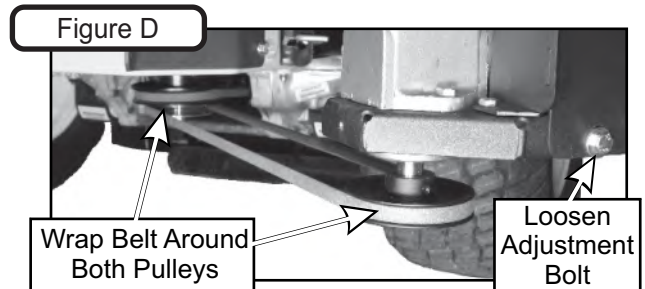
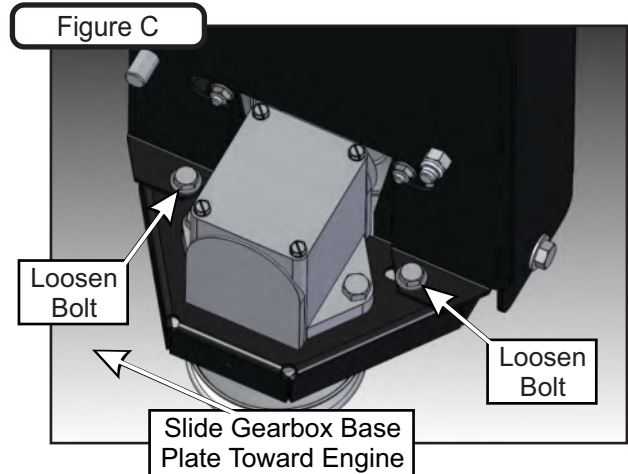
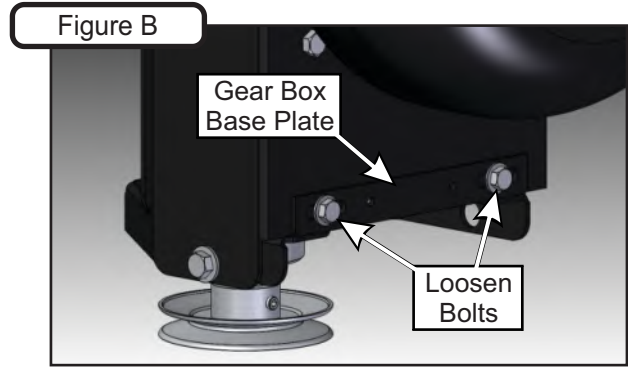
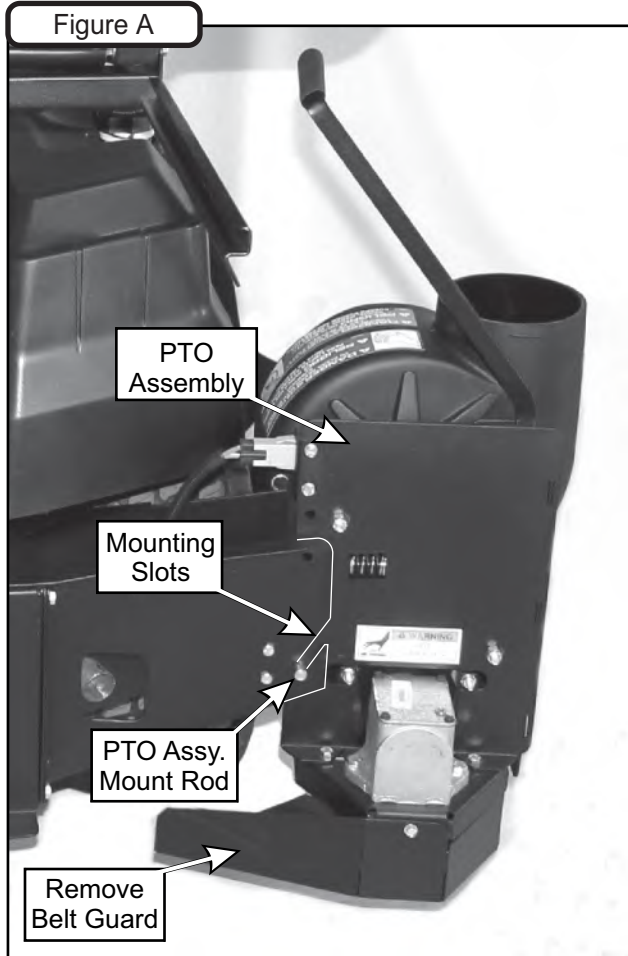


Completed Assembly
For LZ & SZ Models



PTO Assembly Installation

Remove (3) 1/4"-20 x 1/2" HHSTS P#(K0353) from the PTO assembly to remove the belt guard. Insert the mount rod of the PTO assembly P#(A1842), into the mounting slots on the PTO mount plates, as shown in Figure A.



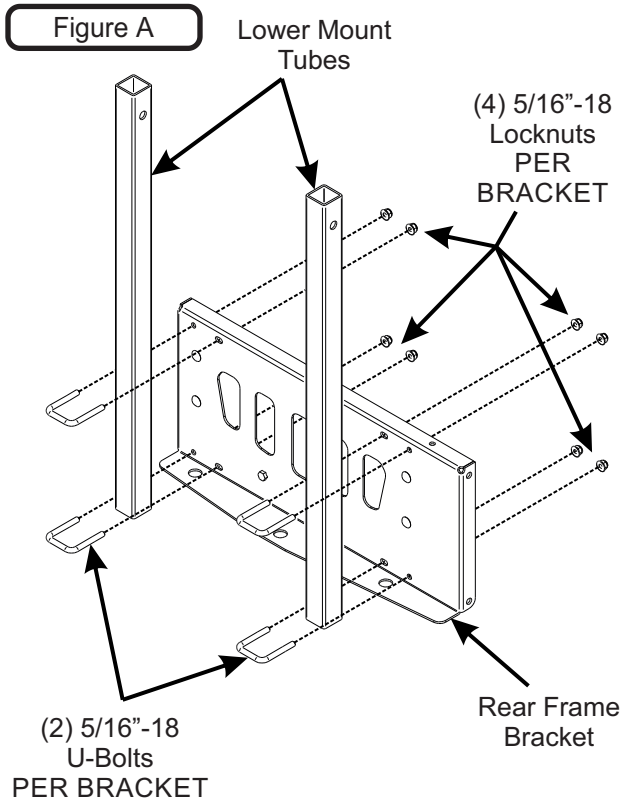
Belt Installation/Removal & Adjustment

Installation/Removal: Loosen the (4) 5/16"-18 x 3/4" HHCS P#(K1153) that secure the gear box base plate. Loosen the adjustment bolt (1) 3/8"-16 x 2" hex bolt P#(K0348). Slide the gearbox towards the mower until there is enough clearance for the kevlar belt to slide over both the engine and gearbox pulleys. Install the A76K kevlar belt P#(M0274). Pivot PTO assembly to align holes, then fasten by inserting (1) PTO mount pin P#(B0274). Secure the mount pin using (1) hair pin clip P#(K0086). Refer to Figures B through E.

Adjustment: To adjust the belt tension, turn the adjustment bolt clockwise until there is 1" of deflection, with 10-11lbs of pressure applied to the center of the belt. When proper tension is achieved, tighten the (4) 5/16"-18 x 3/4" HHCS that secure the gear box base plate to the PTO assembly. Replace the belt guard and (3) 1/4"-20 x 1/2" HHSTS. Refer to Figure E.

Lower Mount Tube Installation

Secure the (2) lower mount tubes P#(B0640) to the rear frame bracket using (2) 5/16"-15 u-bolts P#(K1098) and (4) 5/16"-18 nylon flange locknuts P#(K2516) PER TUBE. Refer to Figure 2-7.



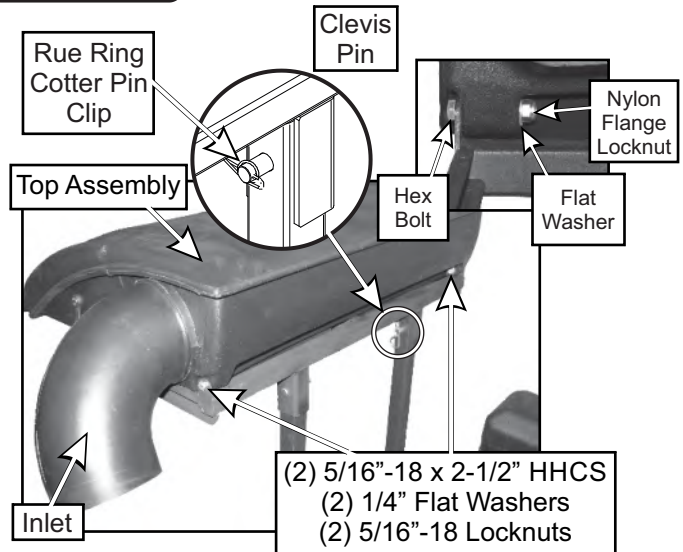
Upper Frame Assembly Installation

Lift the upper frame assembly P#(A1114) into position, and slide onto the lower mount tubes as shown in Figure 2-9 and secure with (2) 1/2" x 2-1/4" clevis pins P#(K0133) and (2) Rue Ring cotter pin clips P#(K1437). **Note:** It is recommended that someone assist you when installing the upper frame assembly.

Top Assembly To Upper Frame Assembly Installation

Position the top assembly P#(A1148) above the upper frame assembly as shown in Figure 2-9. Fasten the top assembly to the upper frame assembly using (2) 5/16"-18 x 2-1/2" HHCS P#(K0125), (2) 1/4" flat washers P#(K0037), and (2) 5/16"-18 nylon flange locknuts P#(K2516). Leave the locknuts slightly loose, to allow the top assembly to open and close easily. Refer to Figure B for hardware location.

