

Cub Cadet®

PTO DRIVEN -
GRASS

MODEL YEAR:

2014-2015

COLLECTION SYSTEM

DESIGNED
TO FIT:

**TANK
SERIES**

SZ
- 54" & 60"
DECKS

LZ
- 54" & 60"
DECKS

COLLECTION SYSTEM

MODEL #

59A30042150

COLLECTION SYSTEM

ALTERNATE

MODEL #

21621216



Tank LZ Models:

53A12PTC050
53B12PTD050
53Y12PTC050
53Y12PTD050
53BH2PTD330

Tank SZ Models:

53A12PUC050
53B12PUD050
53Y12PUC050
53Y12PUD050
53RE2PUD050
53A12PUD330

***LZ MODELS: COLLECTION SYSTEM REQUIRES INSTALLATION
OF ADDED WEIGHT KIT P# 59A30037150 (A1149) FOR SAFE OPERATION!**

OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

PECO GRASS COLLECTION SYSTEM

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SAFETY

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

SAFETY

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

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

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

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

Safety Alert Symbol



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

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

Safety Signs

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



White letters on **RED**

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



Black letters on **ORANGE**

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

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

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

It may also be used to alert against unsafe practices.

PECO LIMITED WARRANTY FOR NEW PRODUCTS

A. WHAT IS UNDER WARRANTY?

PECO extends the following warranties to the original purchaser of each new PECO consumer product subject to the following limitations.

1. PRODUCT WARRANTY: Any part of any consumer product, which is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as PECO elects, without charge for parts or labor, if the defect appears within 12 months from the date of delivery of the product to the original purchaser. ALL DEFECTIVE PARTS MUST BE RETURNED TO PECO FOR INSPECTION TO DETERMINE VALIDITY OF WARRANTY CLAIMS. Freight and mailing will be borne by the customer.

2. PARTS REPLACED DURING WARRANTY: Any new PECO part which is furnished in performance of this warranty and is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, before the expiration of the original warranty period, whichever is later.

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

B. SECURING WARRANTY ADJUSTMENTS

Call PECO for Return Authorization. Damaged or broken parts other than engines or batteries, must be returned to New PECO, Inc. at 10 Walden Drive, Arden, NC 28704 before any warranty adjustment can be authorized. At the time of requesting warranty adjustment, the purchaser must present evidence of the date of delivery of the product. The purchaser shall pay any charge for the product to and from Arden, NC.

C. ITEMS NOT COVERED BY PECO WARRANTY

Engines and batteries attached to PECO products are covered under a separate warranty by the respective manufacturer.

D. UNAPPROVED ALTERATION OR MODIFICATION

All obligations of New PECO, Inc. under this warranty shall be terminated if products are altered or modified in ways not approved by New PECO, Inc.

E. ACCIDENTS AND NORMAL MAINTENANCE

The warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear, accident, improper use or abuse of products. The cost of normal maintenance and normal replacement of service items such as belts, cutting blades, hoses, etc., which are not defective shall be paid for by the purchaser.

F. NO REPRESENTATIONS ADDITIONAL WARRANTIES, DISCLAIMER

Neither New PECO, Inc. nor any company affiliated with it makes any warranties, representations or promises as to the quality of performance of its products other than those set forth herein. Except as described above, New PECO, Inc. makes no other warranties AND SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY.

G. PRODUCTS USED FOR RENTAL OR LEASE PURPOSES ARE WARRANTIED FOR 45 DAYS FROM DATE OF ORIGINAL SALE ONLY

H. REMEDIED EXCLUSIVE

The only remedies the purchaser has in connection with the breach or performance of any warranty on New PECO, Inc. consumer products are set forth above. In no event will PECO be liable for special incidental or consequential damages.

1. NO SERVICE CENTER WARRANTY

The selling Service Center makes no warranty on his own on any item warranted by New PECO, Inc. unless he delivers to purchaser a separate written warranty certificate specifically warranting the item. The dealer has no authority to make any representation or promise on behalf of PECO or to modify the terms of this warranty in any way.

Section I - INTRODUCTION AND DESCRIPTION

1-1 Introduction

We are pleased to have you as a PECO customer. Your collection system has been designed to give you a low maintenance, simple, and effective way to collect the grass clippings from your mower. This manual is provided to give you the necessary instructions to properly mount and operate the collection system on your mower. Please read this manual thoroughly. Understand what each control is for and how to use it. Observe all safety decal precautions on the machine and noted throughout the manual.

NOTE: all references made to right, left, front, rear, top or bottom are as viewed from the normal operator's position on the mower.

1-2 Description

The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves and in pre-season and post-season clean-up. The blower, mounted on the right side of the unit, uses a belt and gearbox system from the engine PTO shaft. Drive train protection comes through belt slippage. The blower draws grass clippings from the discharge area of the cutter deck back to the 12 cubic foot aluminum box at the rear portion of the mower frame. The operator can engage the blower with a push of the over-center linkage on the right side of the unit. Once the container is full, the operator can easily push and raise the dump handle, opening the rear door on the container and pivoting the box to the ground. Once empty, the operator can easily lower and pull the dump handle, pivoting the box back into position and closing the door.

Important! - Before Installing Collection System, Read Below:

All Tank SZ Models:

- Requires installation of included weight kit (A1213) for safe operation!

All Tank LZ Models:

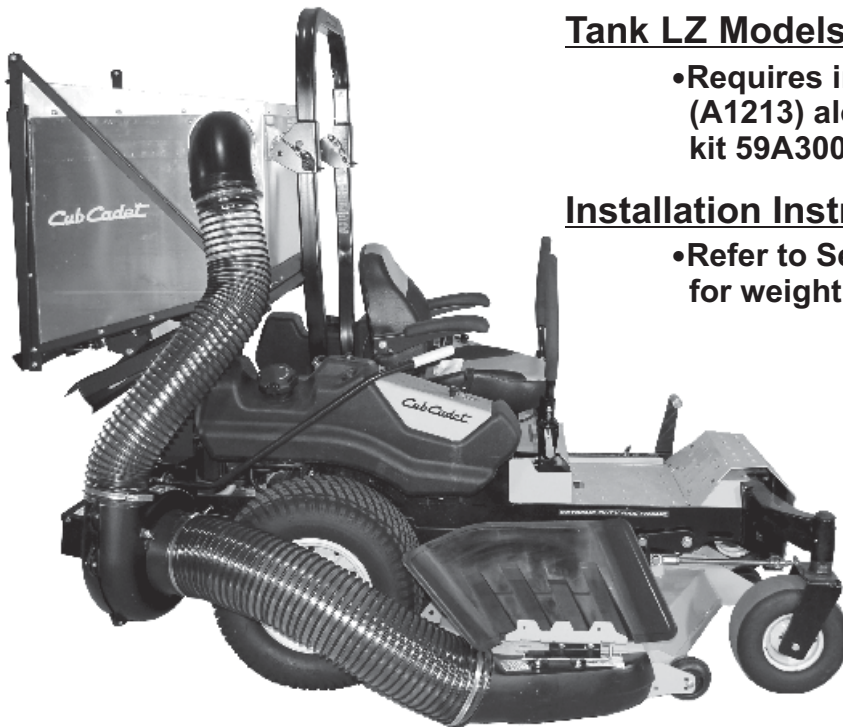
- Requires installation of additional weight kit 59A30037150 (A1149) for safe operation! SZ models only require the included weight kit (A1213). Contact your Cub Cadet dealer to order weight kit 59A30037150 (A1149).

Tank LZ Models w/ 48" Deck:

- Requires installation of included weight kit (A1213) along with the additional weight kit 59A30037150 (A1149).

Installation Instructions:

- Refer to Section 2-21 & 2-22 in this manual for weight kit installation instructions.

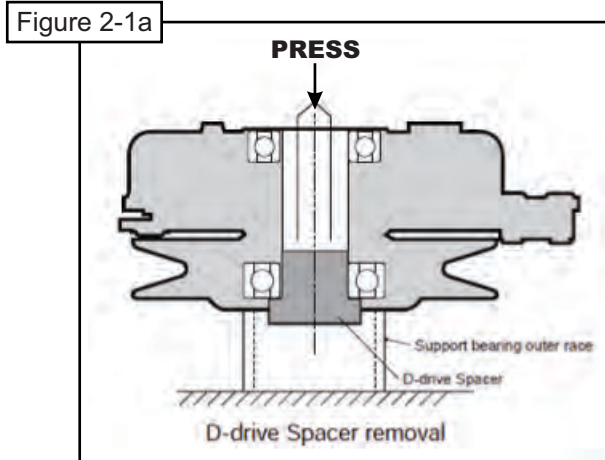


Section II - INSTALLATION FOR USE

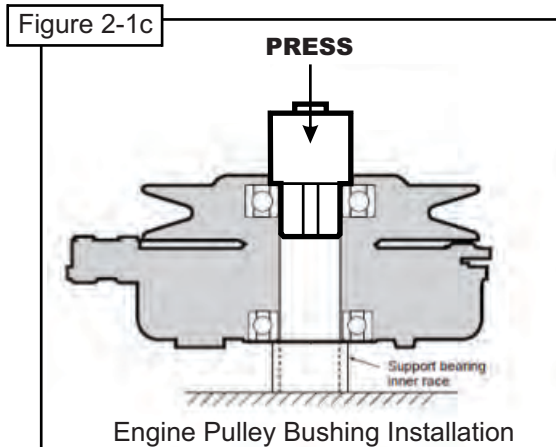
2-1 Preparation Of Mower

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

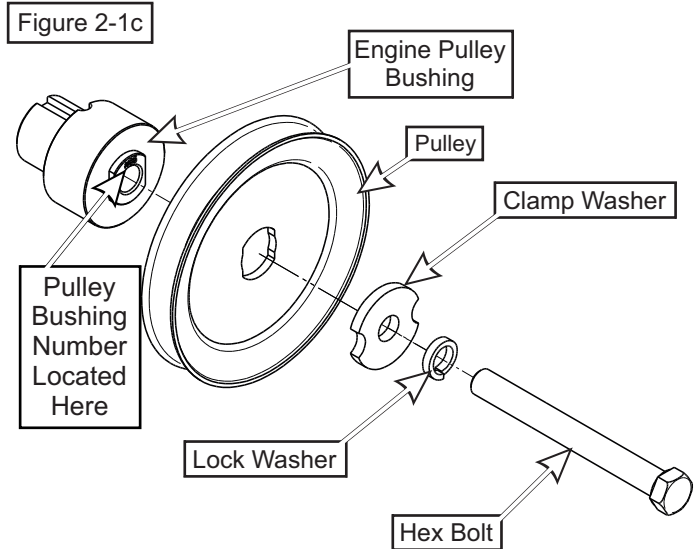
From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer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



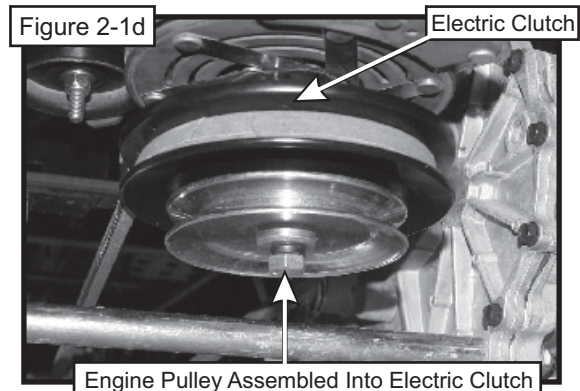
The engine pulley assembly must be installed using an arbor press or equivalent. During installation, opposite bearing inner race must be supported or bearing damage may occur. Refer to Figure 2-1c.



Once the Engine Pulley Bushing P#(S0210) is installed, reattach the clutch assembly to the mower and then review Figure 2-1c.

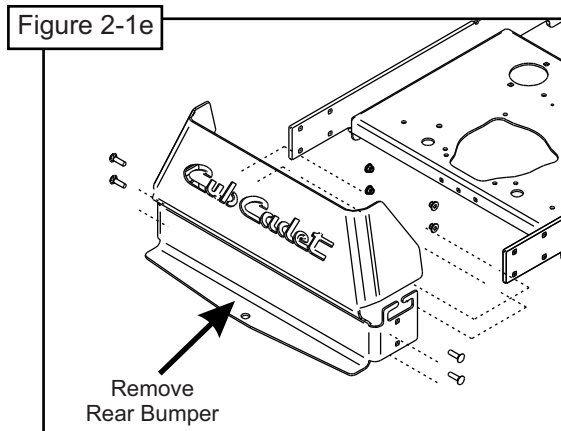


To assemble and fasten the Engine Pulley, align Pulley hole to the Engine Pulley Bushing and fasten using (1) Clamp Washer P#(K0278), (1) 7/16"-20 x 3-3/4" HHCS P#(K0350) and (1) 7/16" helical spring lock washer P#(K0140). Torque the bolt to 55ft./lbs. Refer to Figure 2-1d for reference.



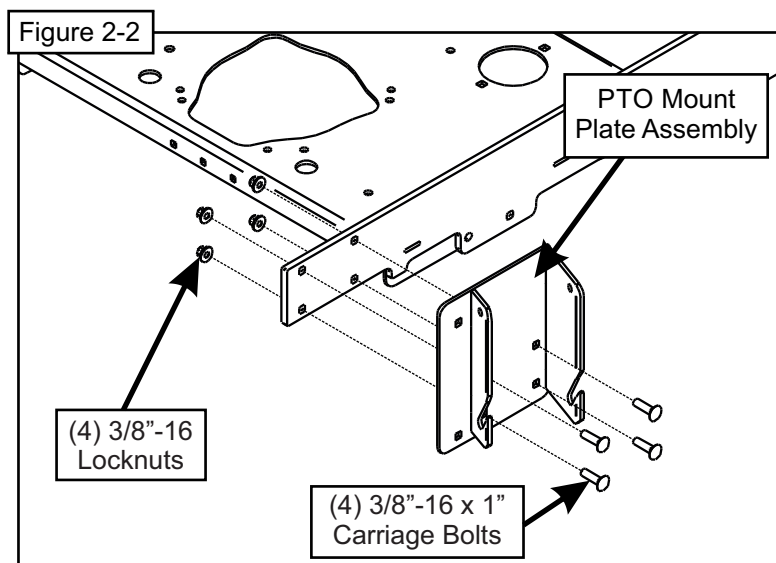
NOTE: Replace the mower deck PTO belt removed at the beginning of this section.

Remove the rear bumper and hardware from the mower as shown in Figure 2-1e.



