

PROFESSIONAL BAGGING SYSTEM

MODEL# PBSB

COUNTRY
CLIPPER
ZERO TURN MOWER

DESIGNED FOR THE DEFENDER & BOSS XL SERIES



OPERATOR'S MANUAL

ASSEMBLY ● OPERATION ● MAINTENANCE

MANUAL#: Q0478

Revision 2.3 - 9/7/2017

PART# 629GR-001A

PROFESSIONAL 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 quickly. READ THE OPERATOR'S MANUAL!
3. Do not allow children to operate the mower. Do not allow adults to operate the mower or grass collection system without proper instruction.
4. Be especially watchful of children and pets darting into the area while operating.
5. Keep your eyes and mind on your unit while mowing or operating your attachment. Don't let others distract you.
6. Do not attempt to operate your unit or mower when not in the driver's seat.
7. Always stop unit when emptying the container.
8. Stop unit, shut off deck attachment, set parking brake, shut off mower engine and remove spark plug wire before removing clogs, removing or replacing hose, boot, blower cone, or performing any maintenance.
9. Mow across the face of slopes (not steeper than 10 degrees); never up and down the face of the slope.
10. It is recommended that the container be kept only half full when negotiating any 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 ear protection if the noise level is offensive.
13. Wear eye protection to prevent debris from damaging 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 exist which, if not avoided, will result in minor or moderate injury.

It may also be used to alert against unsafe practices.

COUNTRY CLIPPER LIMITED WARRANTY FOR NEW PRODUCTS

A. WHAT IS WARRANTED?

Country Clipper extends the following warranties to the original purchaser of each new Country Clipper bagging system subject to the following limitations:

- 1. PRODUCT WARRANTY:** Any part of the bagging system, which is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as Country Clipper 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 COUNTRY CLIPPER FOR INSPECTION TO DETERMINE VALIDITY OF WARRANTY CLAIMS. Freight and mailing will be borne by the customer.

- 2. PARTS REPLACED DURING WARRANTY:** Any new Country Clipper bagging system 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 Country Clipper elects, without charge if the defect appears within 90 days from the date of installation of such part or before the expiration of the original warranty period, whichever is later.

B. SECURING WARRANTY ADJUSTMENTS.

Call Country Clipper for Return Authorization. Damaged or broken parts, other than engines or batteries, must be returned to Country Clipper Division of Shivers Mfg. Inc., 613 W. English, Corydon, IA, 50060 before any warranty adjustment can be authorized. At the time of requesting warranty adjustment, the purchaser must present evidence for date of delivery of the product. The purchaser shall pay any charge for the product to and from Corydon, IA.

C. ITEMS NOT COVERED BY COUNTRY CLIPPER WARRANTY.

Engines, batteries, and gearboxes attached to Country Clipper products are covered under a separate warranty by the respective manufacturer.

D. UNAPPROVED ALTERATION OR MODIFICATION.

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

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 Country Clipper 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, Country Clipper makes no other warranties **AND SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF FITNESS AND MERCHANTABILITY.**

G. ANY MACHINE USED FOR RENTAL PURPOSES ARE GUARANTEED 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 Country Clipper bagging systems are set forth above. In no event will Country Clipper 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 Country Clipper 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 Country Clipper or to modify the terms of this warranty in any way.

SECTION I INTRODUCTION AND DESCRIPTION

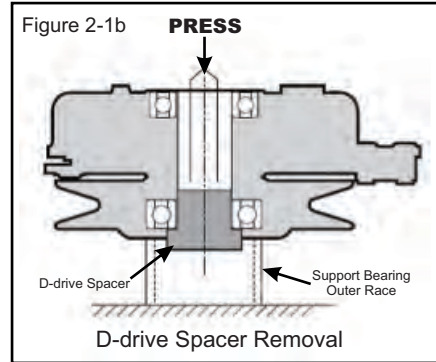
1-1 Introduction

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

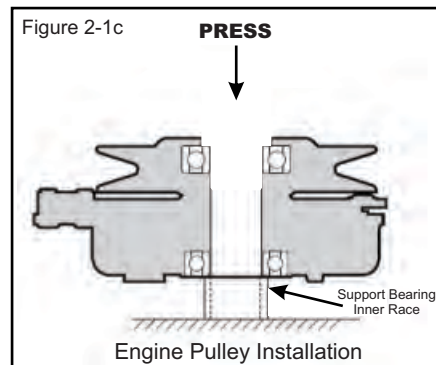
NOTE: all references made to right, left, front, rear, top or bottom are as viewed from the normal operator's position on the mower.

1-2 Description

The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves and twigs 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 (3) - 4.0 cubic foot collection bags P#(G0003) at the rear portion of the mower frame. The operator can engage the blower with a push of the over-center linkage on the right side of the unit. Once the bags are full with clippings, they can be released to make for easy dumping.



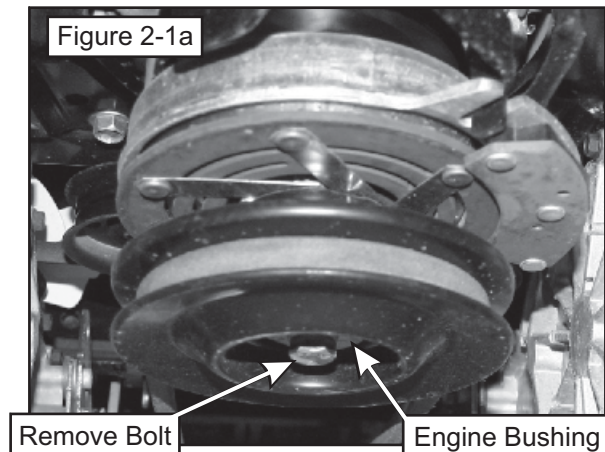
The engine pulley assembly must be installed using an arbor press or equivalent. Upon Installation, opposite bearing inner race must be supported or bearing damage may occur. Refer to Figure 2-1c.