Figure B



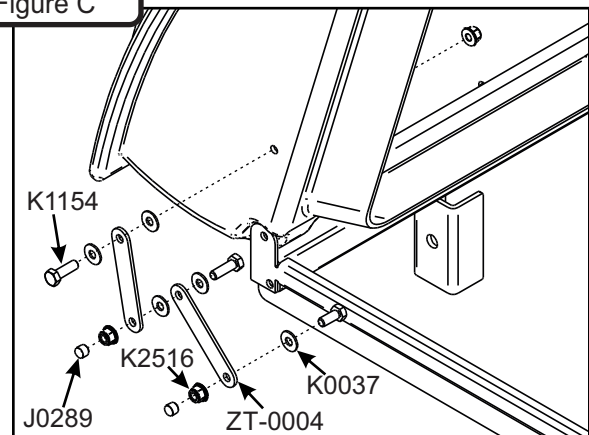
Inlet Installation

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

Hinge Kit Assembly Installation

Assemble the hinge kit as shown in Figure 2-11, using (2) 5/16"-18 x 1" HHCS P#(K1154), (3) 5/16"-18 nylon flange locknuts P#(K2516), (5) 1/4" flat washers P#(K0037) and (2) swing arm brackets P#(ZT-0004). Place (1) vinyl cap P#(J0289) on the end of the hex bolts as shown in Figure C. Leave the nuts loose enough to allow fluid movement of the top when opening and closing. When opened, the top should rest on the middle joint of the hinge allowing it to remain up.

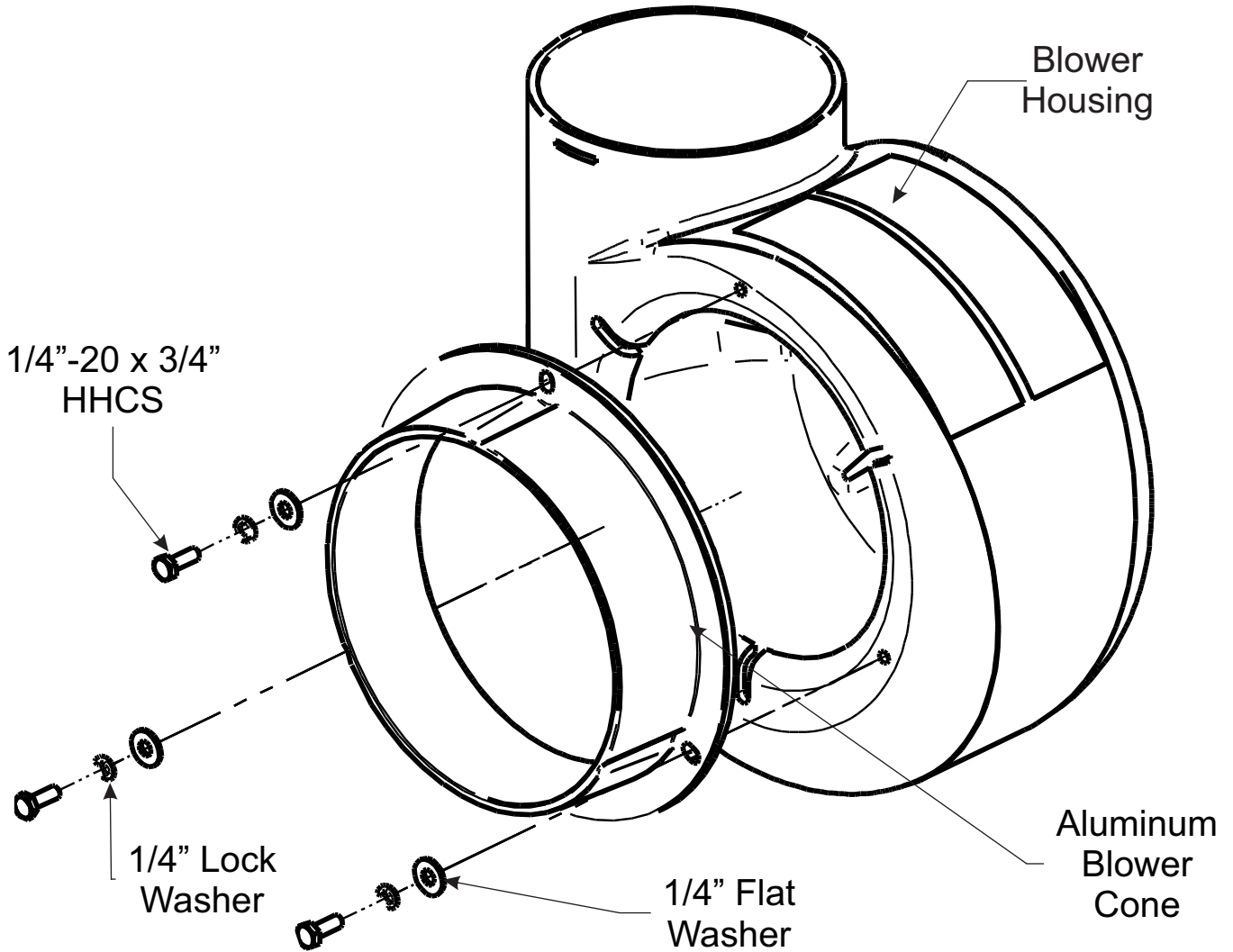
Figure C



Blower Cone Installation

Secure the 8" aluminum blower cone P#(E8004) to the plastic blower housing, using (3) 1/4"-20 x 3/4" HHCS P#(K1222), (3) 1/4" flat washers P#(K0037) and (3) 1/4" lock washers P#(K0039). Refer to Figure A.

Figure A



Boot To Mower Deck Installation

Note: The boot kit assembly is designed to fit the 48" 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.

Lift the grass deflector on the mower deck. Secure the deck plate assembly P#(A1960) to the discharge chute of the mower deck using (2) 5/16"-18 x 1" carriage bolts P#(K1144) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Refer to Figure A.

Secure the boot plate assembly P#(A1961) to the aluminum boot P#(E0026) using (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Insert the carriage bolts from the inside of the boot so the threads are on the outside of the boot (Figure A). This will prevent grass clippings from collecting on the bolt threads.

Align the mount holes in the boot plate assembly with the mounting holes in the deck plate assembly and insert (1) boot rod P#(B0288) into the mounting holes. Secure the boot rod with (1) hair pin clip P#(K0099). Refer to Figure B.

Figure A

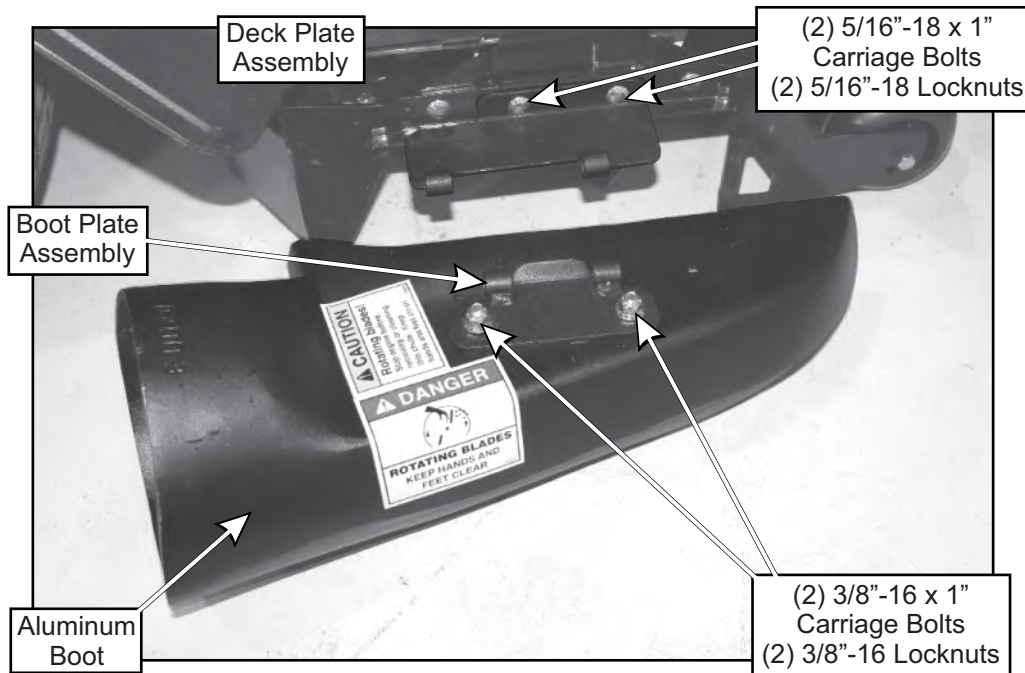
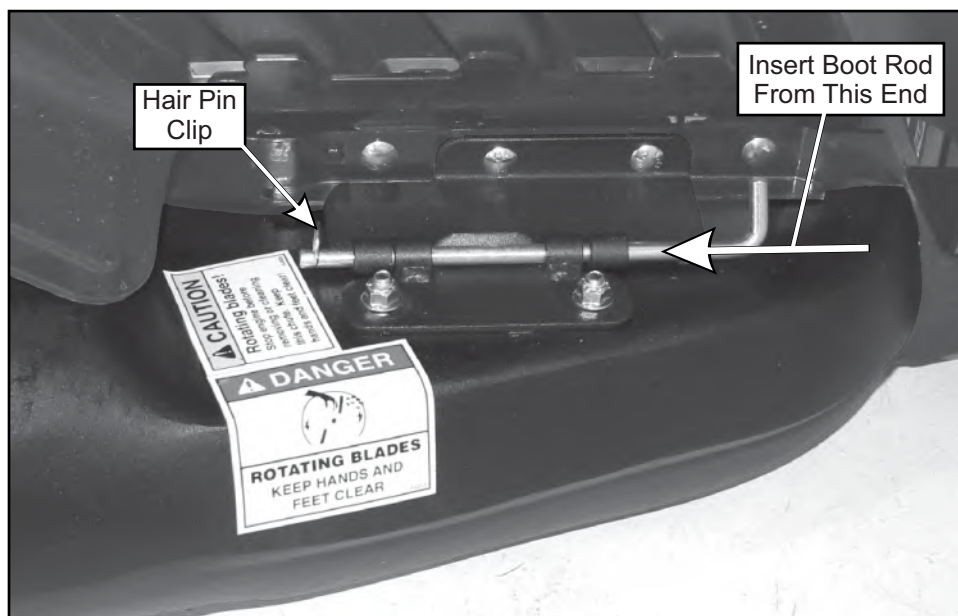


Figure B



Length Of Hose Adjustment

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

Note: The upper hose should be no shorter than 32".