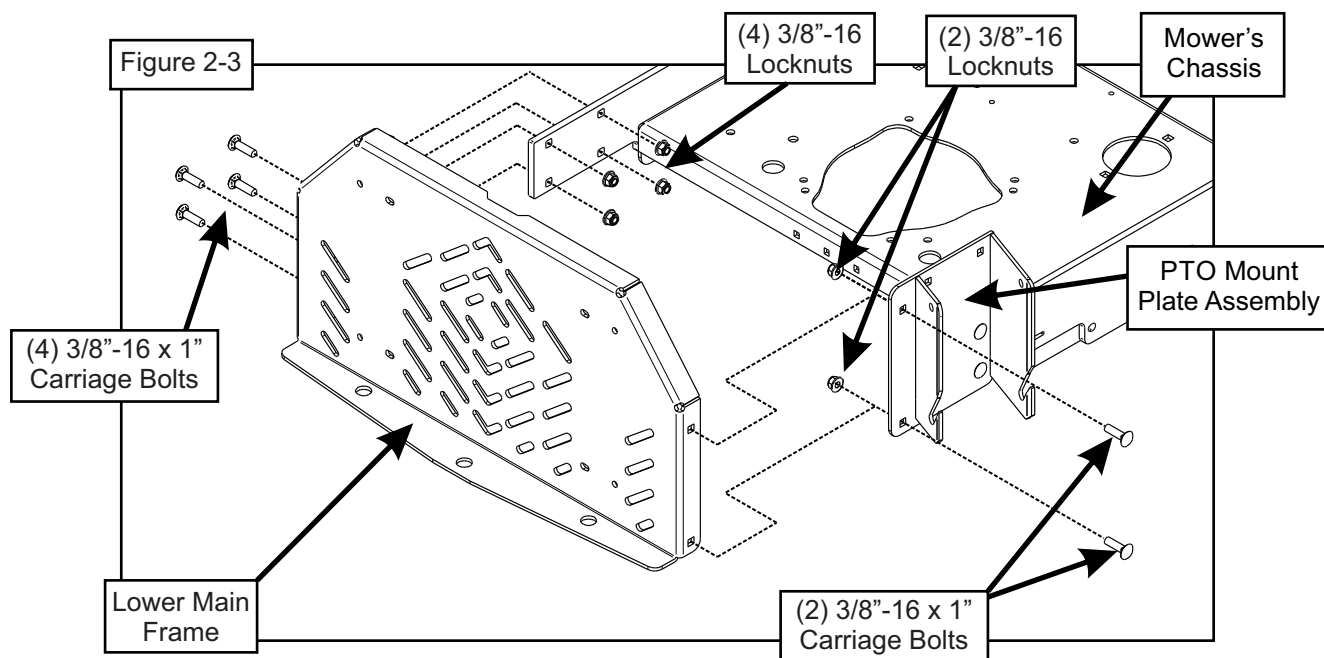
2-2 PTO Mount Plate Assembly Installation

Secure the PTO mount plate assembly P#(A1108) to the chassis of the mower using (4) 3/8"-16 x 1" carriage bolts P#(K1182) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Leave the hardware loose until the lower mount assembly is installed in the next section. Refer to Figure 2-2.



2-3 Lower Main Frame Installation

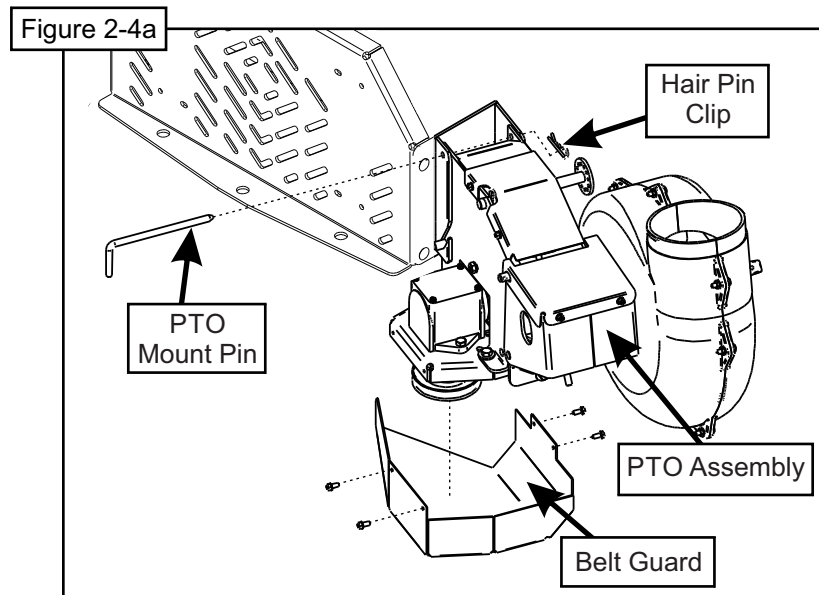
Secure the lower main frame P#(B0821) to the left rear frame of the mower using (4) 3/8"-16 x 1" carriage bolts P#(K1182) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Leave the hardware loose. Secure the lower main frame to the PTO mount plate assembly using (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Align lower main frame and PTO mount assembly to be parallel and level to the mower's chassis, then tighten all hardware from Sections 2-2 and 2-3 at this time. Refer to Figure 2-3.



2-4 PTO Assembly Installation

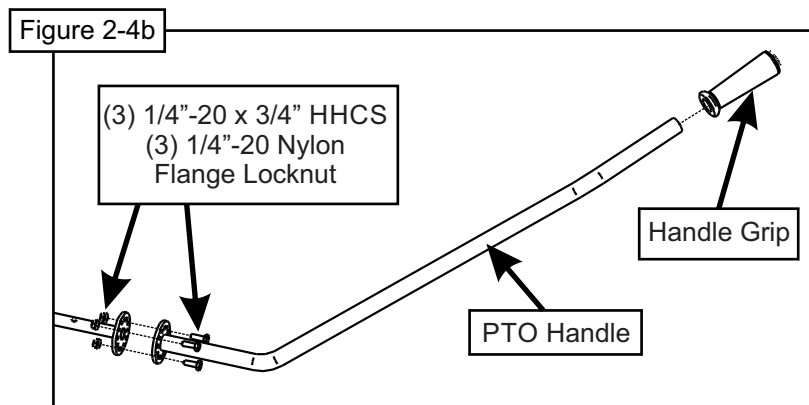
Insert the PTO assembly P#(A1821) into the slots on the PTO mount plate assembly. Secure the PTO assembly with (1) mount pin P#(B0274) and (1) hair pin clip P#(K0086).

Remove the belt guard P#(B0679) and hardware in preparation for the belt installation. Refer to Figure 2-4a.



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

NOTE: The PTO Handle can be adjusted after performing Step 2-6 to achieve proper belt adjustment. To adjust the handle, remove (3) 1/4"-20 x 3/4" HHCS P#(K1222) and (3) 1/4"-20 nylon flange locknuts P#(K2014), rotate handle until positioned in the desired location (while aligning holes) and reattach. The bolts should be kept approximately 120 degrees apart to ensure proper fastening.



2-5 Drive Belt Installation and Adjustment

Loosen the (4) bolts P#(K1191), (2) on each side, that secure the gear box assembly to the PTO assembly P#(A1803) (Figure 2-5a and 2-5b).

Figure 2-5a

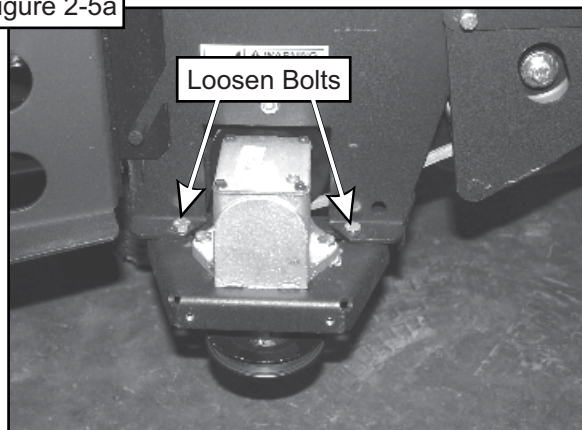
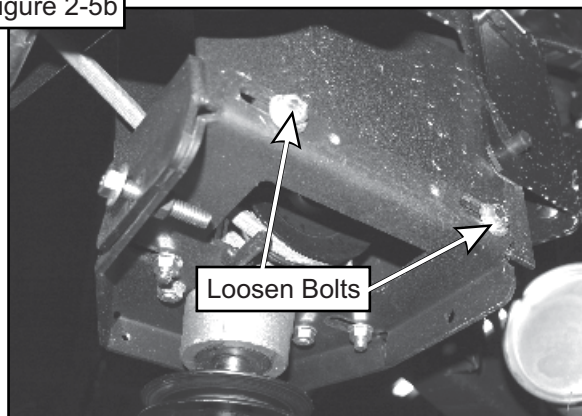
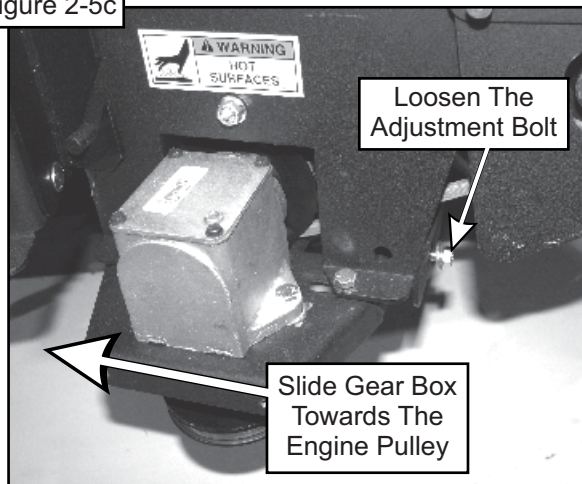


Figure 2-5b



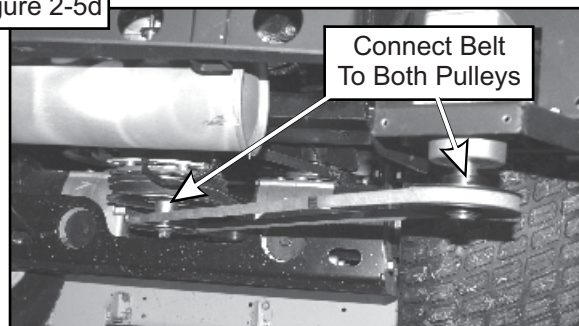
Loosen the adjustment bolt P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved toward the mower's engine pulley). Refer to Figure 2-5c.

Figure 2-5c



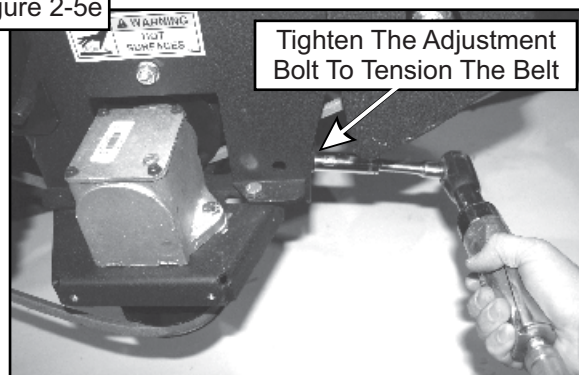
Connect the drive belt A59K P#(M0254) from the engine pulley to the lower gear box pulley (Figure 2-5d).

Figure 2-5d



To tension the drive belt, turn the adjustment bolt clockwise (Figure 2-5e) until there is 1" of deflection, with 10-11 lbs. of pressure, at the center of the belt between the engine pulley and the gear box pulley.

Figure 2-5e



Once the correct tension of the belt is achieved, tighten the (4) bolts that secure the gear box assembly. Refer to Figures 2-5f and 2-5g. Replace the belt guard and hardware that was removed in Section 2-4.

Figure 2-5f

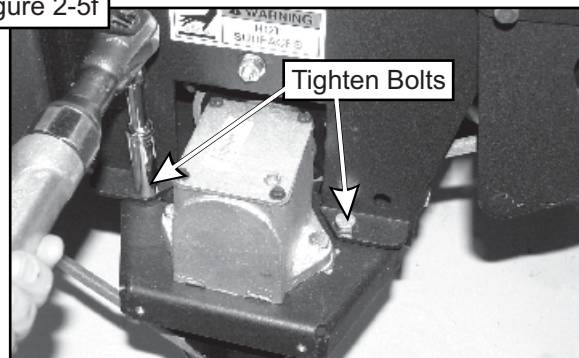
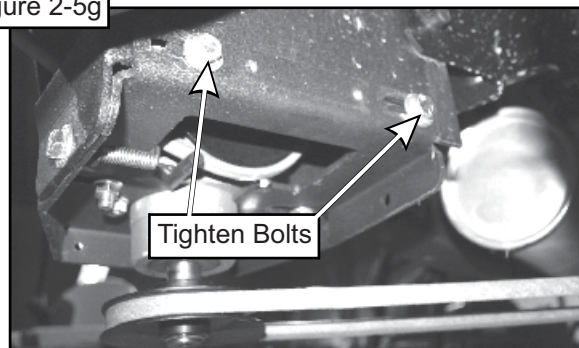


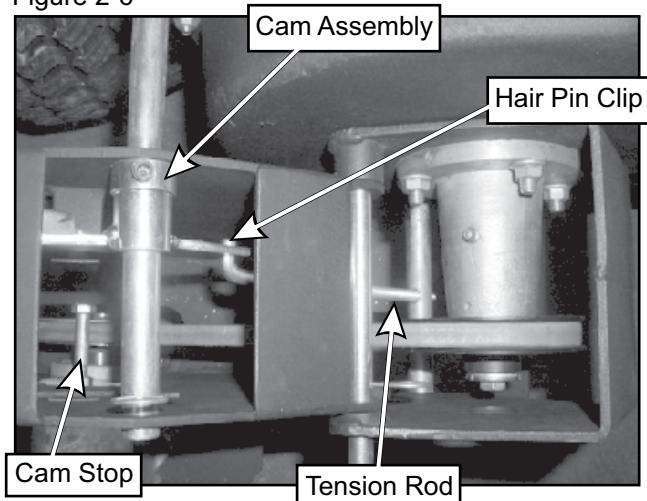
Figure 2-5g



2-6 Cam Assembly Adjustment

The cam assembly P#(A0422), which controls the A30K blower belt P#(M0250) tension, comes from the factory pre-adjusted. If the belt is too tight or becomes too loose, remove the hair pin clip P#(K0099) from the belt tension rod P#(K0326) and pull the "L" end of the rod out of it's hole in the cam assembly. The tension rod may then be screwed out to tighten the belt or screwed in to loosen the belt. Replace the "L" end into the top hole in the cam and replace the hair pin clip. Adjust the cam stop bolt P#(K1159) to allow the cam to rotate slightly over center when the blower is disengaged (Figure 2-6).