Section II INSTALLATION FOR USE

2-1 Preparation Of Mower

Remove deck drive belt from the clutch pulley (refer to your Country Clipper operator's manual). From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Refer to Figure 2-1a.



Remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer to Figure 2-1b.

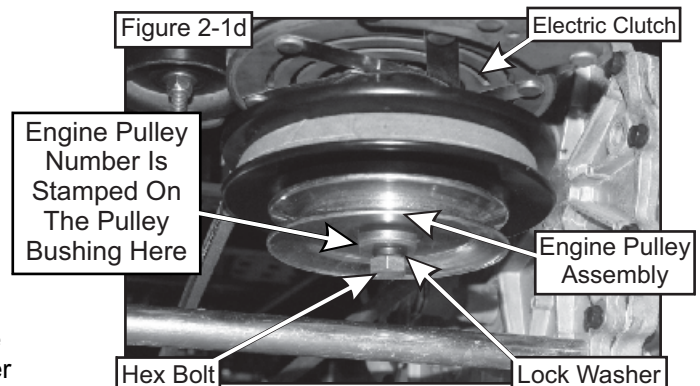
Kawasaki FX801V / 27HP Kohler / 29HP Kohler

Use engine pulley assembly #25 P#(A1200), (1) 7/16" lock washer P#(K0140), and 7/16"-20 x 4-1/2" hex bolt P#(K0427).

Kawasaki FX1000V

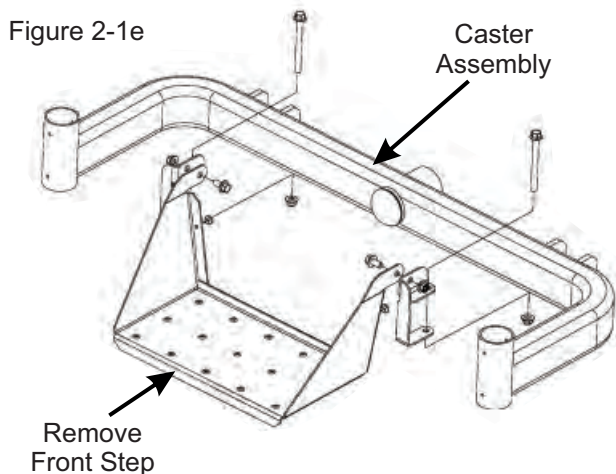
Use engine pulley assembly #24 P#(A1176), (1) 7/16" lock washer P#(K0140), and 7/16"-20 x 4-1/2" hex bolt P#(K0427).

The added pulley will power the collection system. Note that the center of the hub that is extended, should be upward toward the engine (Figure 2-1d). **Torque the bolt to 55 ft./lbs.** Please inspect that lock washer is properly in place when the crankshaft bolt is fully tightened.



2-1 Preparation Of Mower Continued

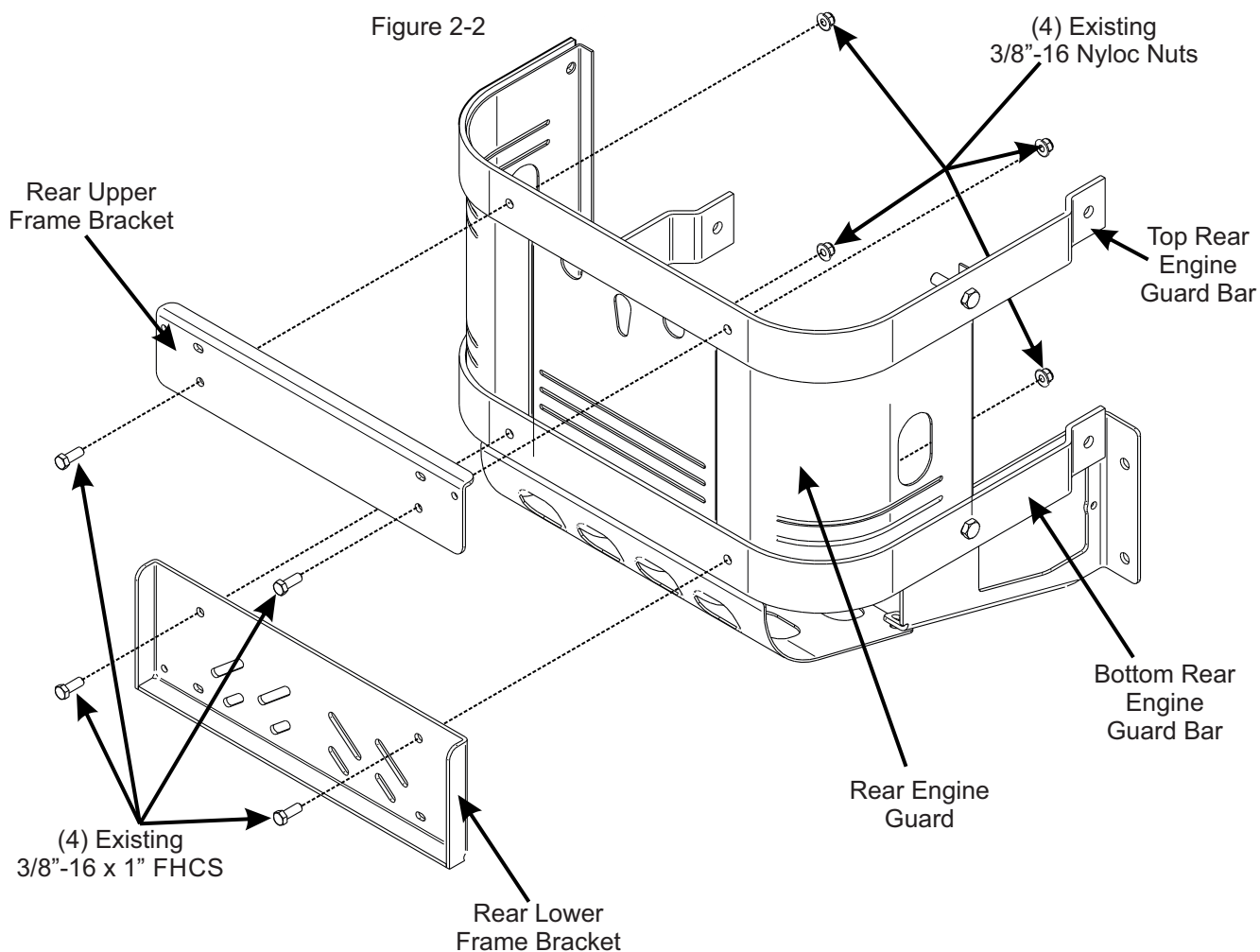
Remove the front step and mounting hardware from the front caster assembly. Reference your Country Clipper owner's manual and Figure 2-1e.