Upper Hose Installation

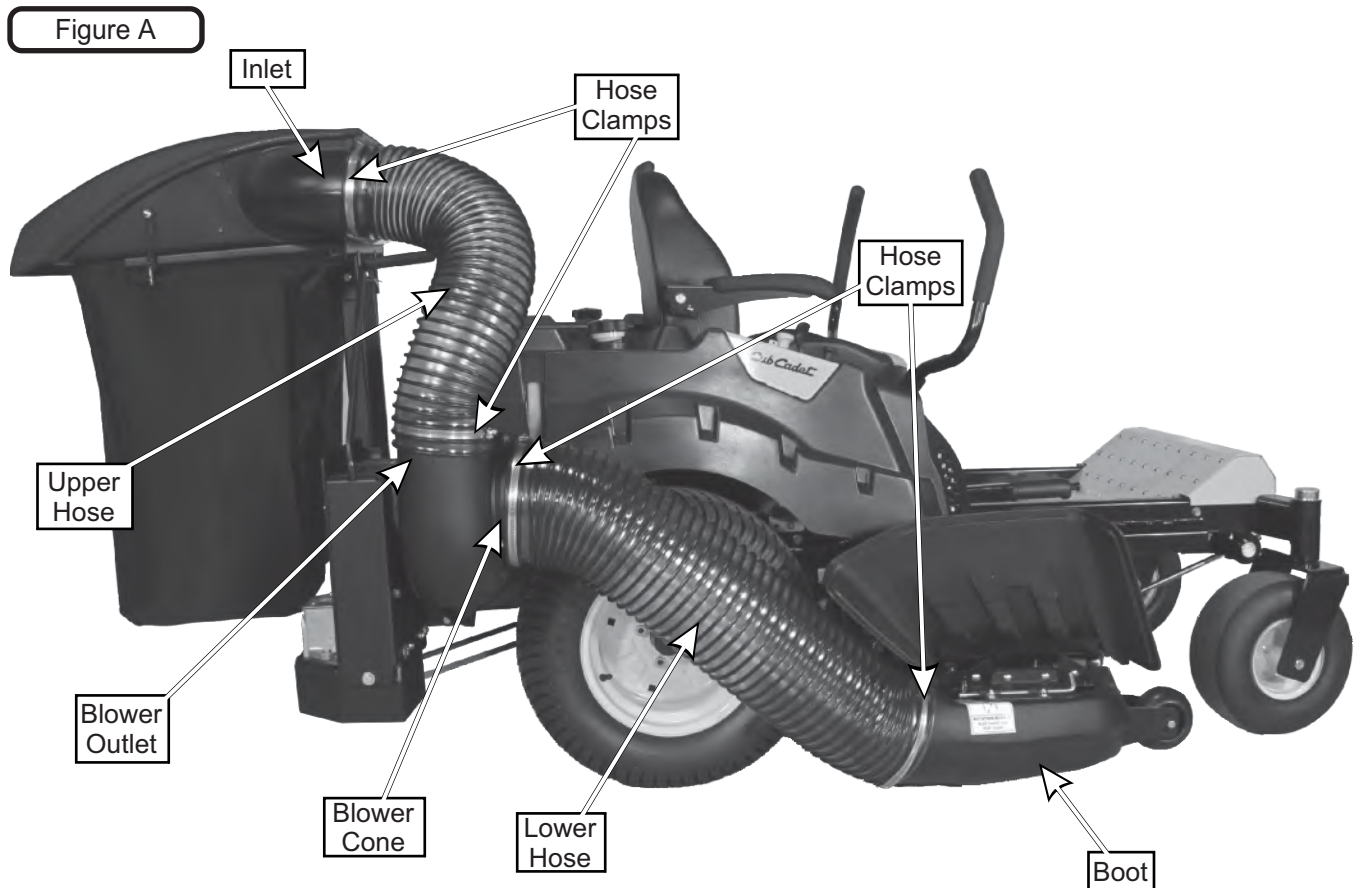
Fasten the inlet to the plastic top by sliding the inlet from the inside of the top to the outside and lock into place. Slide a pre-assembled hose clamp P#(J0060) onto both ends of the 6" upper hose (Figure A). Then slide one end of the 6" hose onto the inlet. Make sure there is about a two-inch overlap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

Lower Hose To Blower Cone Installation

Slide a pre-assembled hose clamp P#(J0080) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. The assembly should look like Figure A.

Lower Hose To Boot Installation

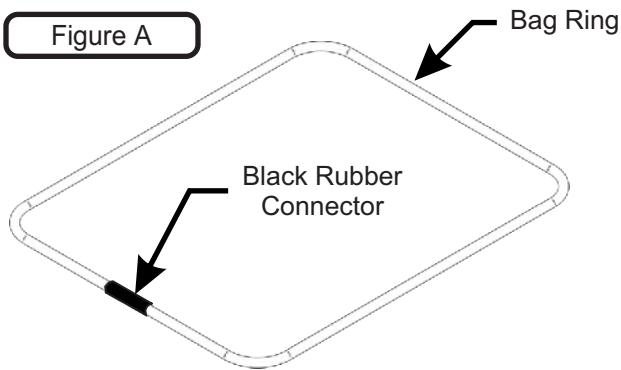
Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the lower hose clamp to secure the hose to the boot (Figure A). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.



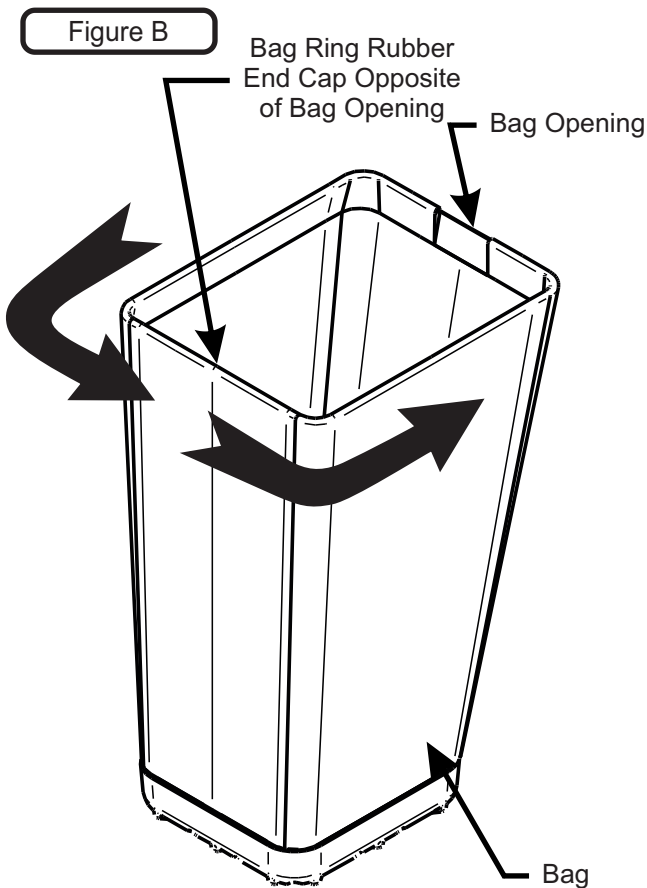
Installation/Removal Of Collection Bags

IMPORTANT!

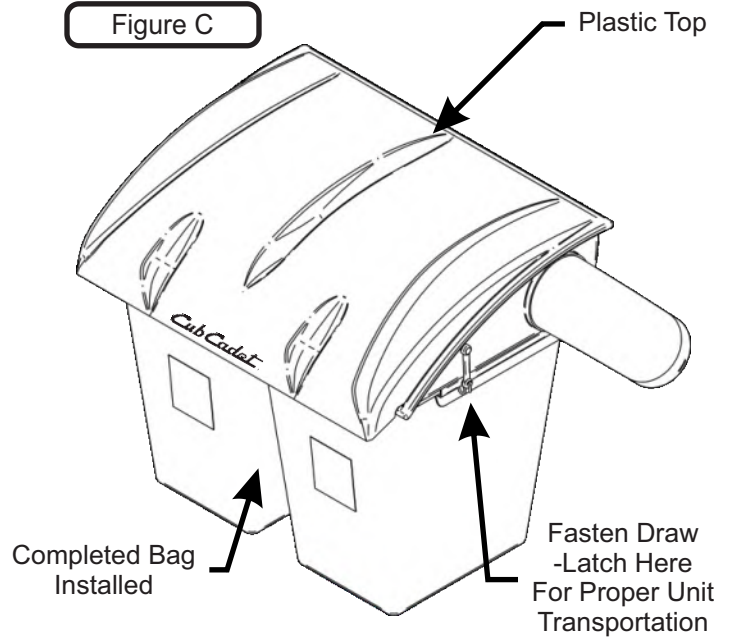
To prevent bag wear, install (1) Black Rubber End Cap P#(F0010), as shown in Figure A, on each Bag Ring after rotating bag 360°.