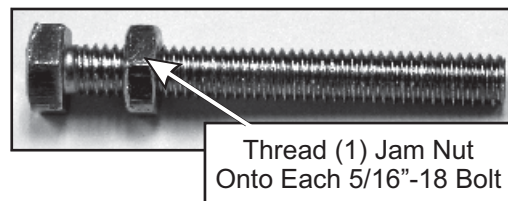
Figure 2-6



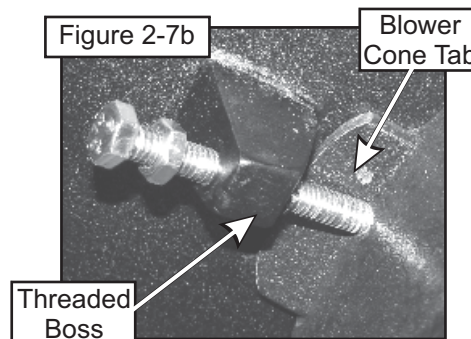
2-7 Blower Cone Installation

Thread (1) 5/16"-18 jam nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) as shown in Figure 2-7a.

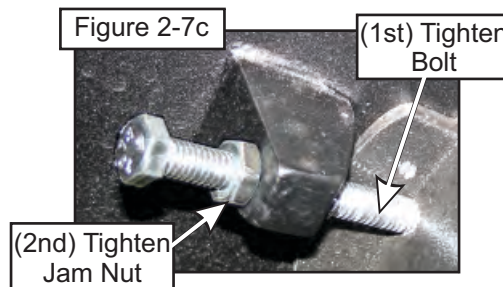
Figure 2-7a



Now partially thread (1) bolt into each of the two threaded bosses located on the blower housing. Place blower cone so the two tabs line up with the bolts and tighten completely as shown in Figure 2-7b.

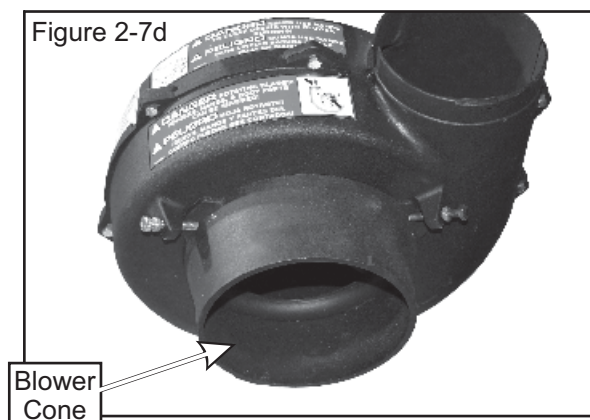


Once the (2) bolts are tight, tighten the jam nuts against the threaded boss as shown in Figure 2-7c.



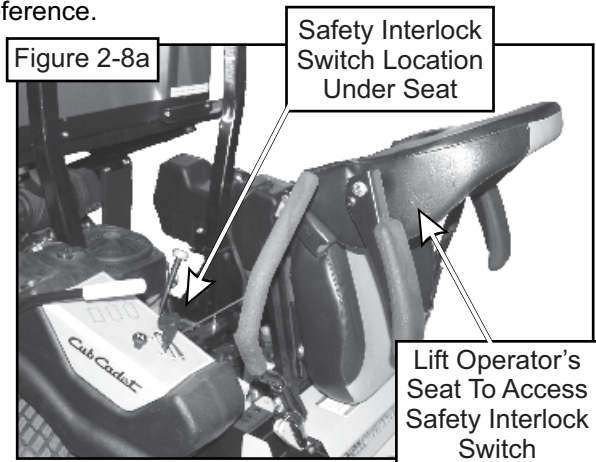
Refer to Figure 2-7d for proper blower cone installation reference.

Figure 2-7d

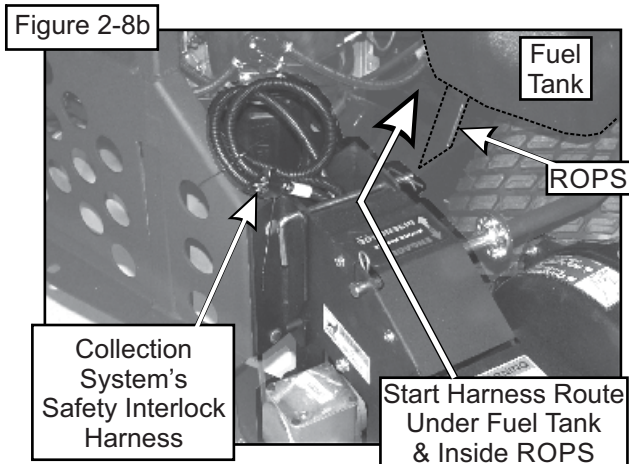


2-8 Safety Interlock Harness Installation

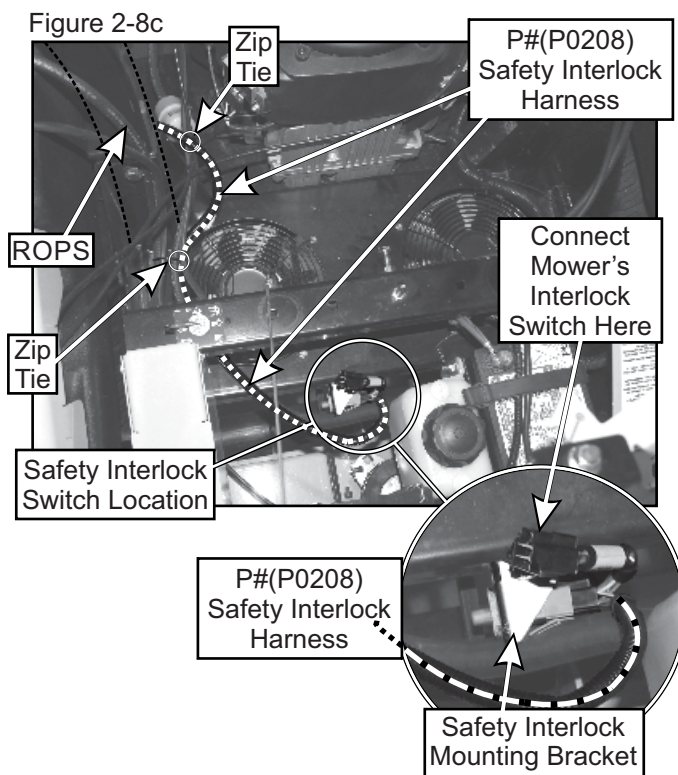
To obtain access to the mower's interlock switch, lift the operator's seat on the mower as shown in Figure 2-8a. Refer to your Cub Cadet operator's manual for reference.



Locate the collection system's safety interlock harness P#(P0208). It is connected to the PTO assembly P#(A1821) shown in Figure 2-8b. This harness will need to be connected to the mower safety interlock switch, and then secured to the mower frame with the zip ties P#(J0245) included in the mount kit hardware bag. Cut the zip-ties retaining the safety interlock harness to the PTO assembly, in preparation for routing the harness to its proper location.



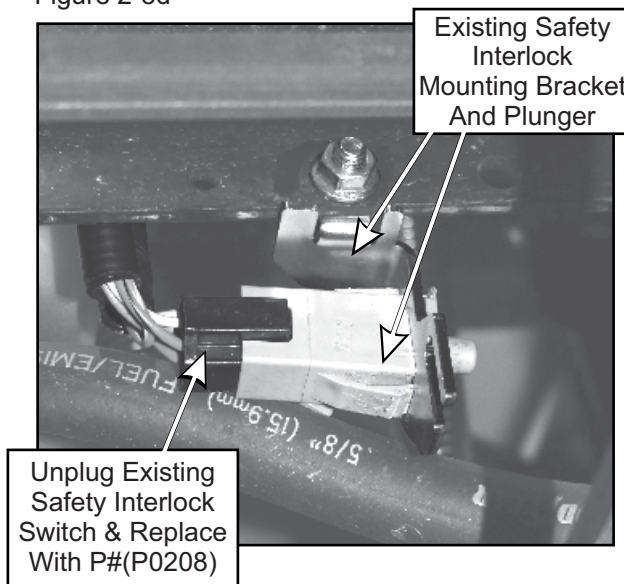
Start by routing the safety interlock harness from the PTO assembly, underneath the right fuel tank and inside the ROPS tube. Secure the harness where indicated in Figure 2-8c, using the zip-ties P#(J0245). Ideally, the harness should be clear of any moving parts or mechanisms. The harness should not come in contact or be in close proximity with any heat sources. Use as many zip-ties as needed to ensure the harness is tightly secured to the mower, and free from any pinch points or potential areas that may cause damage to the harness.



Disconnect the mower's safety interlock switch (See mower's Owner's Manual for location). Plug the male end of the collection system's wiring harness into the port where the mower's safety interlock switch was removed. Then, plug the mower's safety interlock switch into the female end of the collection system's wiring harness. Refer to Figure 2-8c.

Use Figure 2-8c and 2-8d for clarification on the location of the mower's existing safety interlock switch and where the collection system's safety interlock harness should be connected. A wiring schematic for the P#(P0208) safety interlock harness is located on page 25 for reference.

Figure 2-8d

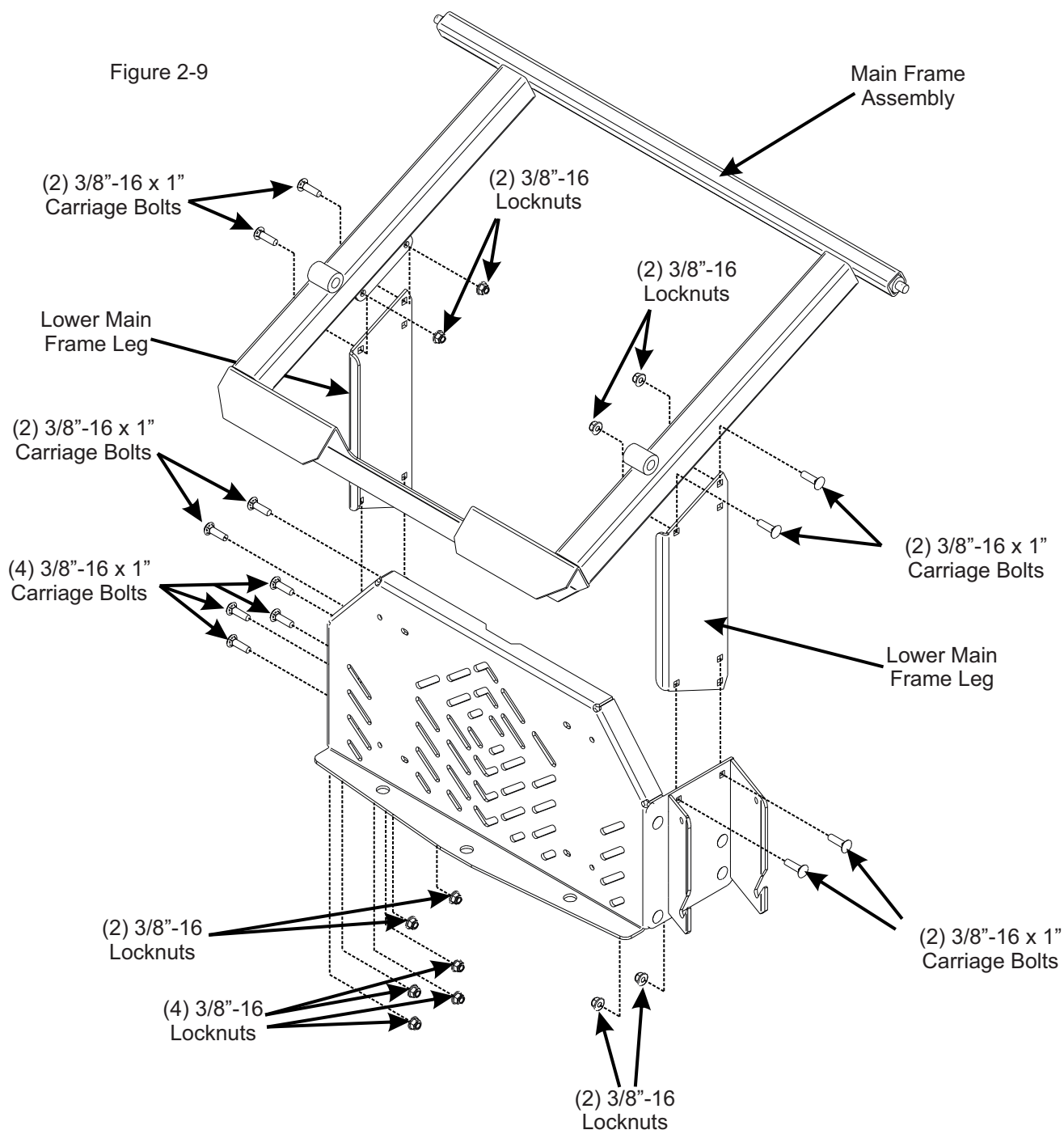


2-9 Lower Main Frame Leg Installation

Secure (1) lower main frame leg P#(B0822) to the lower main frame bracket using (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Secure (1) lower main frame leg P#(B0822) to the PTO mount plate assembly using (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-9.

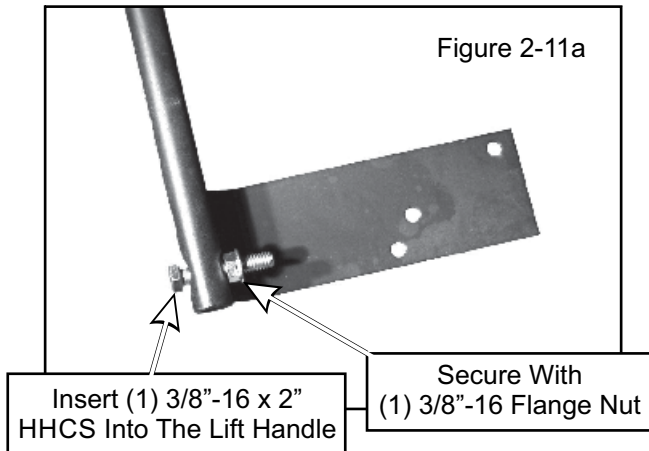
2-10 Main Frame Assembly Installation

Lift the main frame assembly P#(A1192) into position and secure to the lower main frame legs using (4) 3/8"-16 x 1" carriage bolts P#(K1182) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-9.