2-2 Upper And Lower Rear Frame Bracket Installation

First, remove (2) existing top bolts 3/8"-16 x 1" FHCS and (2) 3/8"-16 nyloc nuts that secure the top rear engine guard bar. Secure the rear upper frame bracket P#(B0853) with the hardware removed as shown in Figure 2-2.

Next, remove (2) existing bottom bolts 3/8"-16 x 1" FHCS and (2) 3/8"-16 nyloc nuts that secure the bottom rear engine guard bar. Secure the rear lower frame bracket P#(B0851) with the hardware removed as shown in Figure 2-2.



2-3 PTO Mount Plate Components Installation

Remove the (2) existing 1/2"-13 x 2" FHCS and (2) 1/2"-13 nyloc nuts from the top and bottom rear engine guard bars (shown in Figure 2-3a). Secure the Left PTO mount plate P#(B0852) using the existing hardware.

Figure 2-3a

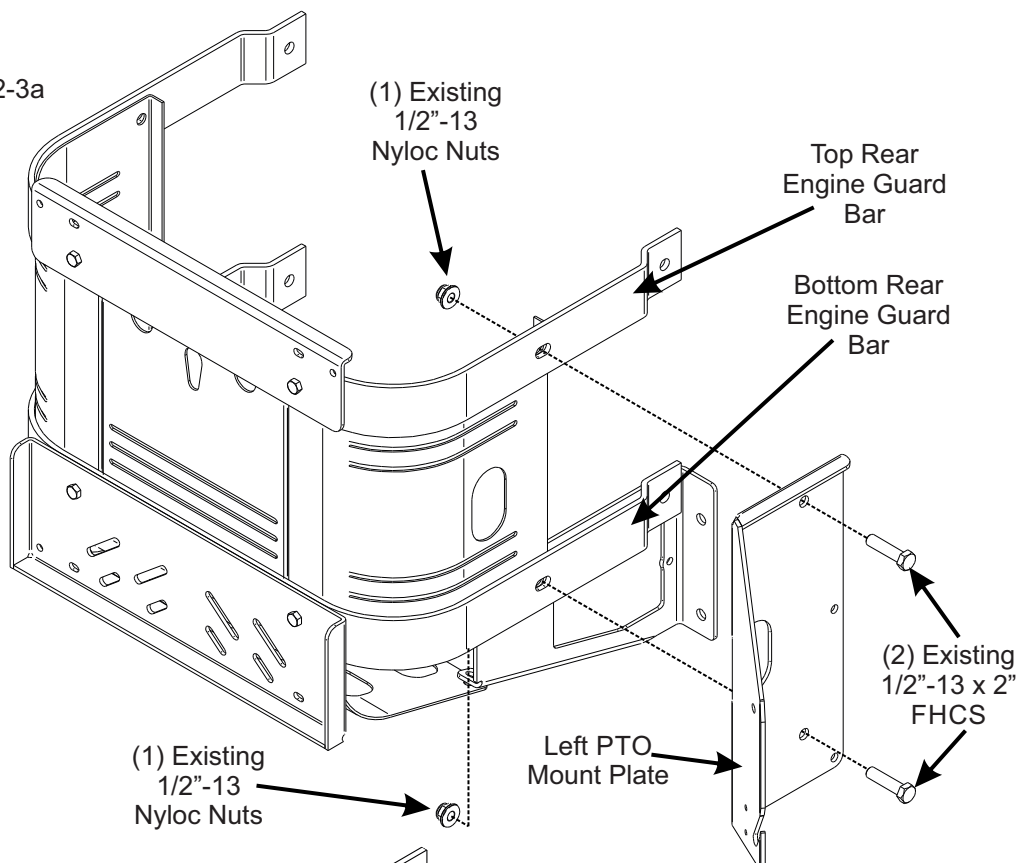
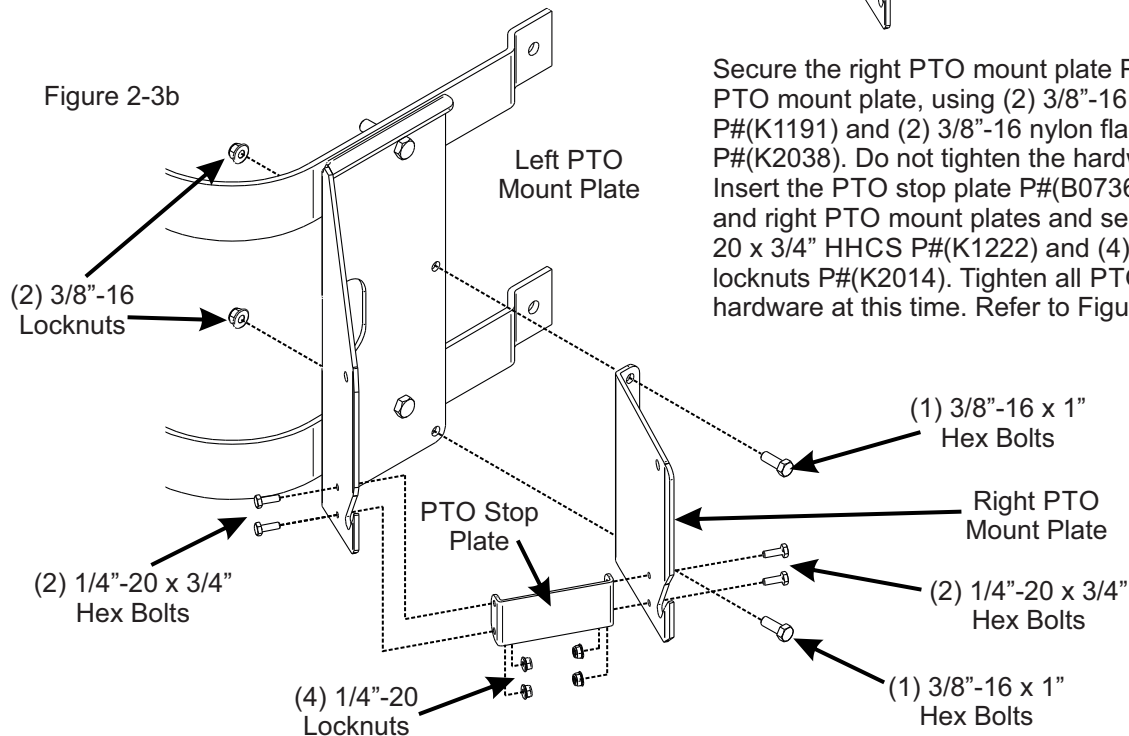