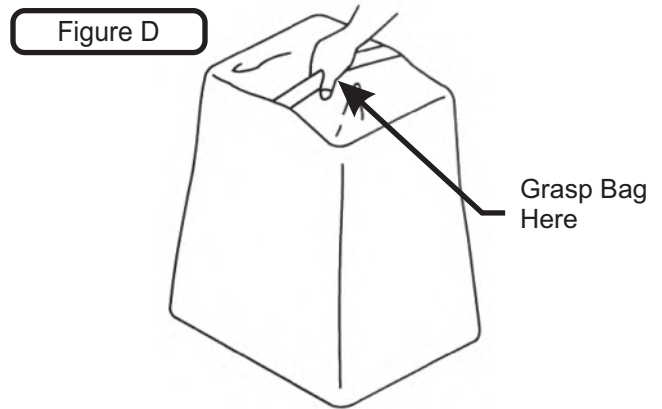
To complete the bag installation, place the seam openings of the bag and the bag ring openings together. Place the rubber bag ring connector on both ends of the bag ring and turn the bag one half turn (180°) so the rubber end cap is located opposite to the opening in the bag (Figure B). Do this for each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



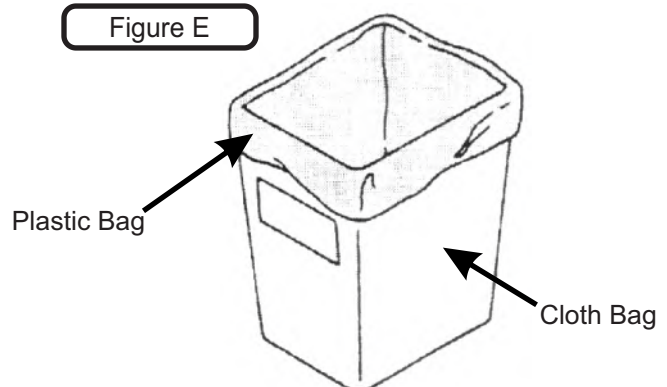
Install the completed assemblies onto the support frame and close the plastic top. Fasten the draw-latches to hold the plastic top closed (Figure C).



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



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



Weight Kit Installation

Note:

- Installing a weight kit is mandatory for safe operation of the collection system.
- When installing the weight bar, you should have another person to help position the weight.
- If removing PTO assembly for side-discharge mowing, please also remove the weight kit.

Installation:

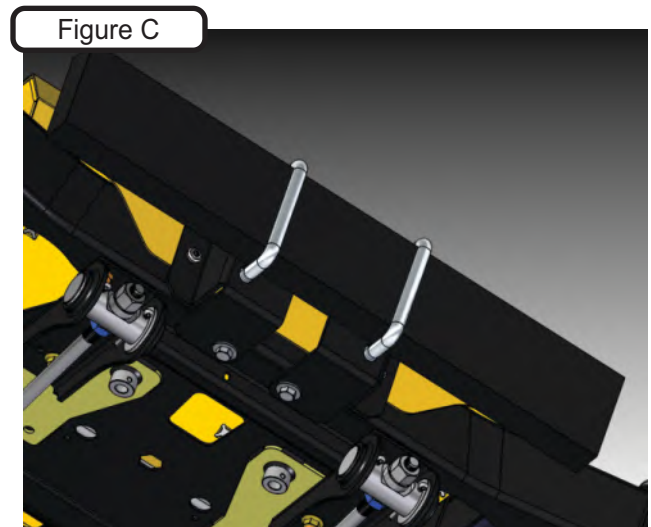
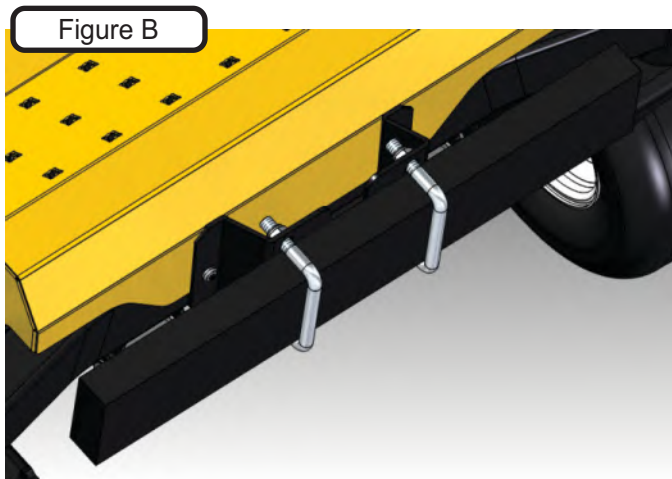
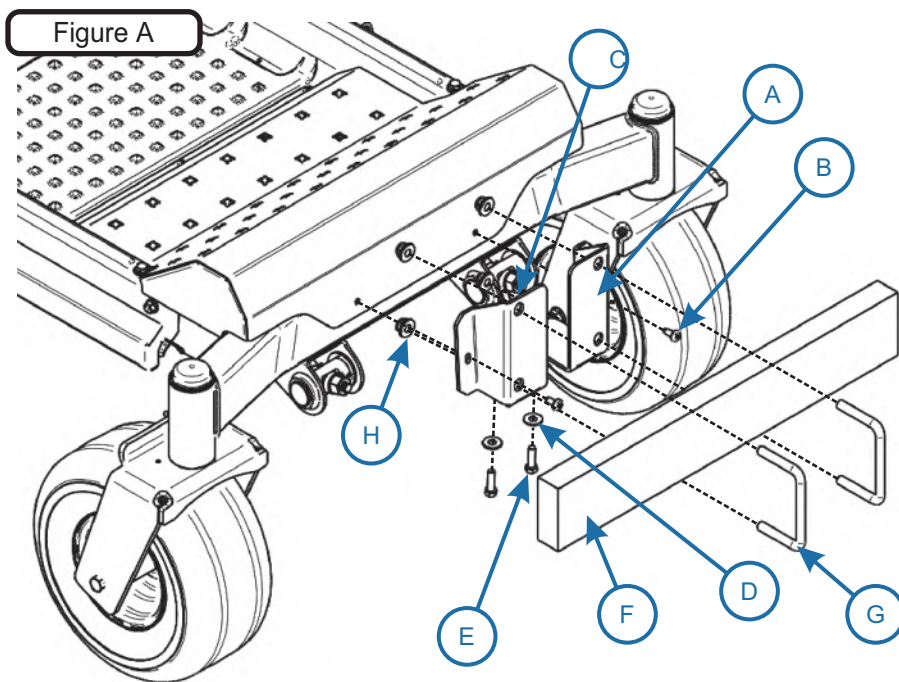
To install left mount plate (A) perform the following;

- Remove (1) existing torx screw (B) from front left side of mower. Retain screw for later use.
- Remove (1) existing hex bolt from bottom left side of mower.
- Align left mount plate (A) to holes in mower where hardware removed.
- Fasten left mount plate (A) to front left side of mower using (1) torx screw, removed previously.
- Fasten left mount plate (A) to bottom left side of mower using (1) 3/8" flat washer (D) P#(K0047) & (1) 3/8"-16 x 1-1/4" hex bolt (E) P#(K1192).

Repeat process to install right mount plate (C).

Position weight bar (F) onto left & right mount plates and fasten using (1) 1/2"-13 u-bolt (G) and (2) 1/2"-13 flanged lock nuts (H) per side.

Refer to Figures A, B & C.



Safety Interlock Harness Installation

Collection System May Require Dealer Installation!

Before installing, please verify the presence of an auxiliary 5-way male connector in the mower's electrical harness. The connector is located underneath the operator's seat, in front of the battery. For early production LZ Models without the connector, a dealer must perform the complete collection system installation. If the connector is present, or an early production SZ Model, dealer installation of the collection system is not required.



WARNING

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

Dealer Installation

Early Production LZ Models;

- Without auxiliary 5-way male connector.
- Interconnects between right steering lever plunger switch & mower's harness, located underneath operator's seat. See Figure A.
- Dealer must disassemble the left & right pods along with the seat box to make the electrical connection.

End-User Installation

Early Production SZ Models;

- Without auxiliary 5-way male connector.
- Interconnects between plunger switch & mower's harness, located underneath front left corner of floor panel, near the brake. See Figure B.
- Connection point requires additional harness length to make connection. Please disconnect standard harness P#(P0209) from Left PTO Mount Assembly P#(A1991) and attach Harness Extension P#(P0263) in-between. See Figure C.

Current Production LZ & SZ Models;

- Auxiliary 5-way male connector present
- Connects to mower's harness, located underneath operator's seat, in front of battery. See Figures A & B.

Harness Routing & Connecting;

- First, route the Safety Interlock Harness (w/ Extension, if applicable) along the mower to the connection point. See Figure C. When choosing a path for the harness, make sure it will not contact moving parts or high heat components. Next, remove any slack from the harness, loop and fasten the excess using (1) zip-tie P#(J0245). Then, secure the harness to the mower frame with the remaining (6) zip ties. Last, check harness operation only after complete collection system is installed. With the mower running, deck PTO off, and not sitting in the operator's seat, engage the PTO. If correctly installed, the mower should turn off. If the mower does not turn off, check the steps above and each connection point.