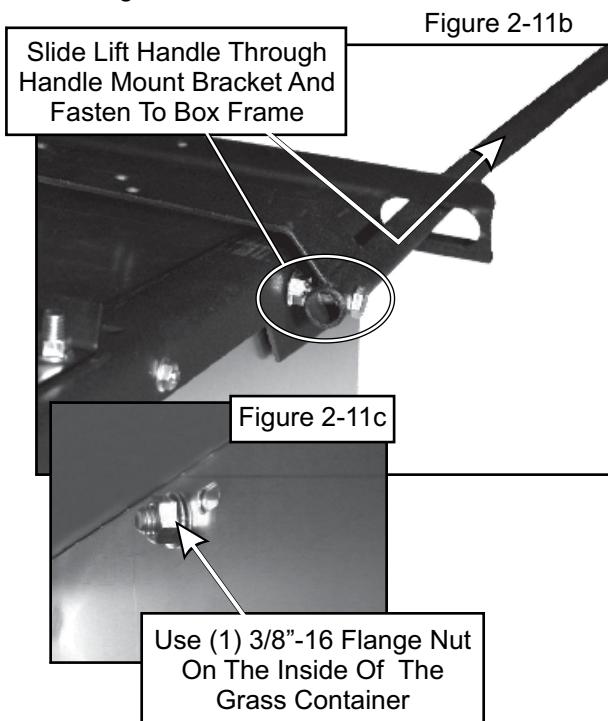


2-11 Lift Handle Installation

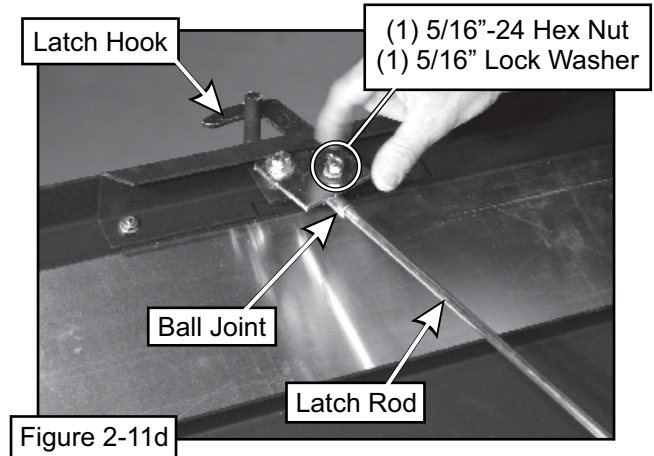
NOTE: Before continuing the lift handle installation, have someone assist you in turning the grass container upside down. Insert (1) 3/8"-16 x 2" HHCS P#(K1208) into the lift handle P#(A0273), and secure with (1) 3/8"-16 flange nut P#(K1215). Thread the flange nut onto the bolt upside down, as shown in Figure 2-11a. Do not tighten the nut fully at this time.



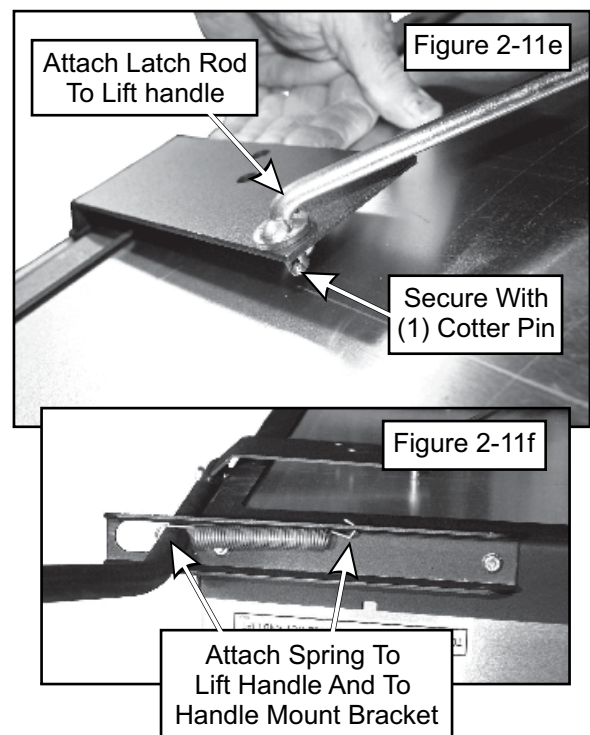
Slide the lift handle through the slot on the handle mount bracket. Insert the lift handle into the box frame as shown in Figure 2-11b, and secure using (1) 3/8"-16 flange nut P#(K1215) on the inside of the container as shown in Figure 2-11c. Now test the movement of the handle. It should have full-range of movement in the slot. If the handle does not have full-range of movement, adjust the 3/8"-16 flange nut from step 2-11a. Once achieved, tighten the fasteners.



Fasten the ball joint P#(K1442) to the end of the latch rod P#(A0620). Tighten the ball joint to approximately half way down the threads on the latch rod. Attach the ball joint to the latch hook as shown in Figure 2-11d, 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 2-11e. 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 2-11f. 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).



2-12 Aluminum Grass Container Installation

NOTE: It is recommended that (3) people assist in mounting the container. With three people available, two can lower the container onto the frame while the third person inserts the pivot pins P#(K0172) through the 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 2-12b). 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 container should open and the box should pivot clockwise towards the ground.

Figure 2-12a

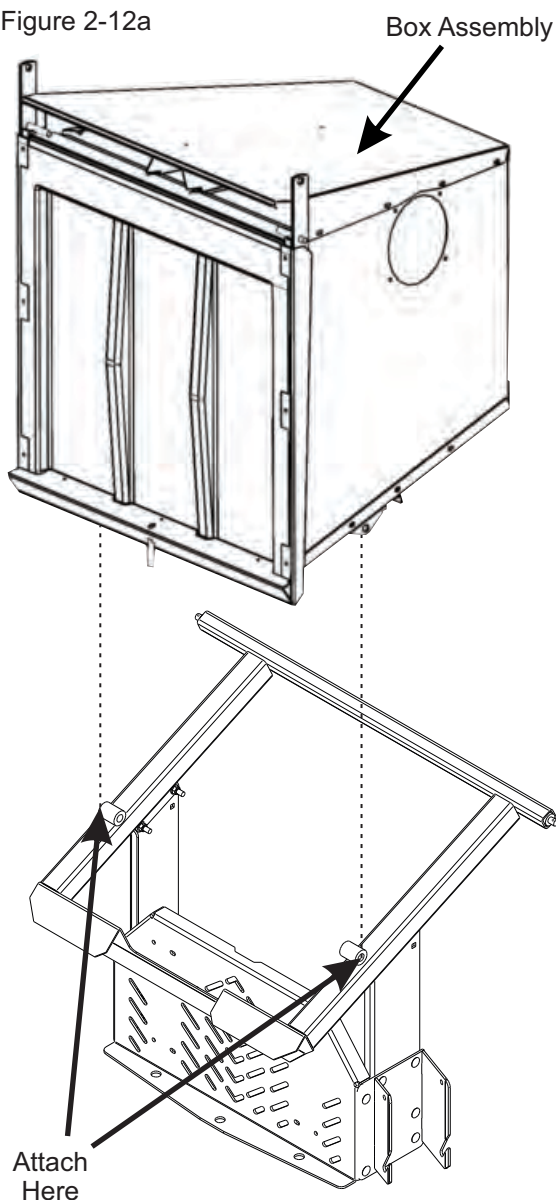
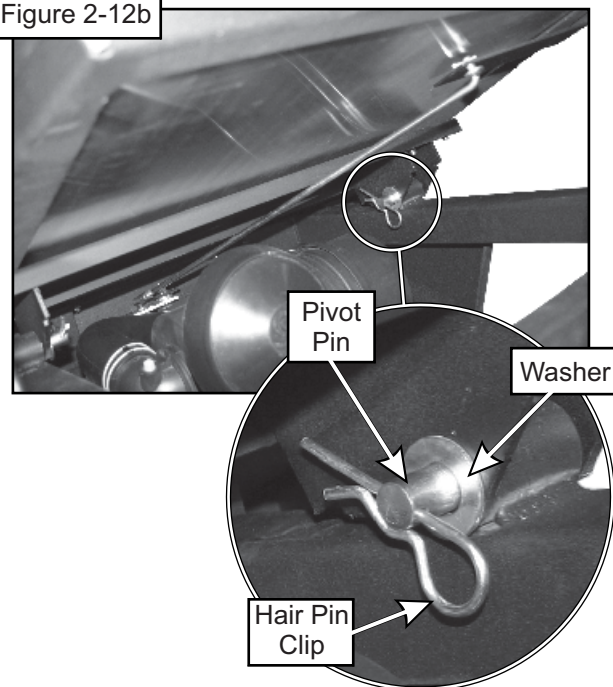
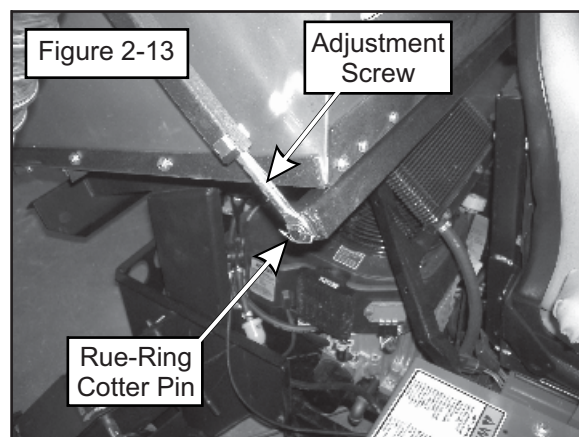


Figure 2-12b



2-13 Dump Mechanism Adjustment

The linkage may be adjusted in two places, at the adjusting screw P#(K1435) and the latch assembly items. See page 21 for visual clarification. To change the door closure tightness, thread the adjusting screw (Figure 2-13) in or out. To adjust the latch, change the length of the latch rod by threading the latch adjusting ball joint in or out. The latch hook pivot should be in the middle of the slot in the latch hook pivot plate. Slide the pivot back or forth and then re-tighten.



2-14 Boot To Mower Deck Installation

NOTE: The boot kit assembly is designed to fit the 48", 54" and 60" deck. To ensure a snug fit between the boot and the mower deck, follow the instructions in this step thoroughly, and remove and tighten all hardware in the sequence specified.

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 2-14a.

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 2-14a). 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 2-14b.

Figure 2-14a

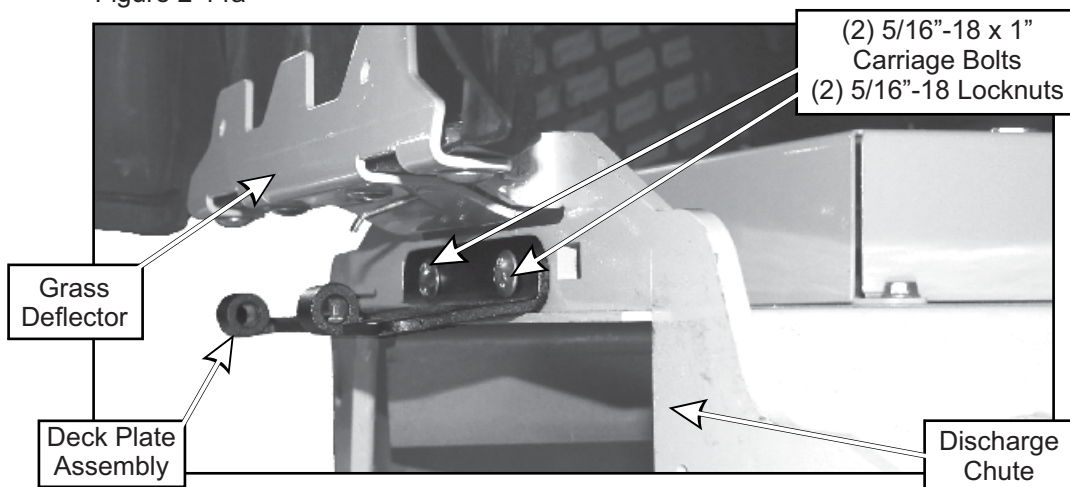
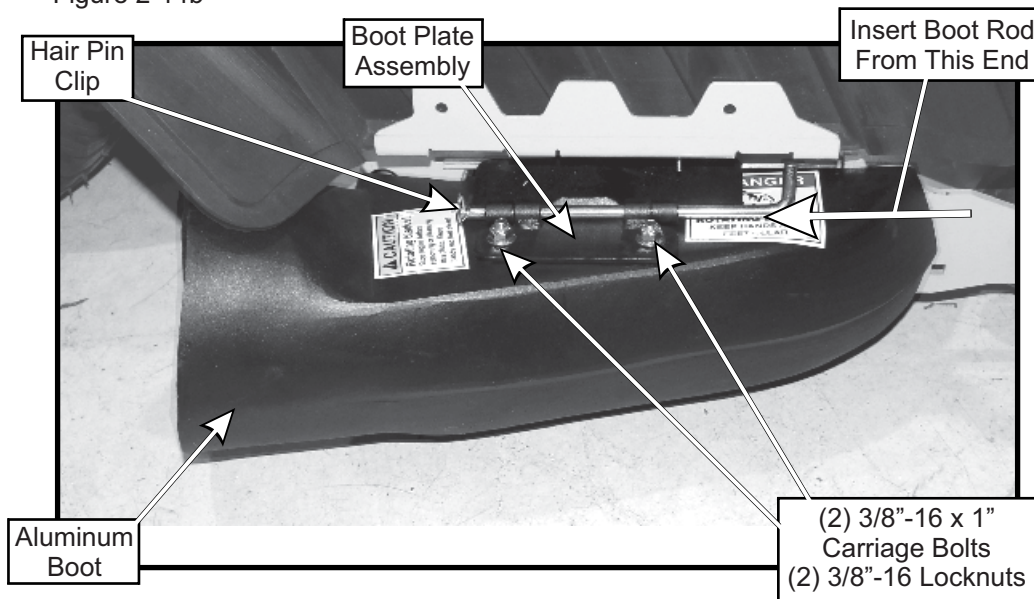


Figure 2-14b



2-15 Length Of Hose Adjustment

The hoses in steps 2-16 and 2-17 must be cut to fit your machine. Follow steps 2-16 and 2-17. 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, PTO blower housing engagement, as well as allowing ample clamping surface between each component.