Figure 2-3b

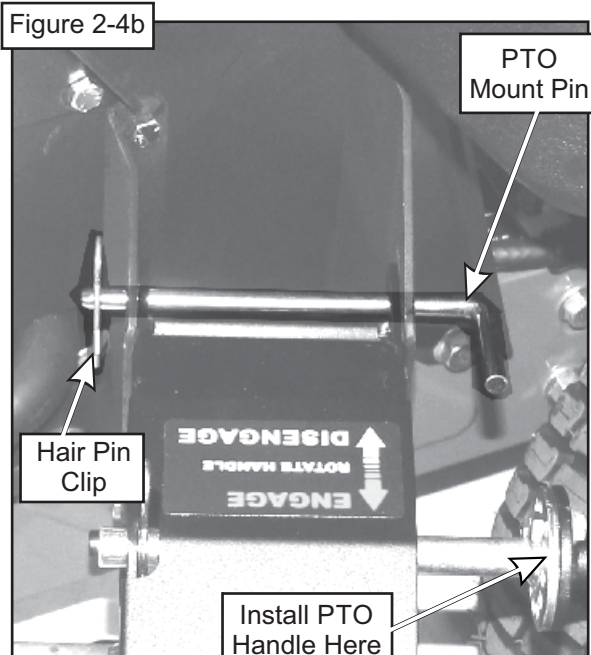
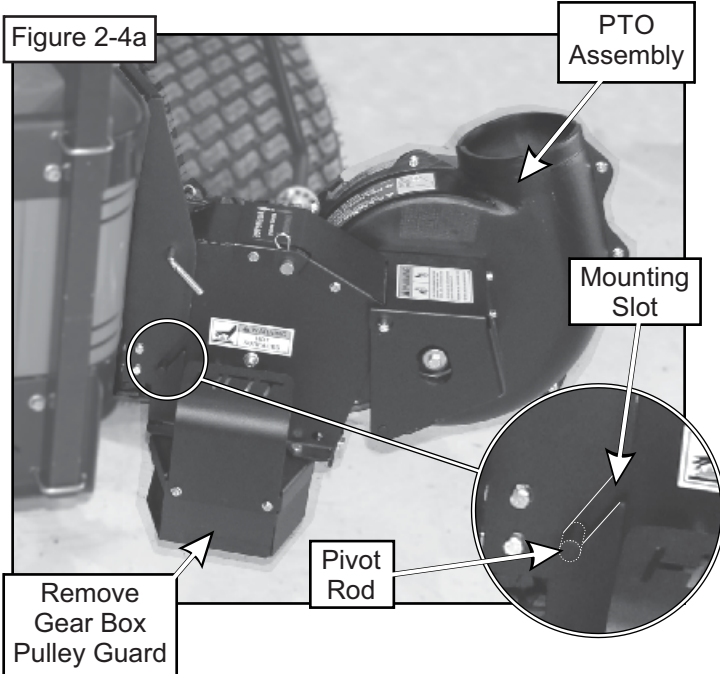


Secure the right PTO mount plate P#(B0854) to the left PTO mount plate, using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nylon flange locknuts P#(K2038). Do not tighten the hardware completely. Insert the PTO stop plate P#(B0736) between the left and right PTO mount plates and secure using (4) 1/4"-20 x 3/4" HHCS P#(K1222) and (4) 1/4"-20 nylon flange locknuts P#(K2014). Tighten all PTO component hardware at this time. Refer to Figure 2-3b.