Figure A

LZ Model

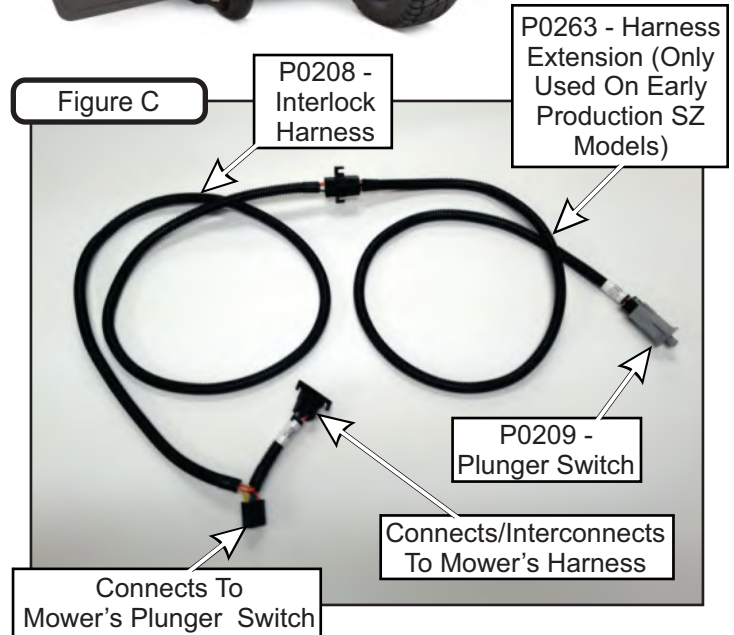


Figure B

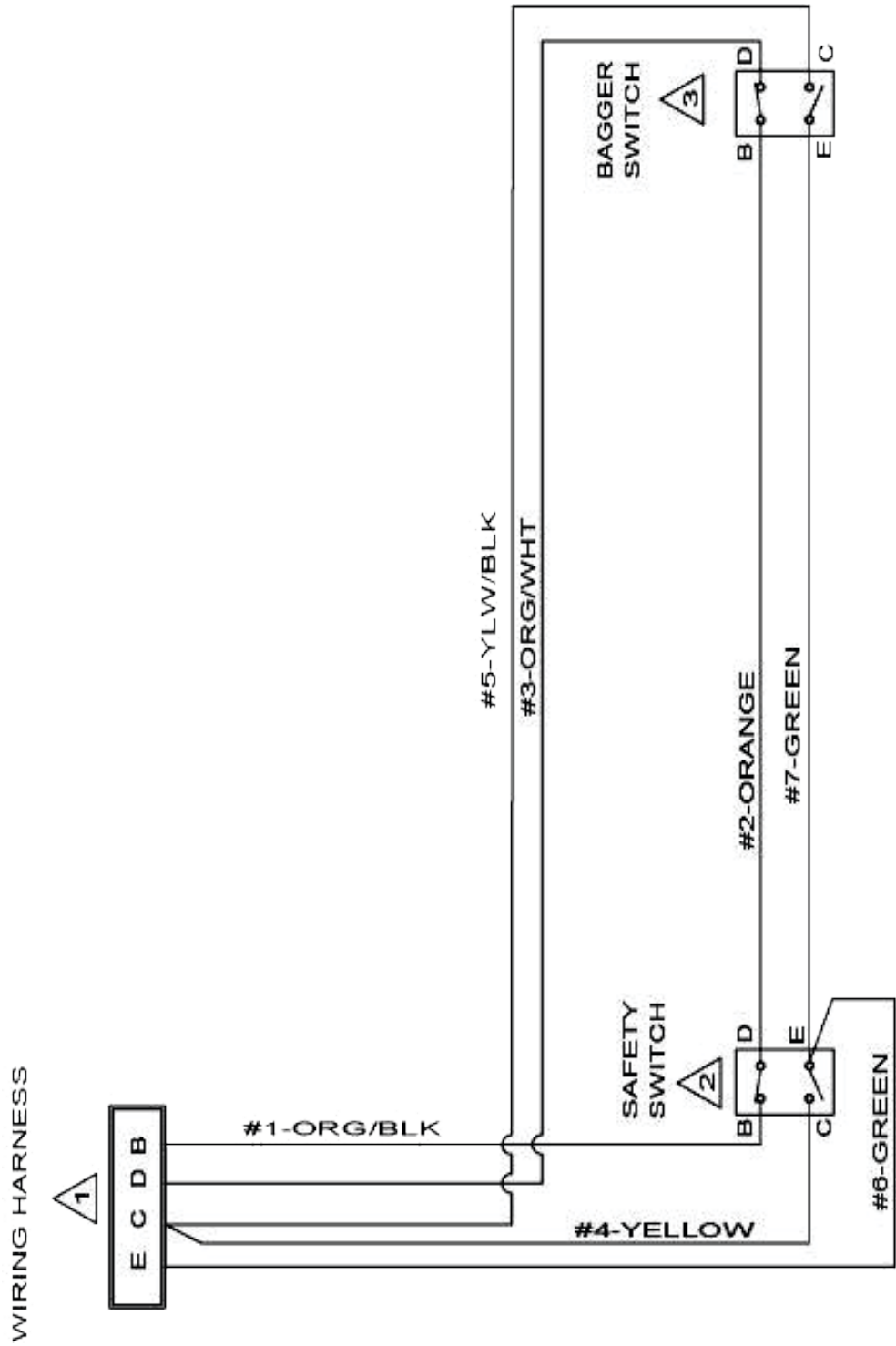
SZ Model



Figure C



P0208 Safety Interlock Wiring Harness



Impeller Blade Removal/Replacement



WARNING

Before Removing/Replacing the Impeller Blades, be sure the mower is **TURNED OFF**, the PTO Assembly is **DISENGAGED** and the Negative Cable is **REMOVED** from the Battery.

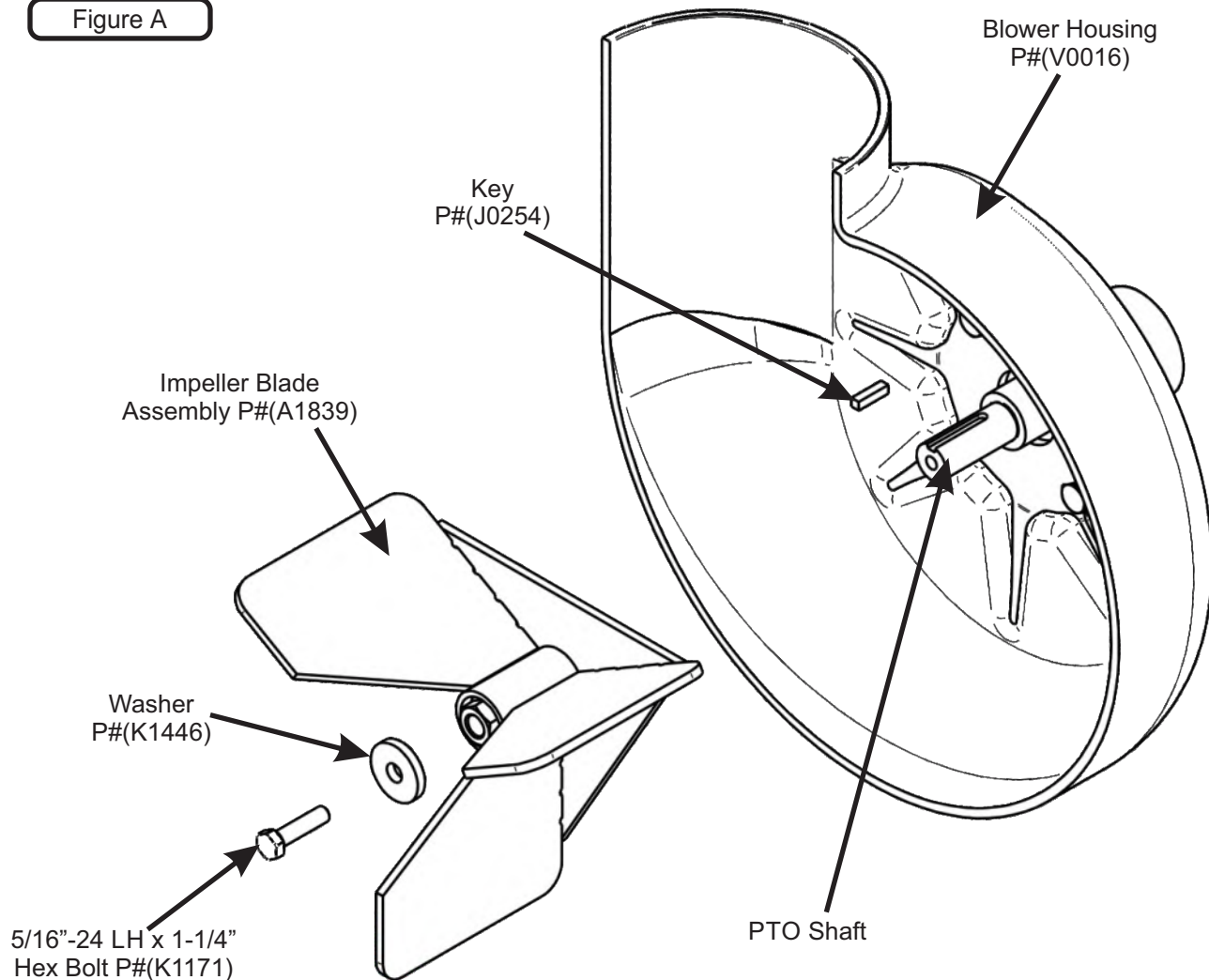
FAILURE TO DO SO MAY RESULT IN SEVERE INJURY OR DEATH.

REMOVAL

STEP 1: Remove the blower cone P#(V0016) from the blower housing located on the PTO assembly P#(A1878). With the blower cone removed, you will have access to the impeller blade assembly P#(A1839). Refer to Figure A.

STEP 2: Remove the 5/16"-24 LH x 1-1/4" hex bolt P#(K1171) and washer P#(K1446).

Figure A



STEP 3: Insert the 1/2"-13 x 1" hex bolt (K1231) into the threads on the blade assembly and tighten. The blade should break free from the shaft.

STEP 4: Remove the blade assembly and key P#(J0254) from the PTO shaft.

Note: If necessary, use a break-free agent to aid in the removal of the blade.

INSTALLATION

STEP 1: Insert the key P#(J0254) into the key way on the PTO shaft.

STEP 2: Insert the blade assembly P#(A1839) onto the PTO shaft.