2-16 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 2-18). Then slide one end of the 6" hose onto the inlet. Make sure there is about a two-inch overlap between the hose end and the container inlet. Proceed to slide the opposite end of the 6" hose onto the outlet of the blower assembly. See (Figure 2-18) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

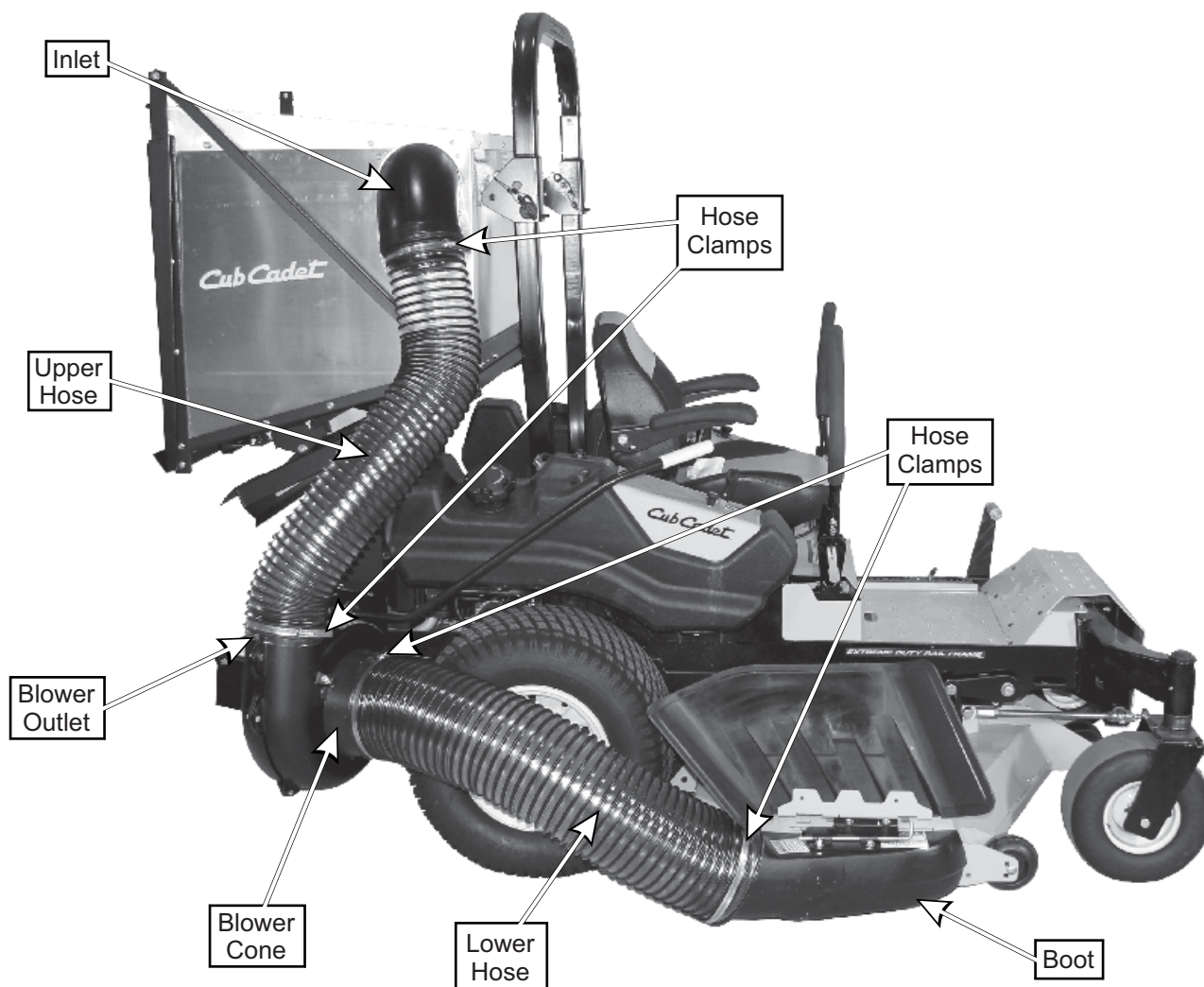
2-17 Lower Hose To Blower Cone Installation

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 2-18.

2-18 Lower Hose To Boot Installation

Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the lower hose clamp to secure the hose to the boot (Figure 2-18). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.

Figure 2-18



2-19 Impeller Blade Removal/Replacement

To gain impeller blade (#1) access, first remove the blower cone (#2) from the blower housing, located on the PTO assembly P#(A1821), by removing two blower cone bolts and nuts (#3). Next, remove the blower housing front (#4) by removing seven bolts and nuts (#5) around the outer housing edge. Refer to Figure 2-19.

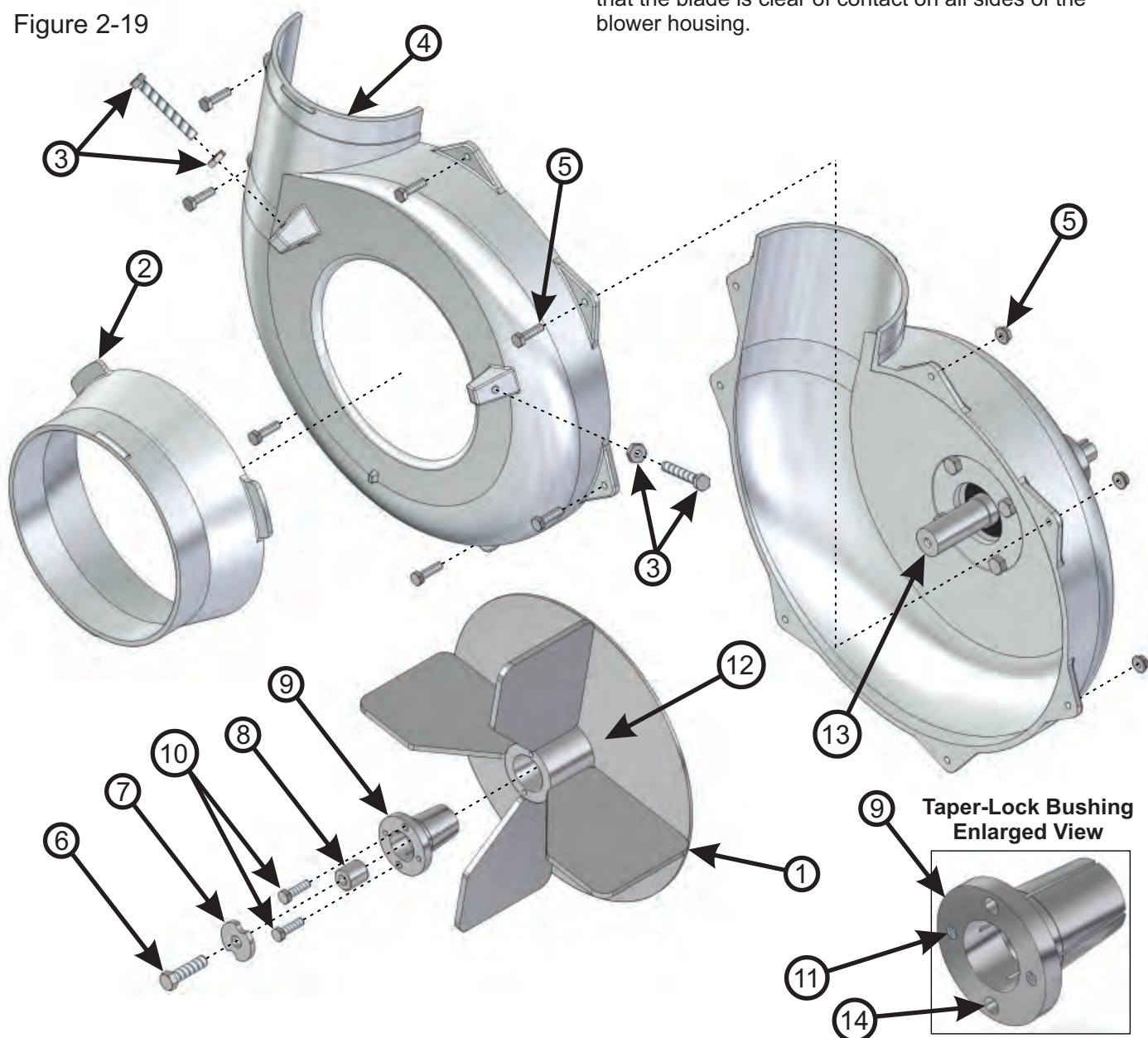
To Remove: First, remove one 3/8"-16 x 1-1/2" HHCS P#(K1211) (#6), one taper-lock bushing washer P#(K0278) (#7) and one spacer bushing P#(S3242) (#8) from the taper-lock bushing (#9). See Figure 2-20. Next, remove two 1/4"-20 x 1" HHCS (#10) and place them into the threaded holes (#11) of the taper-lock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

Tips on removing impeller blade;

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

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

Figure 2-19



2-20 Included Weight Kit Installation

Please Note: The images below may not fully represent your mower as some parts have been removed/hidden for visual clarity during installation.

Installation Instructions For All Tank SZ Models:

- Refer to Figure 2-20a & 2-20b.
- Remove the front caster guard (A).
- Remove (2) bolts (B) from mower's steering rack.
- Slide weight clamp (C) into position as shown in Figure 2-20b. Fasten weight clamp (C) loosely with mowers's steering rack bolts (B).
- Slide (1) weight bar (D) per side into position from above. Each weight bar (D) should be positioned with longer length vertical.
- Tighten mower's steering rack bolts (B) to secure weight bars (D) with weight clamp (C).
- Replace mower's front caster guard (A).

Figure 2-20a

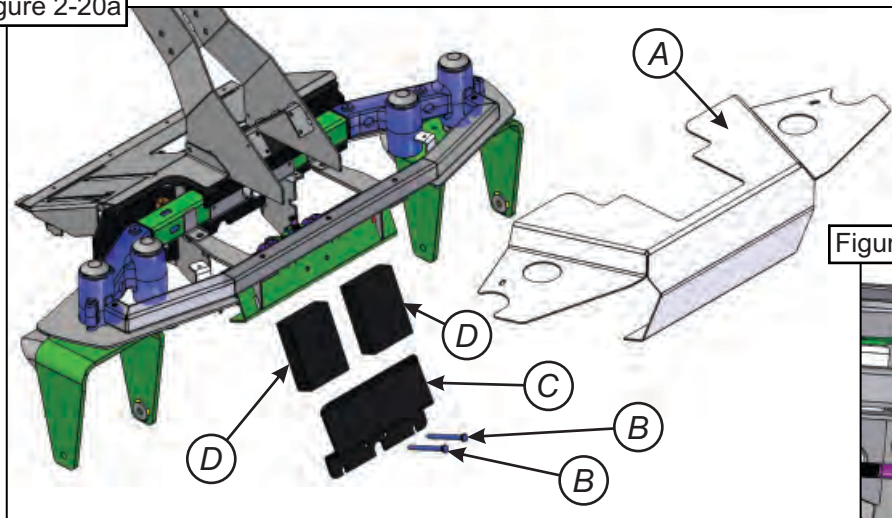
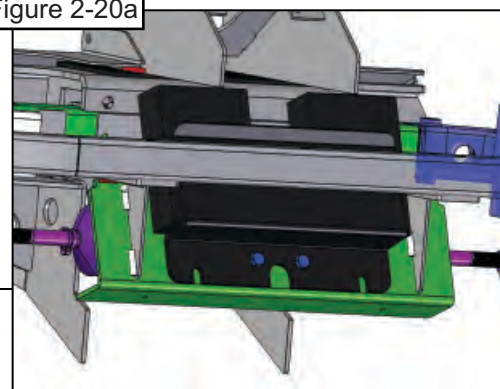


Figure 2-20a



Installation Instructions For Tank LZ Models w/ 48" Decks:

- Refer to Figure 2-20c & 2-20d.
- Remove mower's front caster guard (A).
- Remove (2) carriage bolts (R) from backside of mower's front caster area. Keep existing nuts (B) and replace carriage bolts with (2) 3/8"-16 x 1-1/4" hex bolts (C) P#(K1192) and (2) flat washers (D) P#(K0047). Loosely tighten bolts with existing nuts (B). See Figure 2-21c for carriage bolt removal locations circled (R) .
- Slide weight clamp (E) into position over loosened bolts as shown in Figure 2-21b.
- Slide (1) weight bar (F) per side into position from above. Each weight bar (D) should be positioned with longer length vertical.
- Tighten bolts (C) to secure weight bars (F) with weight clamp (E).
- Replace the mower's front caster guard (A).

Figure 2-20c

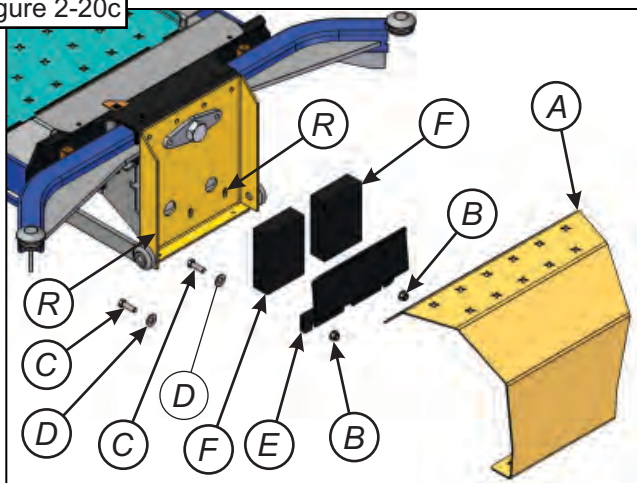
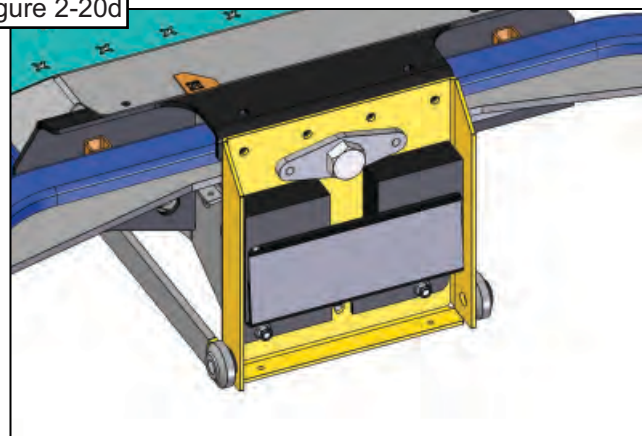


Figure 2-20d

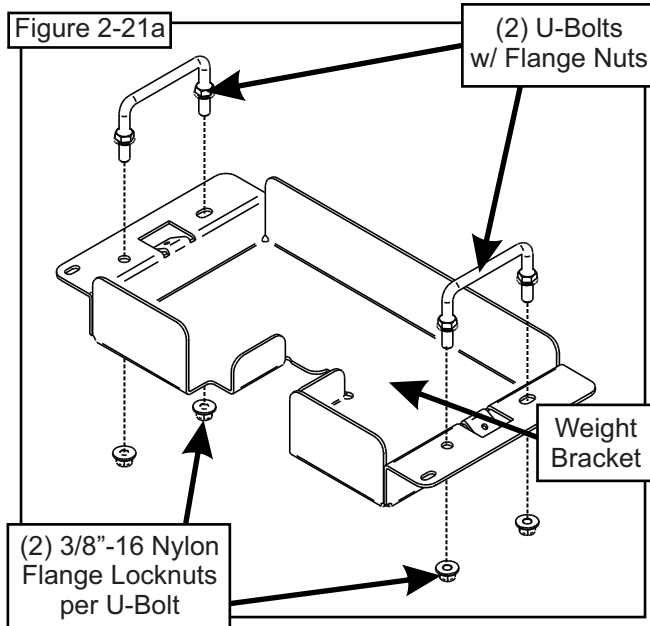


2-21 Additional Weight Kit Installation

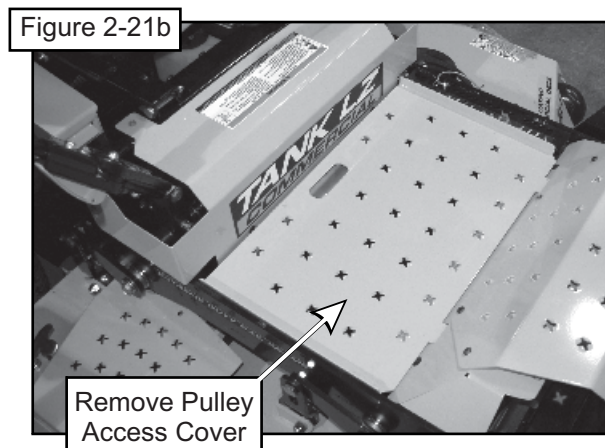
Installation Instructions For All Tank LZ Models:

Installing the additional weight kit 59A30037150 (A1149) is mandatory for safe operation of the collection system. SZ models only require the included weight kit (A1213).