2-4 PTO Assembly Installation

To mount the PTO assembly, insert the pivot rod on the PTO assembly P#(A1950) into the mounting slots located on the left & right PTO mount plates (Figure 2-4a). Tilt the PTO assembly upward and insert the PTO mount pin P#(B0274) through the hole in the top of the right PTO mount plate assembly. Secure the PTO mount pin using 1/8" x 2-3/8" hair pin clip P#(K0086) as shown in Figure 2-4b.

Note: Remove the gearbox pulley guard in preparation for the belt installation. Refer to Figure 2-4a.

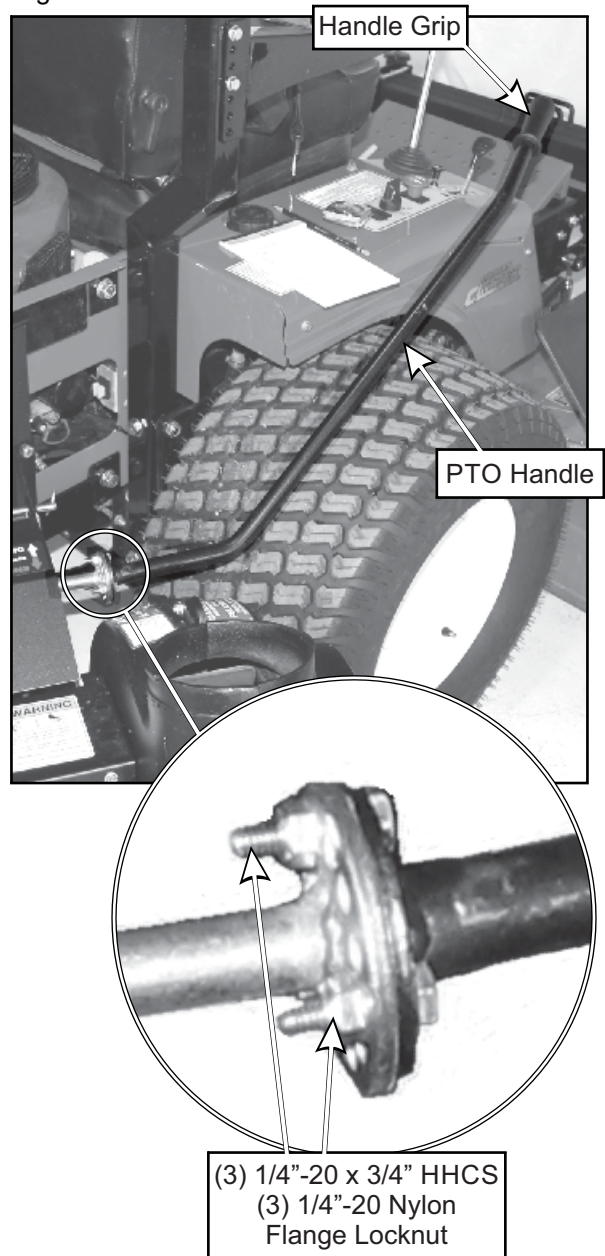


2-5 PTO Handle Installation

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 2-5.

NOTE: The PTO Handle can be adjusted after performing Step 2-8 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.

Figure 2-5



2-6 Belt Installation and Adjustment PTO MODELS ONLY

Loosen the (4) bolts P#(K1191), (2) on each side, that secure the gear box assembly to the PTO assembly P#(A1950) (Figure 2-6a and 2-6b).

Figure 2-6a

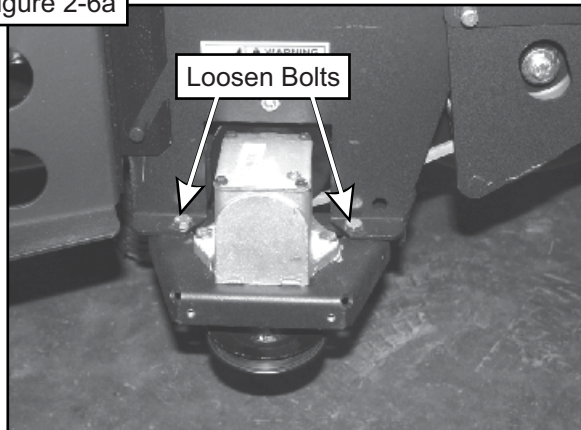
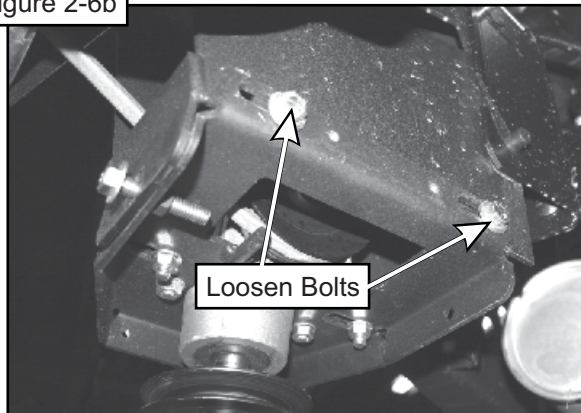
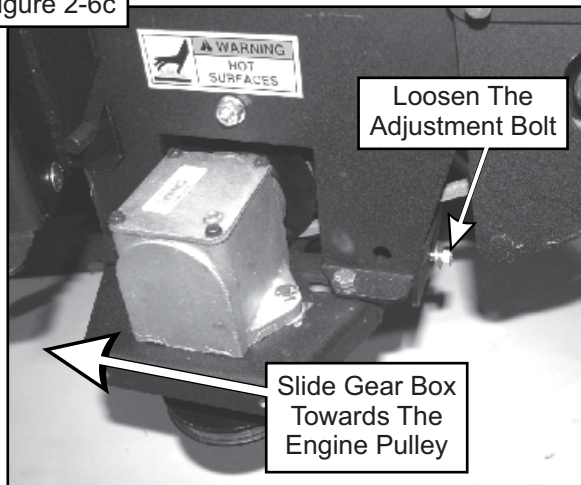