STEP 3: Secure the blade assembly to the PTO shaft with (1) washer P#(K1446) and (1) 5/16"-24 LH x 1-1/4" hex bolt. Torque the bolt to 19 ft./lbs.



Unit Model #: 59A30045150 (21120901B)

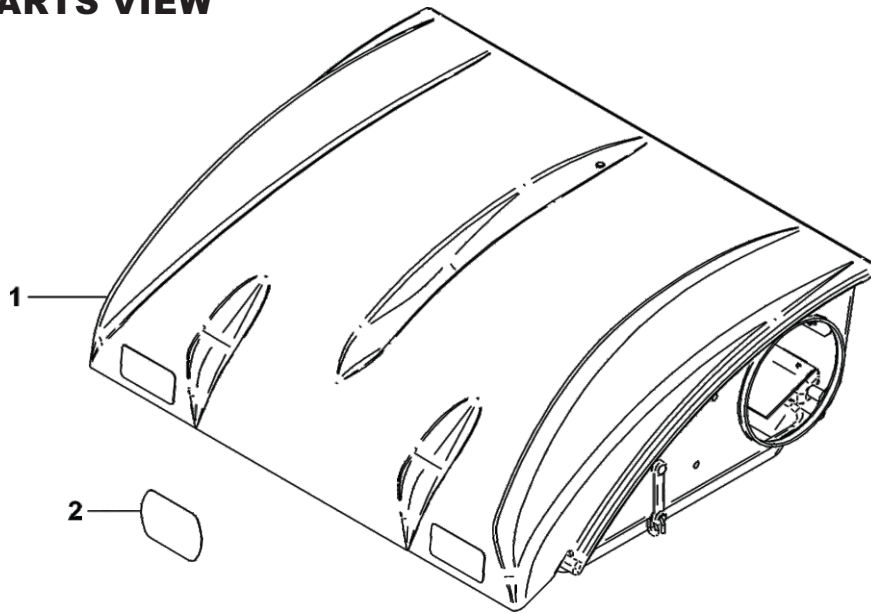
Mower & Type: Cub Cadet Z-Force Series 48", 54" & 60" Decks

Mower Models: Z-Force - LZ 48-53AIDAGB050 / LZ 60-53ANDAGD050 / SZ 48-53ATDFJB050 / SZ 60-53ANDEFJD050
 Z-Force - LX 48-17AIDAUB010 / LX 54-17AIDAUC010 / LX 60-17AIDAUD010 / SX 48-17AIDGJB010 / SX 54-17AIDGJC010 / SX 60-17AIDGJD010

Owner's Manual: Q0475
Vac/Drive Type: P2B+ (9 Cu. Ft.) PTO Driven
Revision #: 3 - Updated PTO-R to New Handle - 12/16/21 XY
Fits Year(s): 2014 & Newer

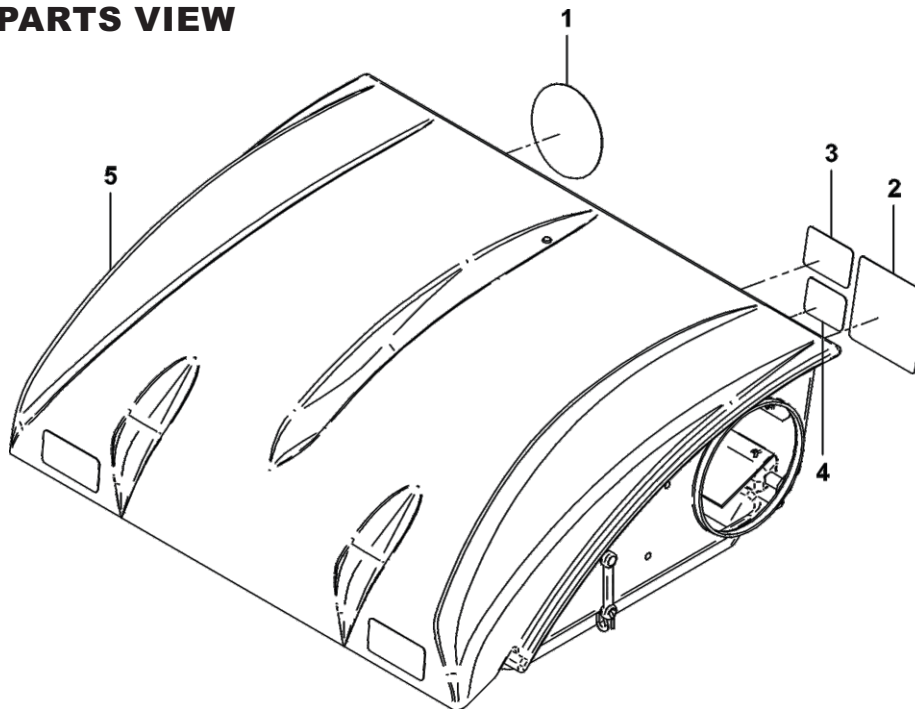
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**A2110 TOP ASSEMBLY / CUB CADET
EXPLODED PARTS VIEW**



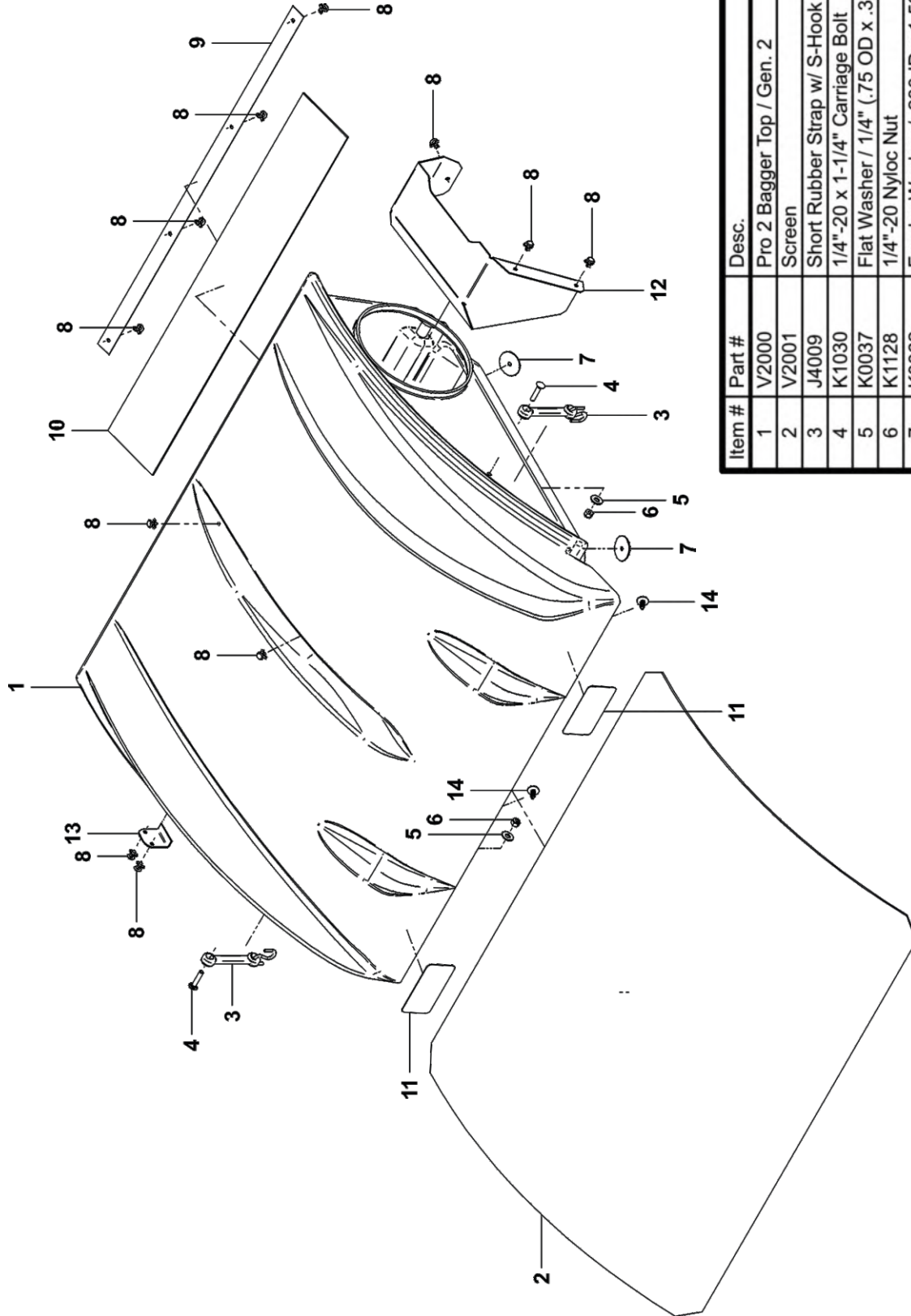
Item #	Part #	Desc.	Qty.
1	A2101	Top Assy / P2B+ Gen. 2 / Standard Model	1
2	R0023	Decal / Cub Cadet 'C'	1

**A2101 TOP ASSEMBLY / STANDARD
EXPLODED PARTS VIEW**



Item #	Part #	Desc.	Qty.
1	R0022	Decal / Built In The USA / Lg	1
2	R1069	Decal / Warning - Turn Off Blower	1
3	R1054	Decal / Important Check Hoses	1
4	R1051	Decal / Warning - Use Hearing Protection	1
5	A2222	Top Assy / P2B+ Gen. 2 / Base Model	1