Completely thread (2) 3/8"-16 flange nuts P#(K1215) onto (1) 3/8"-16 U-bolt P#(K0407). Repeat process again to create two sets. Secure each U-Bolt, w/ attached flange nuts, to the weight bracket P#(B0703) using (2) 3/8"-16 nylon flange locknuts P#(K2038) as shown in Figure 2-21a.

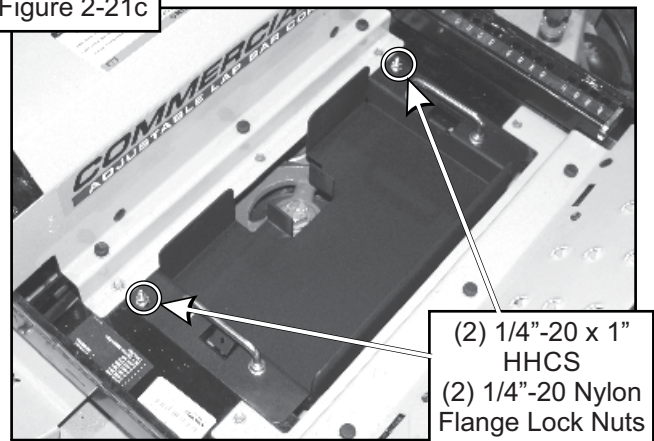


Remove the mower's pulley access cover shown in Figure 2-21b.



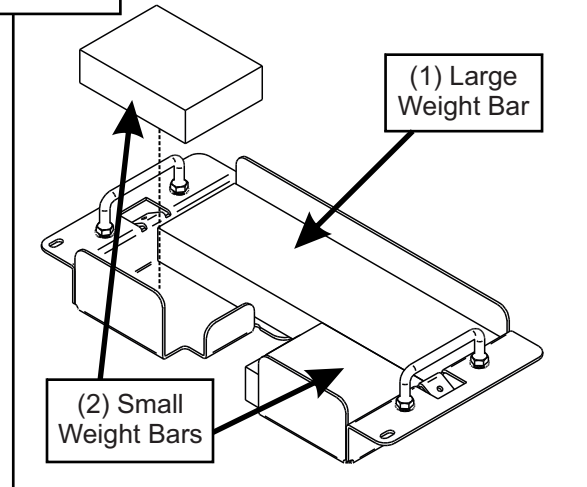
Insert the weight bracket assembly into the recess as shown in Figure 2-21c. Align the weight bracket's mounting holes to the mower's frame and secure using (2) 1/4"-20 x 3/4" HHCS P#(K1222) and (2) 1/4"-20 nylon flange locknuts P#(K2014). Insert the bolts from the bottom of the weight bracket so that the nuts fasten to the top of the bracket as shown in to Figure 2-21c.

Figure 2-21c



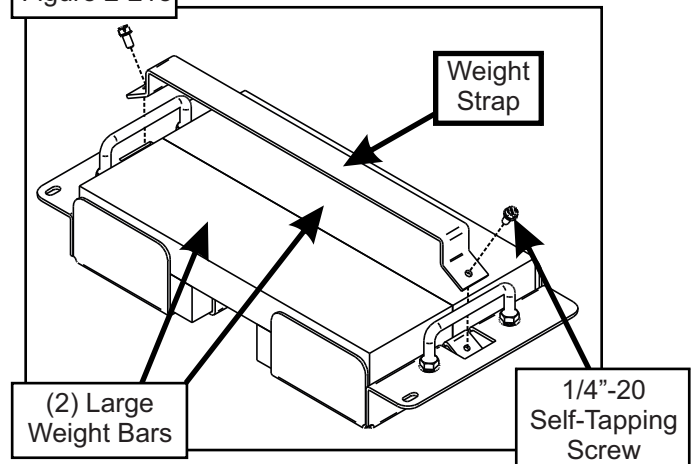
One at a time, add (1) large weight bar P#(B0704) to the weight bracket, then (2) small weight bars P#(B0741). Refer to Figure 2-21d.

Figure 2-21d

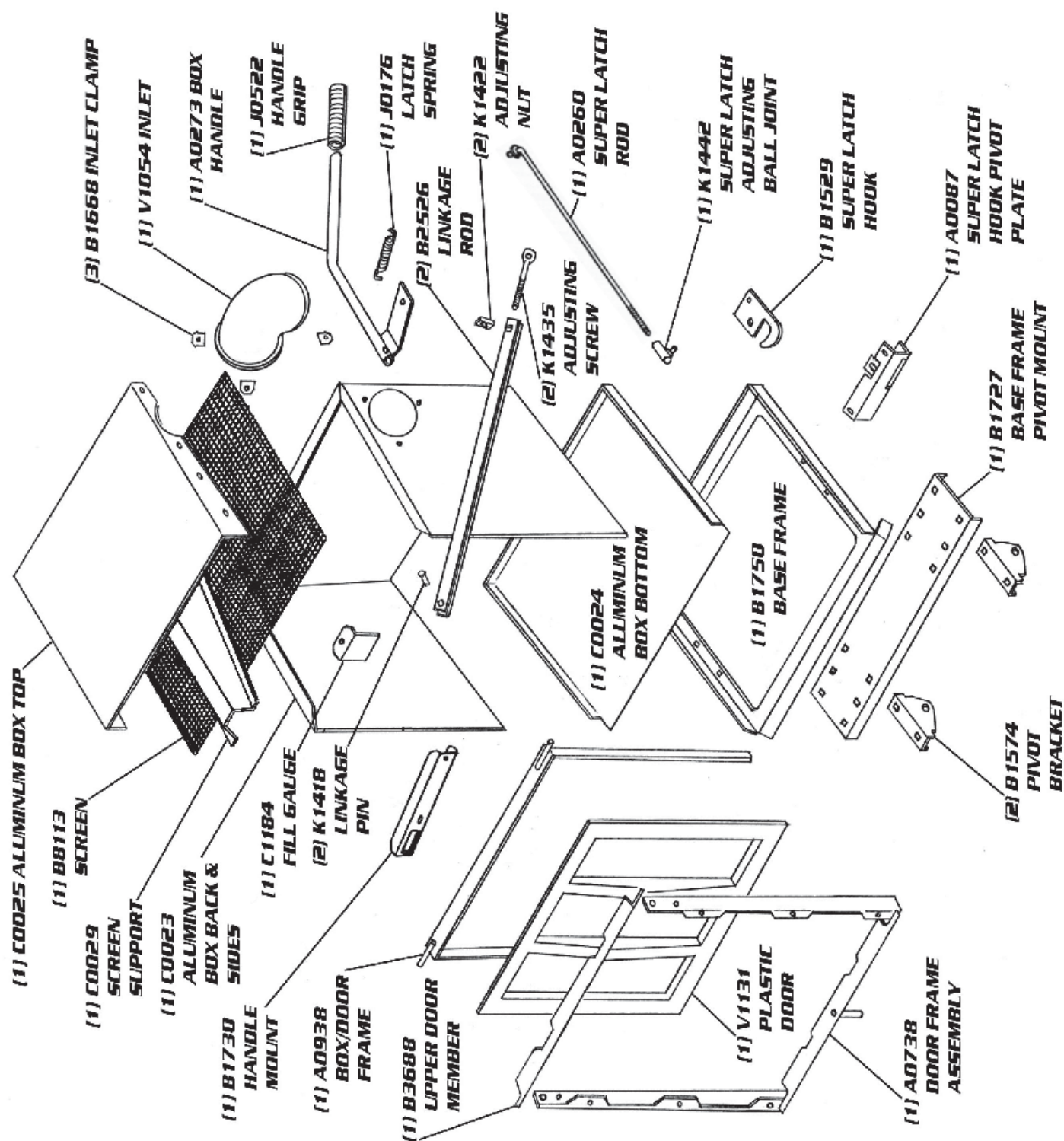


Add the remaining (2) large weight bars P#(B0704) to the weight bracket. Secure the weights to the weight bracket with (1) weight strap P#(B0719) and (2) 1/4"-20 self-tapping screws P#(K0353). Refer to Figure 2-21e. Replace mower's pulley access cover when completed.