Figure 2-6b



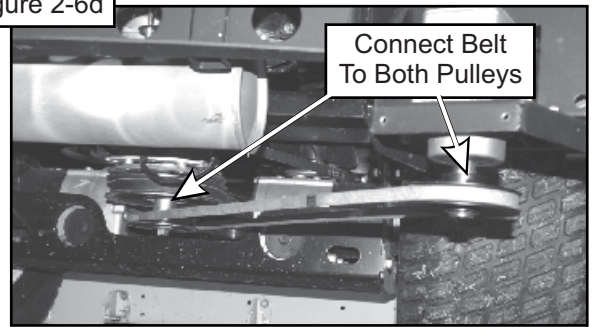
Loosen the adjustment bolt P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved toward the mower's engine pulley). Refer to Figure 2-6c.

Figure 2-6c



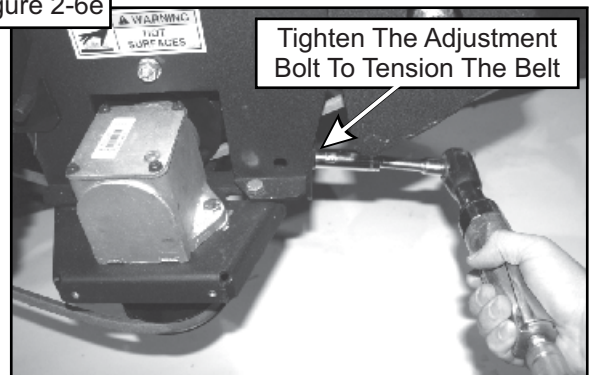
Connect the belt A57K P#(M0256) from the engine pulley to the lower gear box pulley (Figure 2-6d).

Figure 2-6d



To tension the drive belt, turn the adjustment bolt clockwise (Figure 2-6e) 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 2-6e



Once the correct tension of the belt is achieved, tighten the (4) bolts that secure the gear box assembly. Refer to Figures 2-6f and 2-6g. Replace the belt guard and hardware that was removed in Section 2-4.

Figure 2-6f

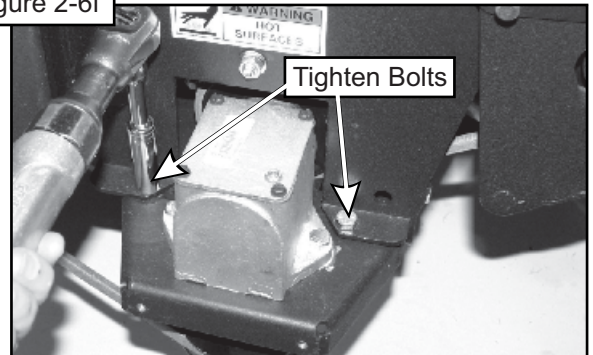
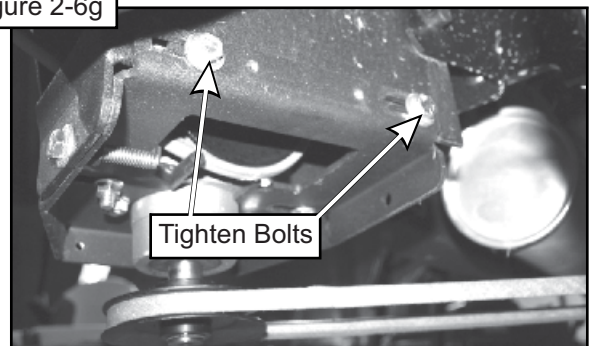


Figure 2-6g



2-7 Cam Assembly Adjustment

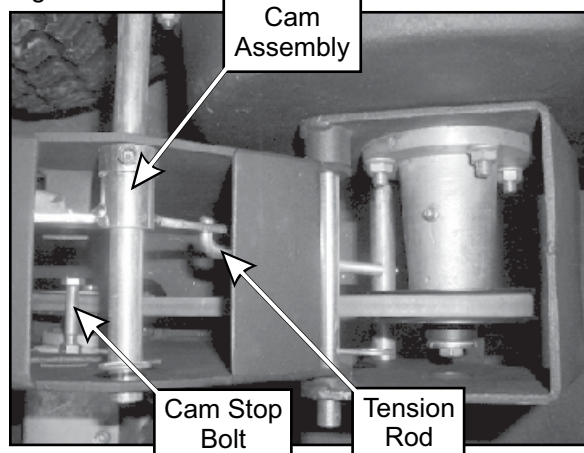
The cam assembly P#(A0422), which controls the blower belt tension, comes from the factory pre-adjusted.