A2222 TOP ASSEMBLY / BASE EXPLODED PARTS VIEW

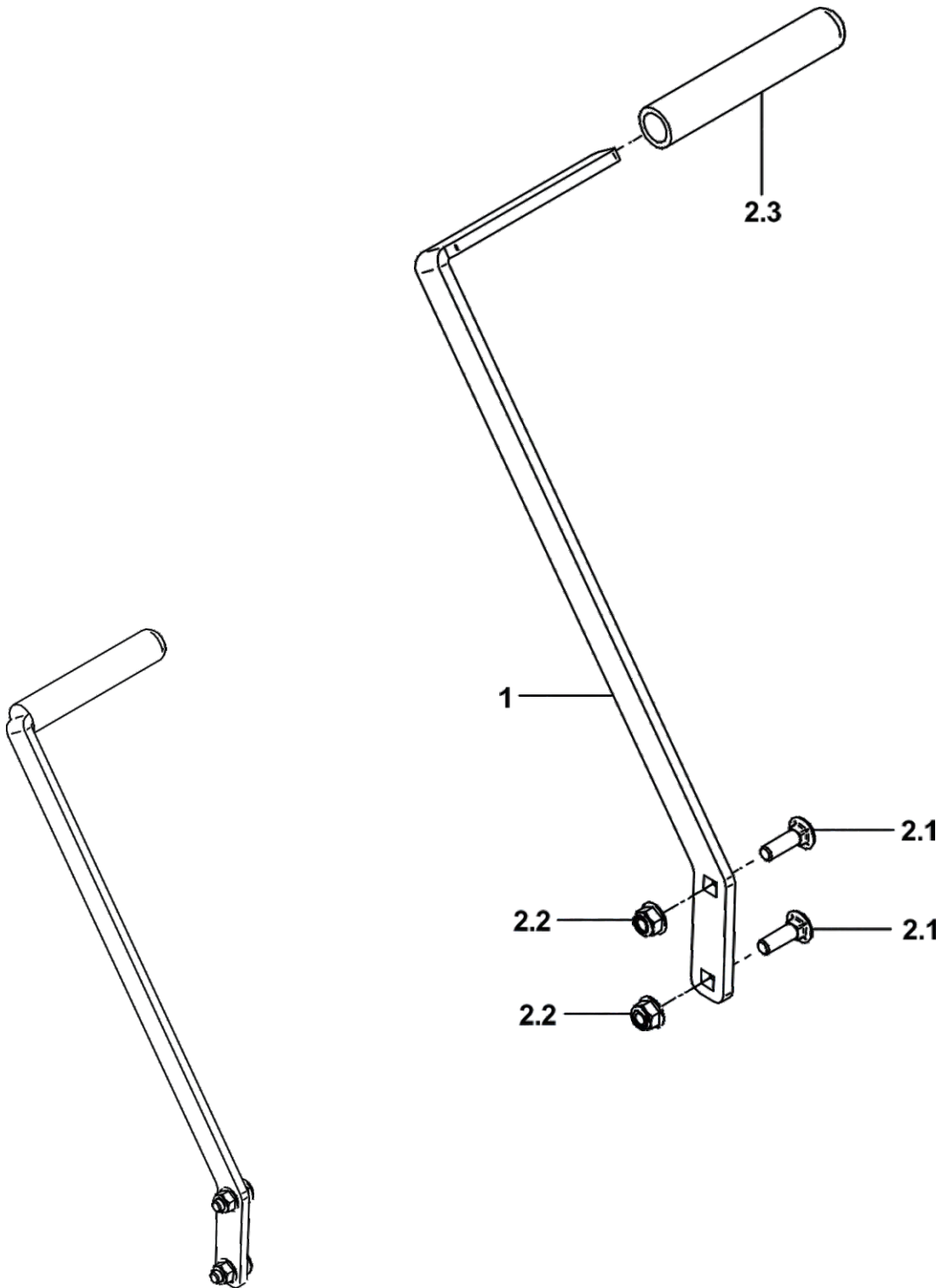


Item #	Part #	Desc.	Qty.
1	V2000	Pro 2 Bagger Top / Gen. 2	1
2	V2001	Screen	1
3	J4009	Short Rubber Strap w/ S-Hook	2
4	K1030	1/4"-20 x 1-1/4" Carriage Bolt	2
5	K0037	Flat Washer / 1/4" (.75 OD x .312 ID x .060 T)	2
6	K1128	1/4"-20 Nyloc Nut	2
7	K0062	Fender Washer / .230 ID x 1.500 OD / Zinc	2
8	K0114	Black Plastic Rivet	11
9	C0067	Dust Guard Mnt. Brkt.	1
10	V1117	Dust Guard	1
11	R1057	Decal / 2" x 4" Red Reflector	2
12	C0026	Grass Deflector	1
13	B0676	Hinge Stop Pl.	1
14	K1265	Black Panel Retainer	2

A1137_01 PTO HANDLE EXT. KIT

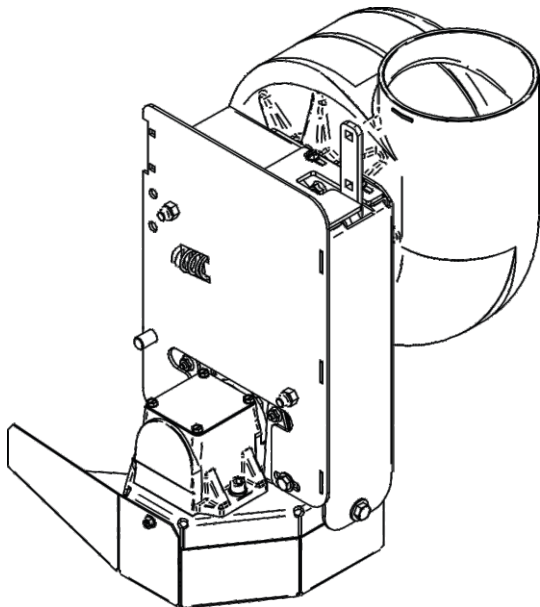
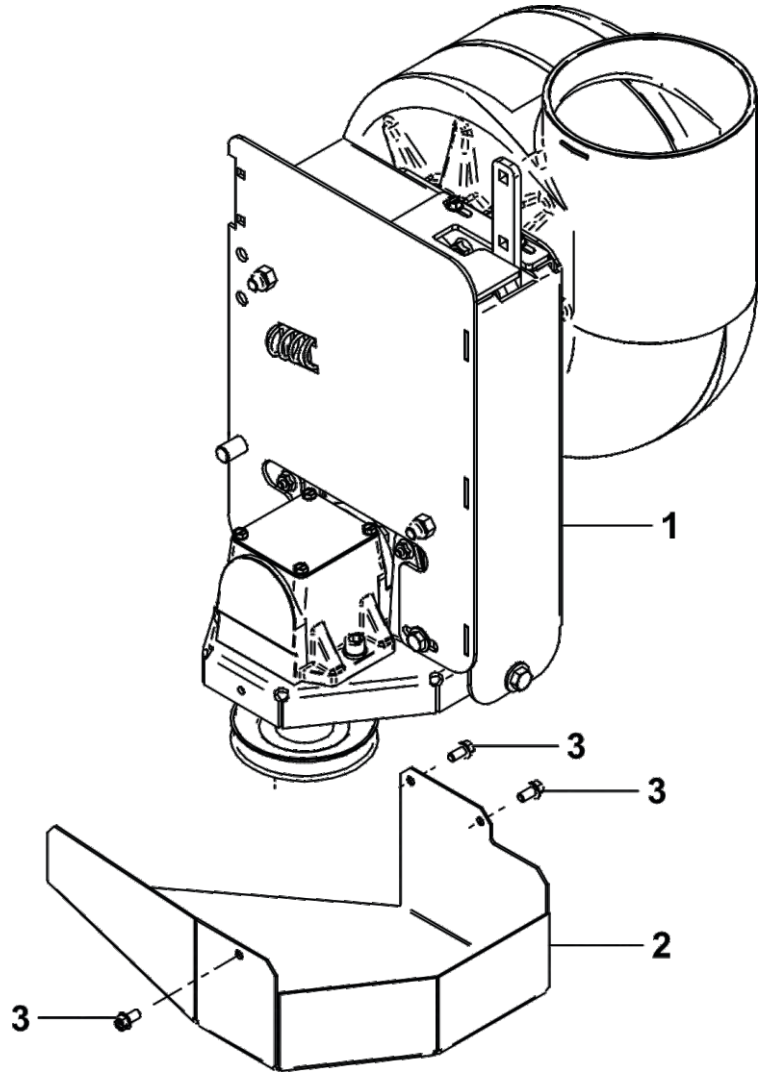
EXPLODED PARTS VIEW

Item #	Part #	Desc.	Qty.
1	B0683_01	Handle Ext. / PTO-R	1
2	HB0783	HW Bag / Handle Ext. Kit / PTO-R	1
2.1	K1144	5/16"-18 x 1" Carriage Bolt	2
2.2	K2516	Ny-Flange Lock Nut 5/16"-18	2
2.3	V1151	Black Handle Grip (5/8" ID x 4-3/4" L)	1