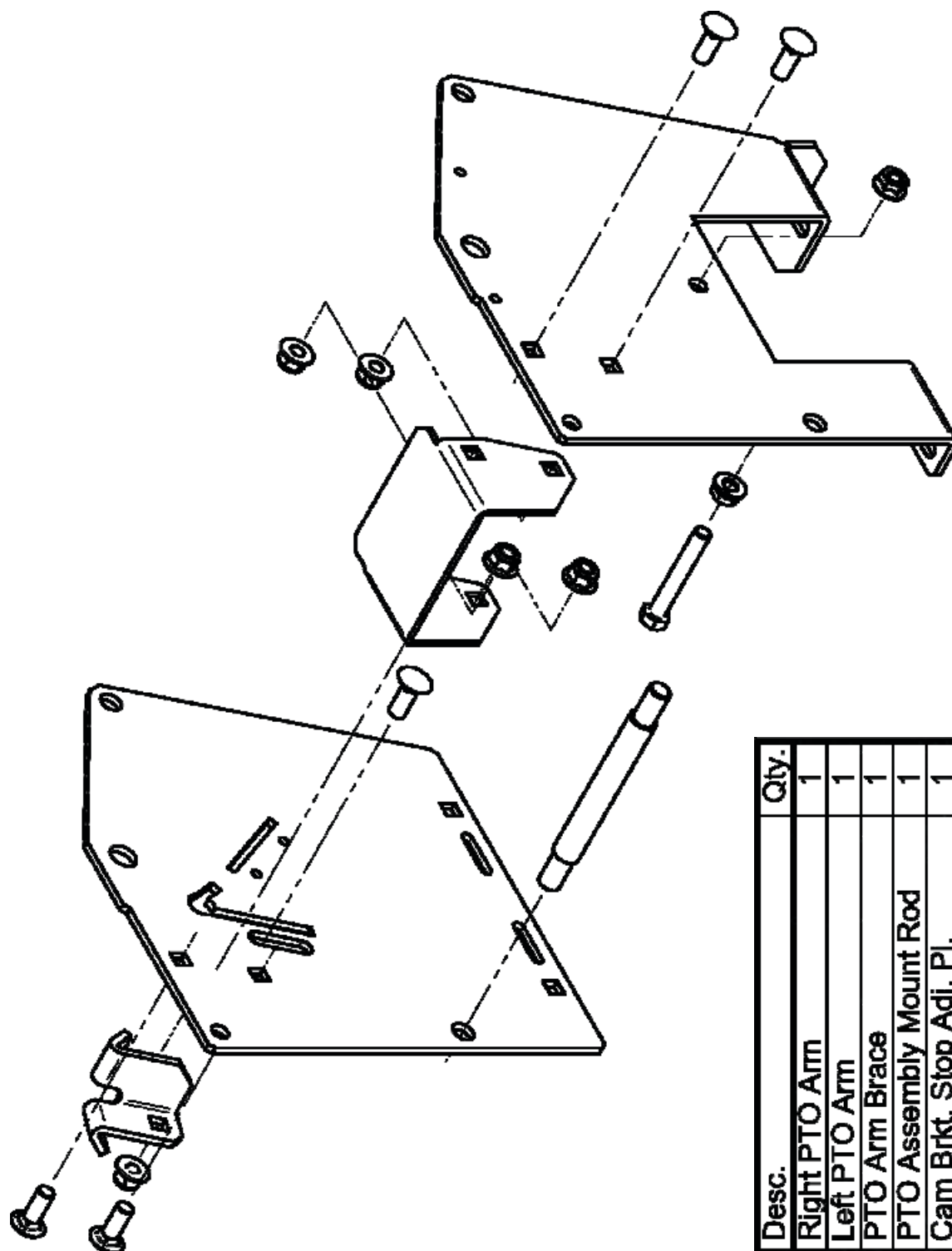
Figure 2-21e



A1933
ALUMINUM GRASS
CONTAINER
EXPLODED VIEW

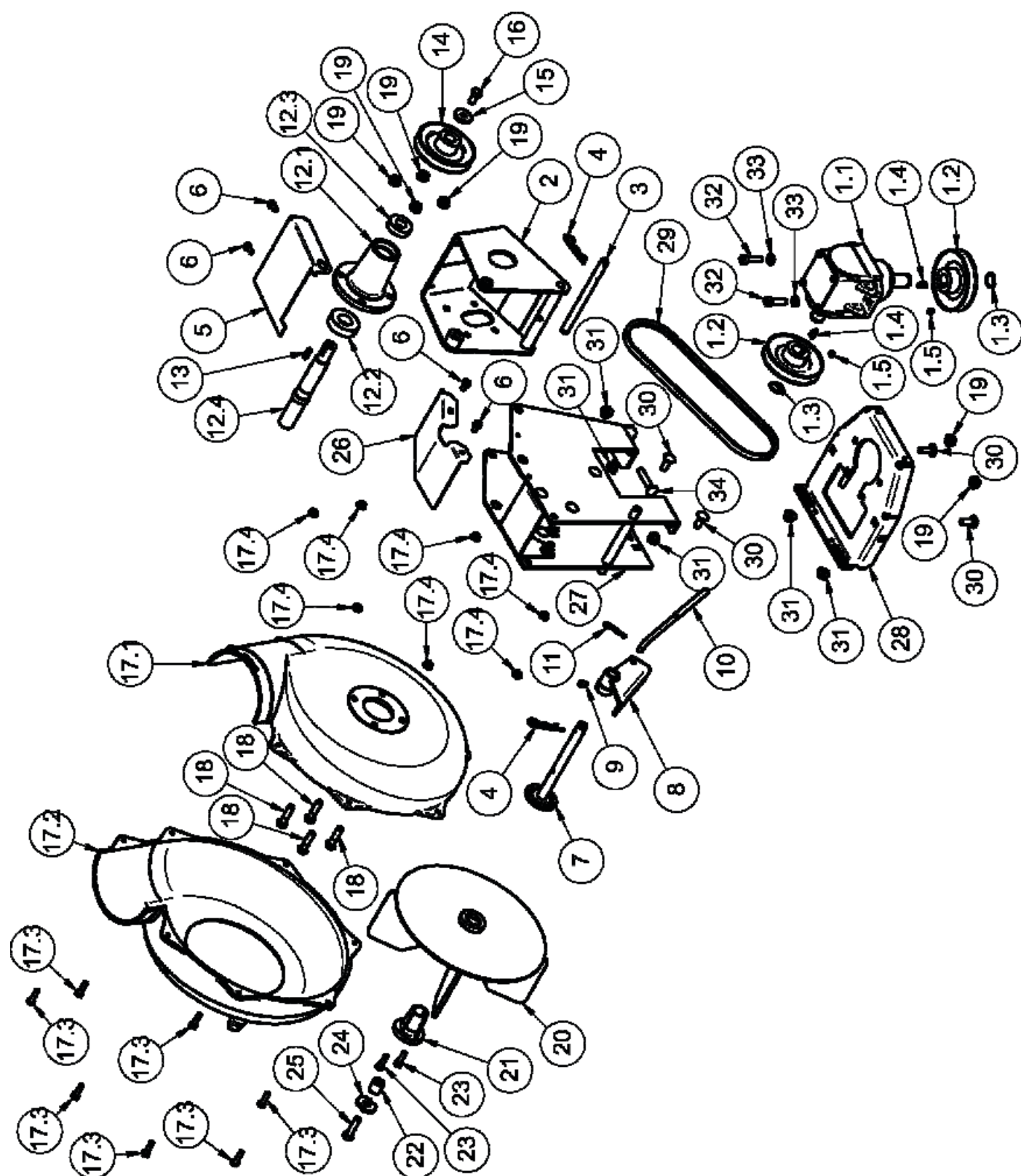


A1841_01 PTO Arm Assembly



Item#	Part#	Desc.	Qty.
1	B0265 01	Right PTO Arm	1
2	B0266 01	Left PTO Arm	1
3	B0268 01	PTO Arm Brace	1
4	B0271 01	PTO Assembly Mount Rod	1
5	B0024 01	Cam Brkt. Stop Adj. Pl.	1
6	K1215	Flange Nut 3/8"-16	2
7	K1197	3/8"-16X2 1/2" HHCS	1
8	K1182	Carriage Bolt 3/8"-16x1"	5
9	K2038	Ny-Flange Lock Nut 3/8"-16	5

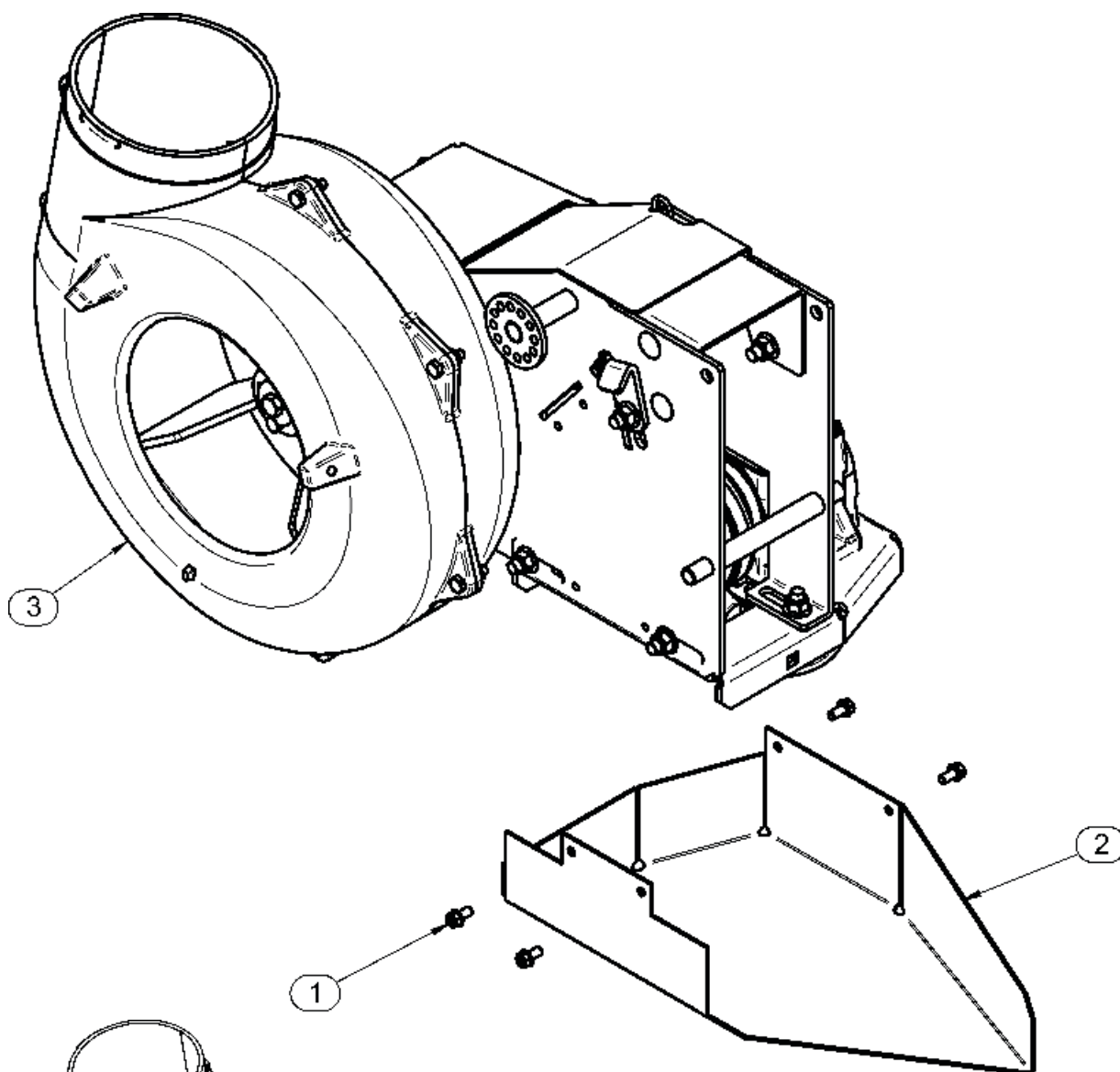
A1941_01 PTO Base Assembly Exploded Parts View



A1941_01 PTO Base Assembly Exploded Parts List

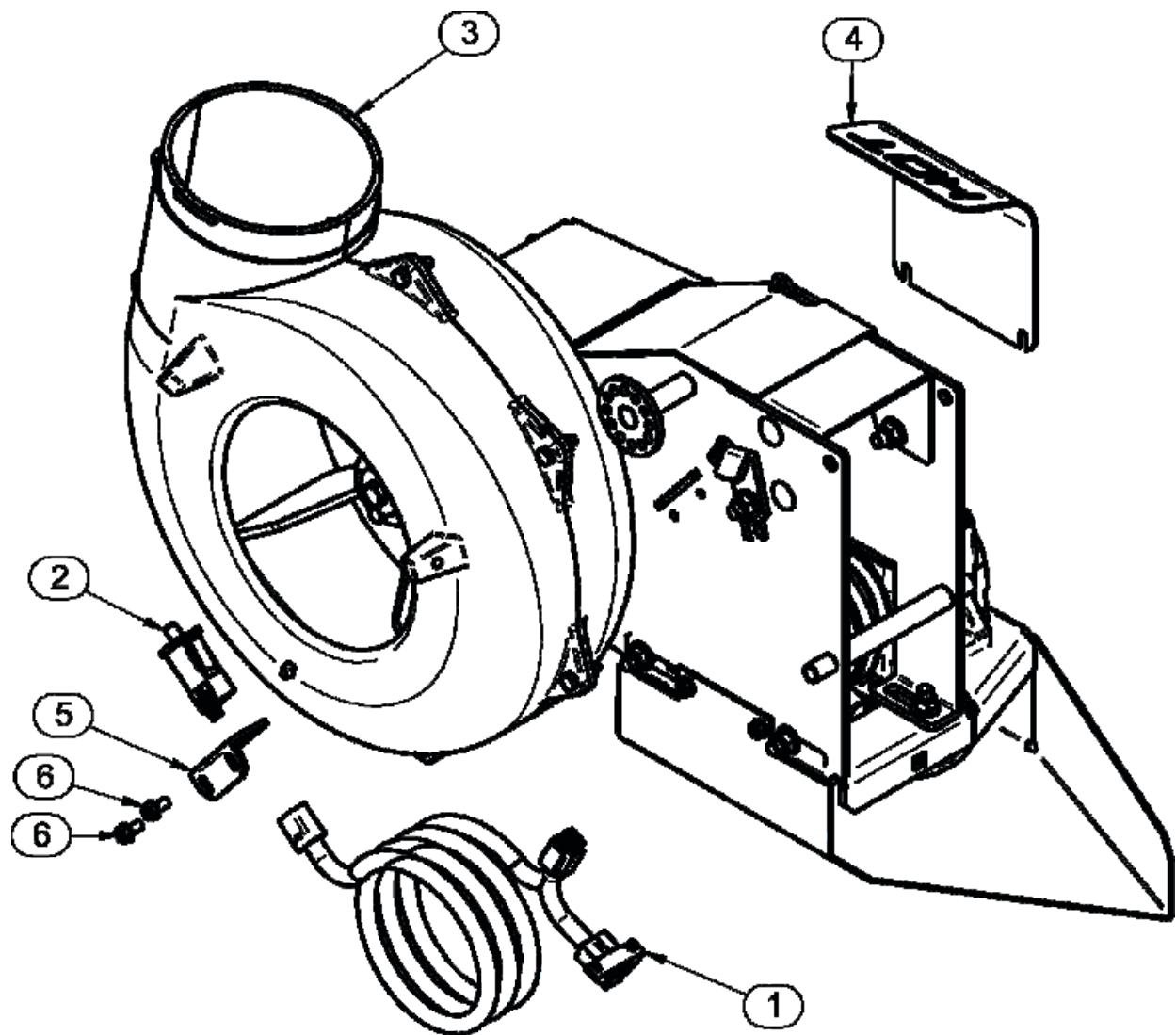
Item#	Part#	Desc.	Qty.
1	A0429	Gear Box Assy.	1
1.1	A0431	Gearbox	1
1.2	A0498	Pulley Assy. / GearBox	2
1.3	K0360	Snap Ring / 7/8" Shaft	2
1.4	J0272	Woodruff Key #9	2
1.5	K0035	Set Screw 5/16" -18x1/4" CupPoint	2
2	A0144	Blower Mnt. Brkt. Assy.	1
3	B1755	BLOWER PIVOT ROD	1
4	K0086	Hair Pin Clip.125ODx2.50	2
5	B0121	Blower Belt Guard	1
6	K0353	HWHTCS 1/4" -20x1/2"	4
7	A0604	PTO HANDLE MOUNT ASSY	1
8	A0422	CAM BRACKET ASSEMBLY	1
9	K0356	3/8"-16 TAPERED SET SCREW	1
10	K0326	BELT TENSION ROD 3/8"-16	1
11	K0130	.091ODx1.625L HAIR PIN CLIP	1
12	A0306	PTO Shaft Assy.	1
12.1	E0121	PTO Shaft Housing	1
12.2	N0147	Bearing (2.0472OD,0.9843ID,0.5906W)	1
12.3	N0148	Bearing (1.625OD,0.750ID,0.4375W)	1
12.4	B1758	PTO Shaft	1
13	J0254	Key / 3/16" x3/16" x3/4"	1
14	M0228	Pulley / Impeller Shaft	1
15	K1446	PTO Housing Washer	1
16	K1190	HHCS / 3/8"-16x3/4"	1
17	E4004A	BLOWER HSG. ASSY.	1
17.1	E4004B	BLOWER HSG. BACK	1
17.2	E4004F	BLOWER HSG. FRONT	1
17.3	K1125	HHCS 1/4" -20X1" GR2	7
17.4	K1126	Flange Nut 1/4" -20	7
18	K1193	HHCS 3/8" -16X1-1/2"GR5	4
19	K1215	Flange Nut 3/8"-16	6
20	A0645	4-Blade Impeller Assy	1
21	S4302	TAPER - LOCK BUSHING	1
22	S3242	Spacer Bushing / .750IDx.380IDx.830L	1
23	K1225	HHCS 1/4" -20X1" GR8	2
24	K0278	Double Indented Washer 7/16"1.375ODx.440IDx.179T	1
25	K1211	3/8"-16x1-1/2"HHCS GR8	1
26	B0270	PTO Arm Guard	1
27	A1804_01	PTO Arm Assembly	1
28	A0624_01	Base Plate Assembly	1
29	M0250	A30K KEVLAR BELT	1
30	K1182	Carriage Bolt 3/8"-16x1"	4
31	K2038	Ny-Flange Lock Nut 3/8"-16	5
32	K0309	3/8"-16x1-1/4"SHCS	2
33	K0048	Lock Washer 3/8"	2
34	K1184	Carriage Bolt 3/8"-16x2"	1

A1623 PTO Assembly w/ Pulley Guard Exploded View Parts List



Item#	Part#	Description	Qty.
1	K0353	HWHTCS 1/4"-20x1/2"	4
2	B0679	Large Pulley Guard	1
3	A1941_01	PTO Assy / Generic	1

A1821 PTO Assembly w/ Heat Guard Exploded View Parts List



Item#	Part#	Description	Qty.	Rev#
1	P0208	SafetyInterlockHarness	1	
2	P0208	PlungerSwitch	1	
3	A1823	PTOAssy/LargePulleyGuard	1	3
4	B0833	GearBoxHeatGuard	1	
5	B0682	SwitchMountBracket/Cub	1	
6	K0353	HWHTCS1/4"20x1/2"	2	



Unit Model #: 59A30042150 (21621216)

Mower & Type: Cub Cadet - Tank LZ (54" & 60"), Tank SZ (54" & 60")

Mower Models: Tank LZ - 53AI2PTC050, 53BI2PTD050, 53YI2PTC050, 53YI2PTD050, 53BH2PTD330