If the belt is too tight or becomes too loose, remove the hair pin clip P#(K0130) 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 engaged (Figure 2-7).

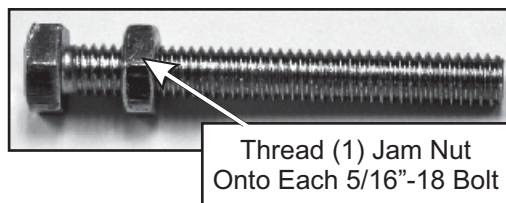
Figure 2-7



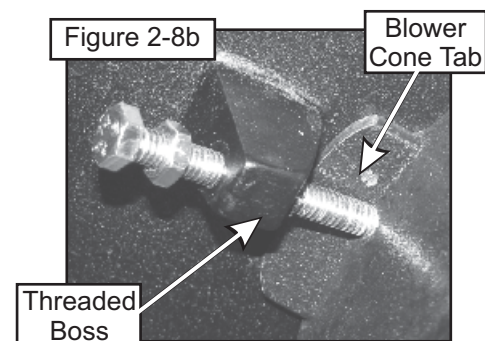
2-8 Blower Cone Installation

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 2-8a.

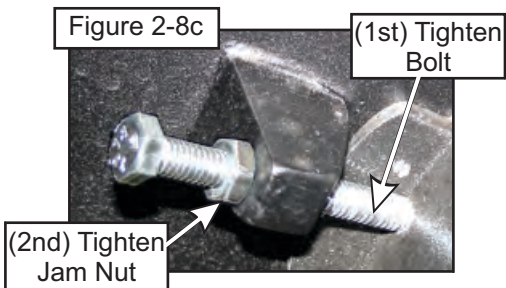
Figure 2-8a



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 2-8b.

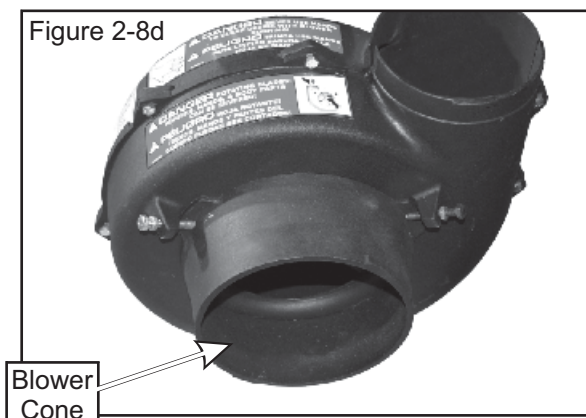


Once the (2) bolts are tight, tighten the jam nuts against the threaded boss as shown in Figure 2-8c.



Refer to Figure 2-8d for proper blower cone installation reference.