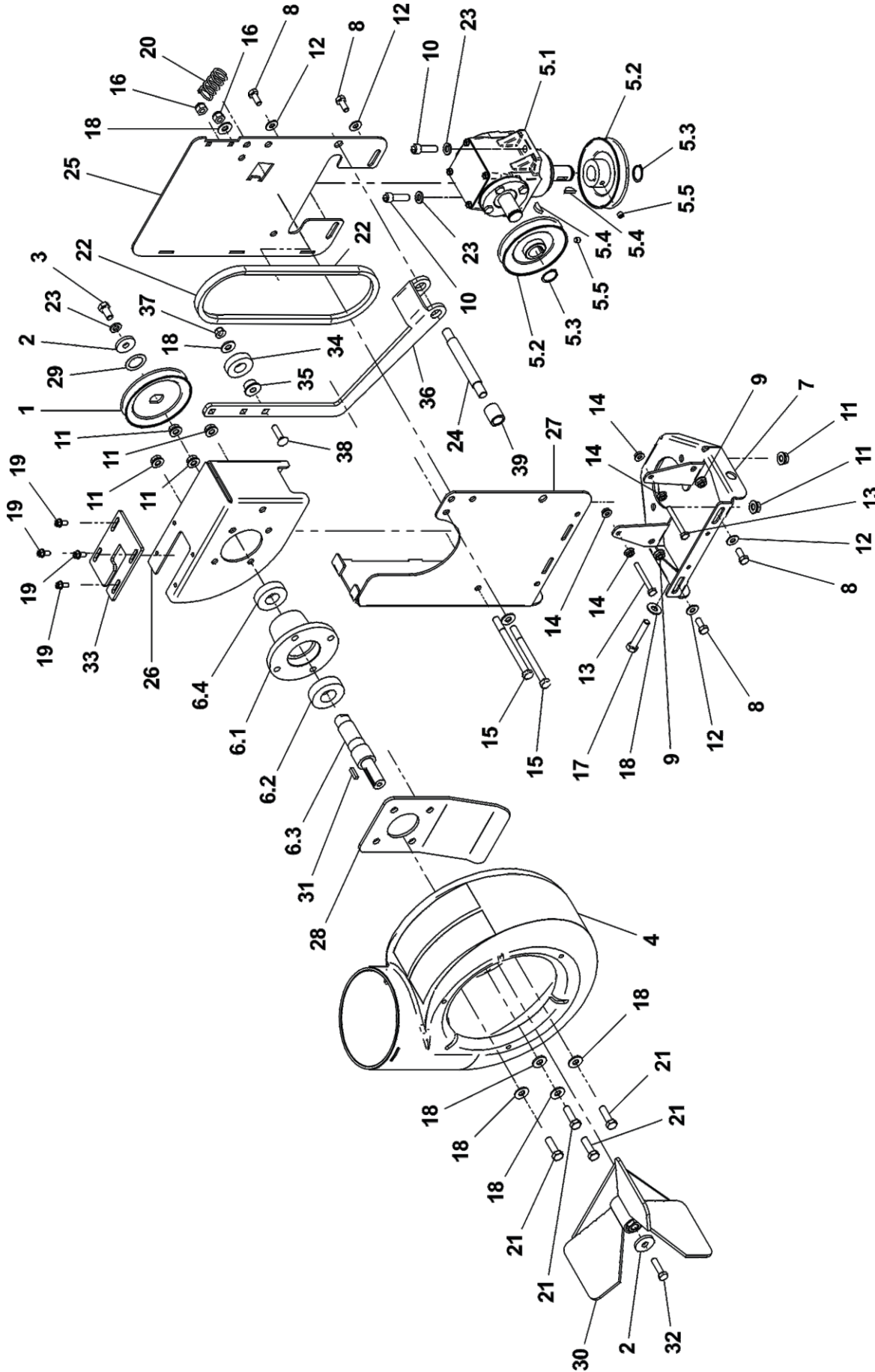


A2267 PTO ASSEMBLY / LARGE PULLEY GUARD / BEARING HANDLE EXPLODED PARTS VIEW

Item #	Part #	Desc.	Qty.
1	A2194_01	PTO-R Base Assy. / Bearing Handle	1
2	B0681	Large Pulley Guard / PTO-R	1
3	K0353	HWHTCS 1/4"-20 x 1/2"	3



A2194_01 PTO-R BASE ASSEMBLY EXPLODED PARTS VIEW



A2194_01 PTO-R BASE ASSEMBLY PARTS LIST

Item #	Part #	Desc.	Qty.
1	M0266	A-Section Pulley / 4.25 OD	1
2	K1446	PTO Housing Washer	2
3	K1190	HHCS / 3/8"-16 x 3/4"	1
4	V0015	Blower Hsg.	1
5	A0429	Gear Box Assy.	1
5.1	A0431	Gearbox	1
5.2	A0498	Pulley Assy. / Gear Box	2
5.3	K0360	Snap Ring / 7/8" Shaft	2
5.4	J0272	Woodruff Key #9	2
5.5	K0035	Set Screw 5/16"-18 x 1/4" Cup Point	2
6	A1004	PTO Shaft Assy.	1
6.1	E0015	Housing / PTO Shaft	1
6.2	N0147	Bearing (2.0472 OD, 0.9843 ID, 0.5906 W)	1
6.3	B0460	PTO Shaft	1
6.4	N0165	Bearing (1.875 OD, .875 ID, .500 W)	1
7	A1003	PTO Base Plate Assy.	1
8	K1153	HHCS 5/16"-18 x 3/4"	4
9	K1178	Flange Nut 5/16"-18	4
10	K0309	3/8"-16 x 1-1/4" SHCS	2
11	K1215	Flange Nut 3/8"-16	6
12	K0037	Flat Washer / 1/4" (.75 OD x .312 ID x .060 T)	4
13	K1150	HHCS / 1/4"-20 x 2-1/4"	2
14	K1126	Flange Nut 1/4"-20	4
15	K1202	HHCS / 3/8"-16 x 4-1/2" / G5	2
16	K1216	Nyloc Nut / 3/8"-16	2
17	K0348	HHCS / 3/8"-16 x 2" All Thread	1
18	K0042	Flat Washer 5/16" / .875 OD x .380 ID x .075 T	8
19	K0353	HWHTCS 1/4"-20 x 1/2"	4
20	J0303	Spring	1
21	K1192	HHCS 3/8"-16 x 1-1/4" GR5	4
22	M0267	Kevlar Belt / A28K	1
23	K0048	Lock Washer 3/8"	3
24	B0505	Mount Rod	1
25	B0506_01	Lt. PTO Arm	1
26	B0642_01	Mount Bracket / Blower Hsg.	1
27	B0643_01	Rt. PTO Arm	1
28	B0739	Stiffener Plate / Blower Hsg.	1
29	K0070	Flat Washer (1.295 OD x .881 ID x .020 T)	1
30	A1839	3-Blade Impeller Assy.	1
31	J0254	Key / 3/16" x 3/16" x 3/4"	1
32	K1171	HHCS / 5/16"-24 LH x 1-1/4" / G5 w/ Patch Coating	1
33	B1875	Belt Tension Adjust Bracket	1
34	N0148	Bearing (1.625 OD, 0.750 ID, 0.4375 W)	1
35	S0021	Flange Bushing / Bearing	1
36	B1897	Base Handle	1
37	K2516	Ny-Flange Lock Nut 5/16"-18	1
38	K1146	5/16"-18 x 1-1/4" Carriage Bolt	1
39	S0229	Spacer Bushing	1

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 #: R2007
Danger - Never Use Hands



Part #: R4037
Warning: Hot Surface Label



Part #: R2008
Danger - Rotating Blades



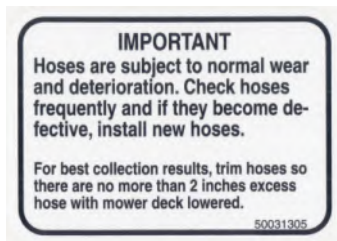
Part #: R1100
Engage-Disengage Label



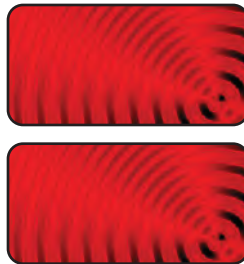
Part #: R0022
Designed & Built In The USA



Part #: R1052
Small Warning: Turn Off Blower Label



Part #: R1054
Important Label



Part #: R1057 - (2)



Part #: R1069
Warning: Turn Off Blower Label



Part #: R0024
Danger Keep Hands Clear



Part #: R1051
Warning: Hearing Protection Label



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 over-filled 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:

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

3. Make sure all shields are in place and in good condition. Repair or replace any missing or damaged shields.
4. Perform lubrication per 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.
2. Inspect the unit for worn or damaged components. Repair or replace before the next use. Any replacement component installed during repair shall include the component's current safety decal specified by the manufacturers to be affixed to the component.
3. Under normal usage, the bag material is subject to deterioration and wear and should therefore be frequently checked for necessary replacement. Any replacement bag should be checked to ensure compliance with the original manufacturer's recommendations or specifications.
4. Check belt for proper tension.

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 greasable 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.

DOCUMENT THE FOLLOWING INFORMATION FOR FUTURE REFERENCE

Unit Model Number: _____

Unit Engine Size: _____

Unit Serial Number: _____

Date of purchase: ____/____/____

Dealer/Distributor Name: _____

Address: _____ **State:** _____ **Zip:** _____

Phone Number: _____

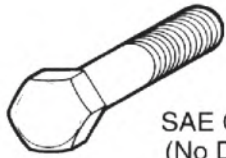
THE SERIAL NUMBER PLATE
IS LOCATED ON THE TOP
ASSEMBLY

MODEL: 59A30034150
SERIAL: 2____XP____
<small>R0007</small>

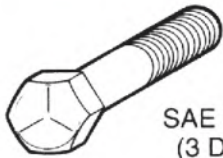
TORQUE SPECIFICATIONS

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

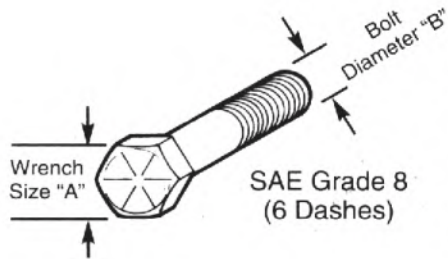
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



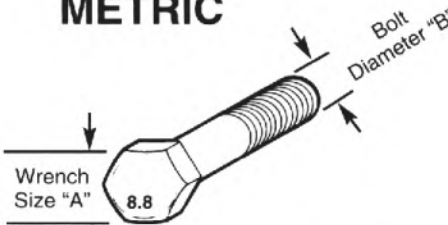
SAE Grade 5
(3 Dashes)



SAE Grade 8
(6 Dashes)

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

METRIC



Numbers appearing on bolt heads indicate ASTM class.

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)

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

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