Tank SZ - 53AI2PUC050, 53BI2PUD050, 53YI2PUC050, 53YI2PUD050, 53RE2PUD050, 53AI2PUD330

Owner's Manual: Q0466

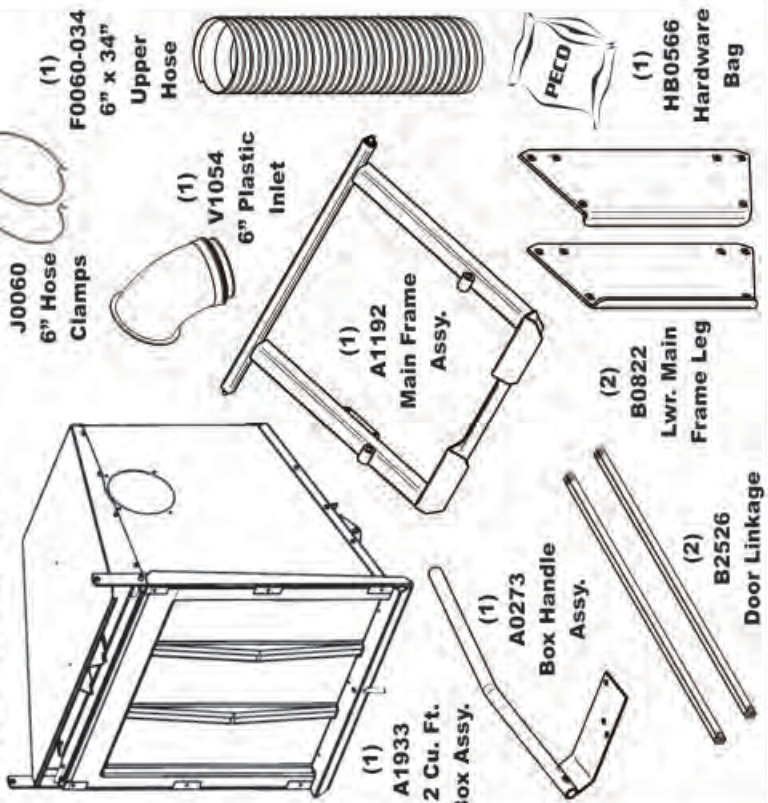
Revision #: 3 / Updated Hose P#'s (1/3/2018)

Vac/Drive Type: Pro 12 (12 Cu. Ft.) PTO Driven

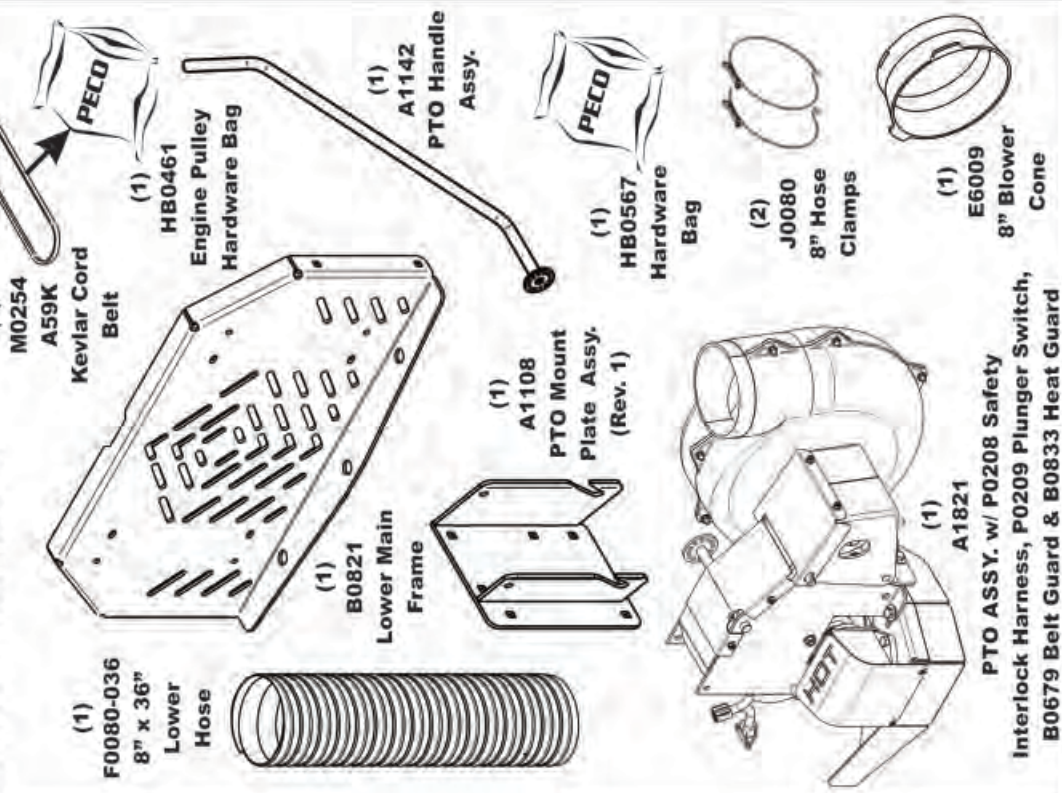
Fits Year(s): 2014-2015

LZ Mowers Require Weight Kit 59A30037150 (A1149) - Not Included On Pack

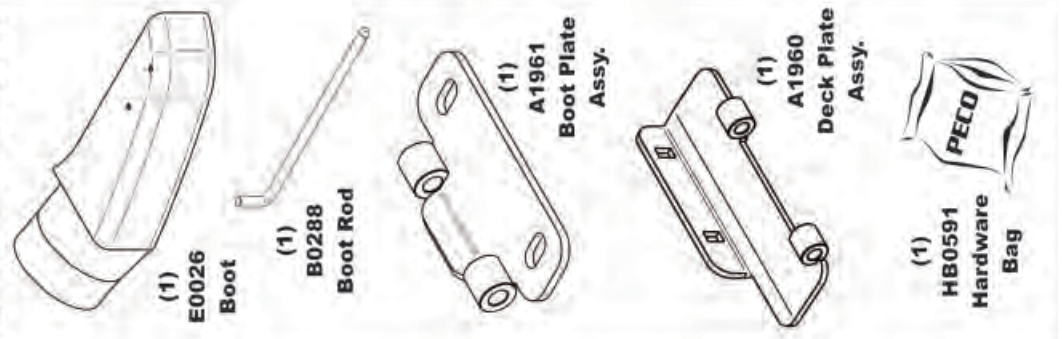
☐ A1930 Vac Kit



☐ A1931 Mount Kit

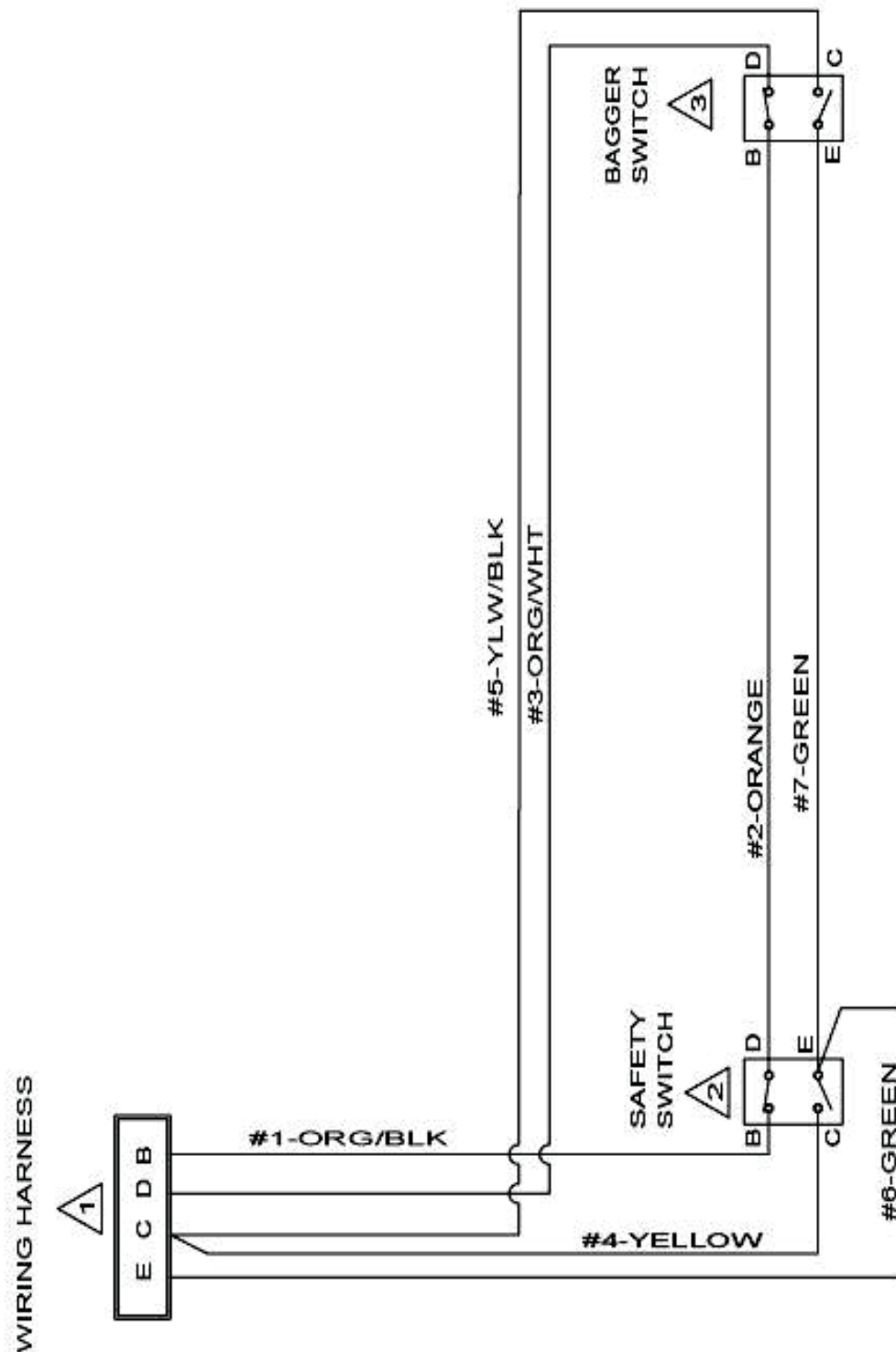


☐ A1964 Boot Kit



Wiring Diagram

P0208 Safety Interlock Wiring Harness



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, rotate the engagement handle of the collection system away from the mower. Continue to rotate the handle until it stops in an over center position. With the 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, rotate the engagement handle towards the mower.

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

- 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 over-filled 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.

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.

4-2 Lubrication

Gearbox:

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

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

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

Blower Assembly:

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

1. On initial use: Grease the fitting on the blower shaft.
2. Every 25 hours of use: Re-grease the grease fitting.

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

SECTION V - PARTS & SERVICE

5-1 Parts And Service Information

Collection system owners should record the name and telephone number of their Service Center. Your Service Center will be happy to supply replacement parts, accessories, and do any service or repairs to your collection system. If for any reason your Service Center is unable to service your collection system or supply replacement parts, contact 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: _____

New PECO, Inc.

10 Walden Dr | Arden, North Carolina 28704

Phone: 1-800-438-5823 | 828-684-1234

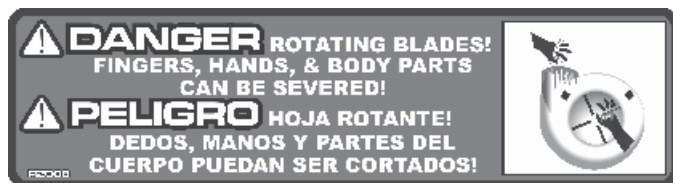
Fax: 828-684-0858

Email: peco@lawnvac.com

Website: www.lawnvac.com

SAFETY DECALS

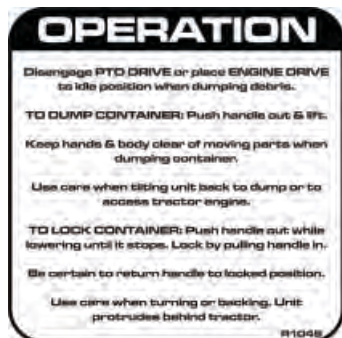
To promote safe operation, PECO supplies safety decals on all products manufactured. Damage can occur to safety decals either through shipment, use or reconditioning. Contact your local Service Center for replacement decals.



R2008



R2007



Part #: R1049



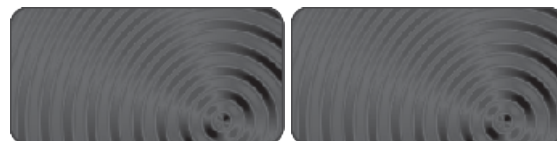
Part #: R1069



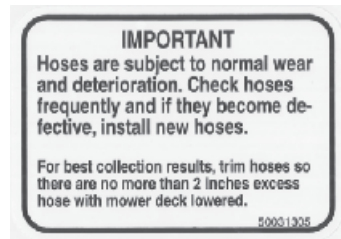
Part #: R1053



Part #: R1055



Part #: R1057
Red Reflector Label



Part #: R1054



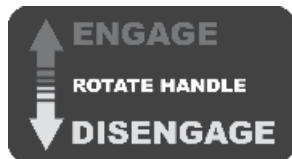
Part #: R4015



Part #: R4037



Part #: R1052



Part #: R1083



Part #: R1065



Part #: R4008



Part #: R1051

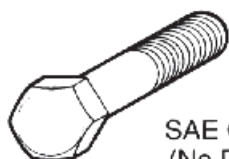


Part #: R0006 - Cub Cadet Label

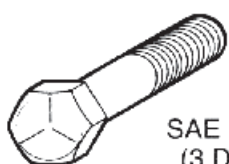
TORQUE SPECIFICATIONS

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

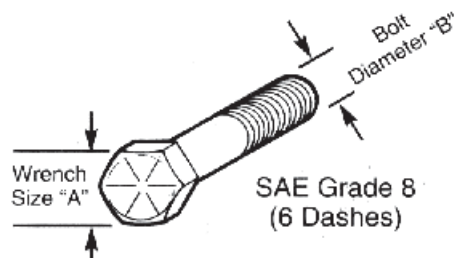
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



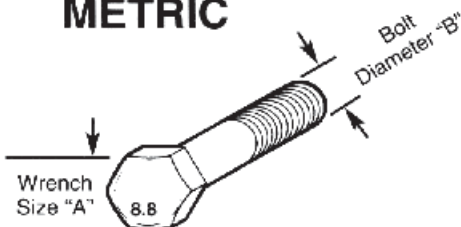
SAE Grade 5
(3 Dashes)



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 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.



Cub Cadet®

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