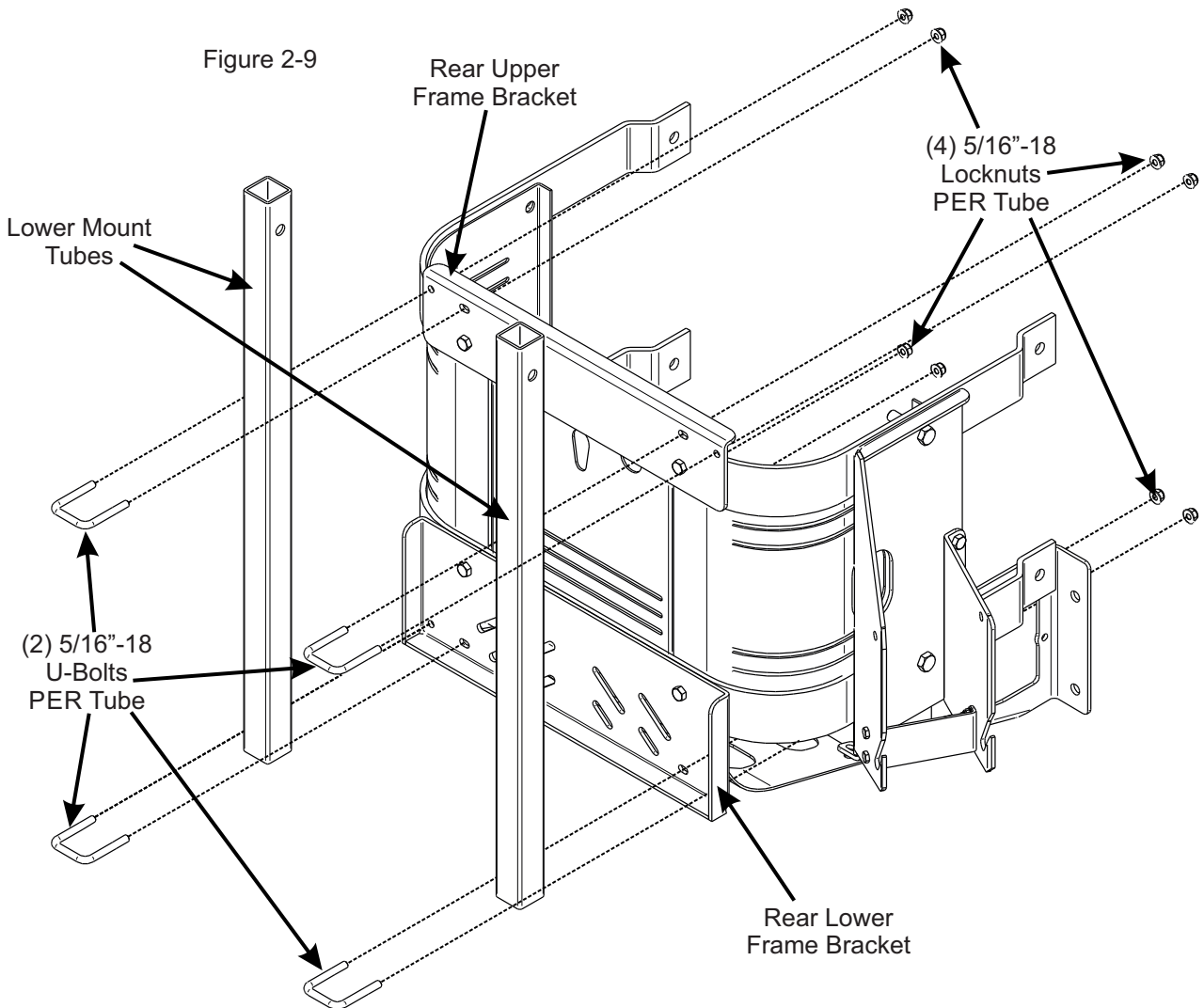
Figure 2-8d



2-9 Lower Mount Tube Installation

Secure the (2) lower mount tubes P#(B0640) to the rear lower and upper frame brackets using (2) 5/16"-18 x 2-1/4" u-bolts P#(K1098) and (4) 5/16"-18 nylon flange locknuts P#(K2516) PER TUBE.

The bottom edge of the lower mount tubes should be flush with the bottom flange of the rear lower frame bracket. Refer to Figure 2-9.



2-10 Upper Frame Assembly Installation

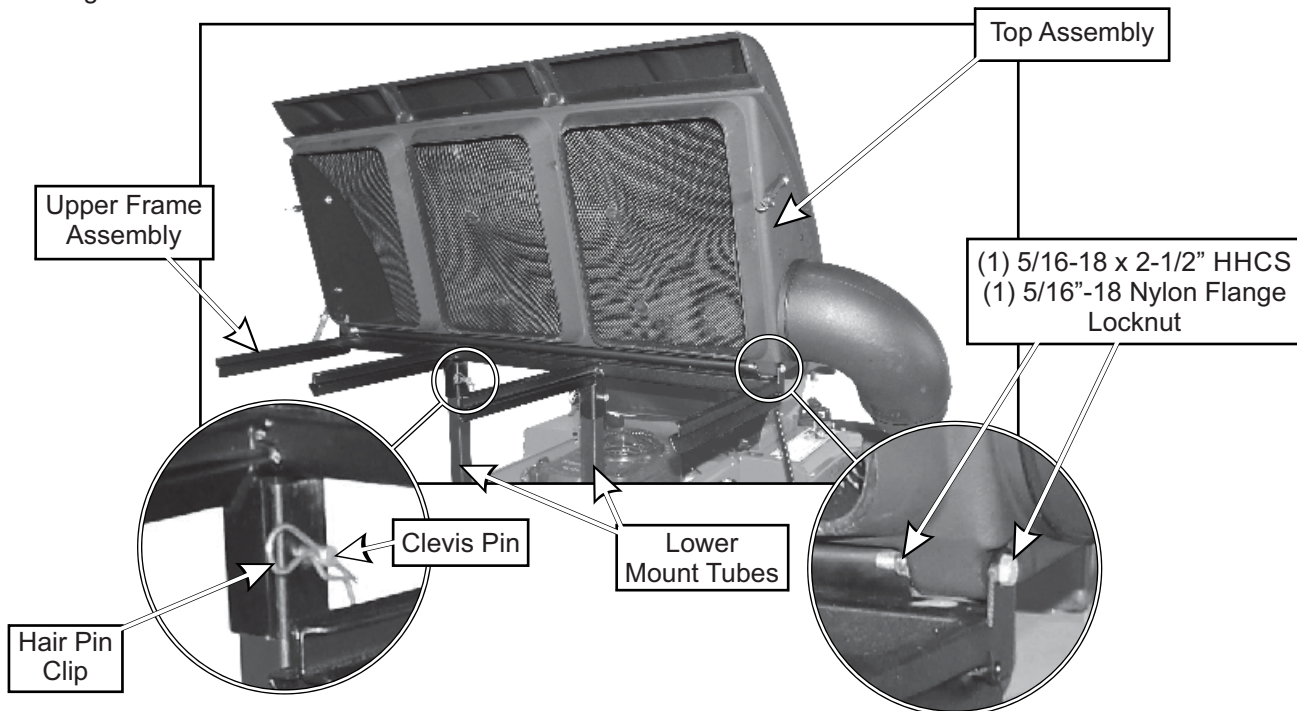
NOTE: During this step, it is suggested that two people install the upper frame to the lower mount tube.

Lift the upper frame assembly P#(A1058) and lower the upper frame assembly onto the two lower mount tubes. Secure the top assembly to the lower mount tubes using (2) clevis pins P#(K0133) and (2) hair pin clips P#(K0088). Refer to Figure 2-10.

2-11 Top Assembly To Upper Frame Assembly Installation

Position the top assembly P#(A1190) above the upper frame assembly as shown in Figure 2-10. Fasten the top assembly to the upper frame assembly using (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Leave the locknuts slightly loose, to allow the top assembly to open and close easily.

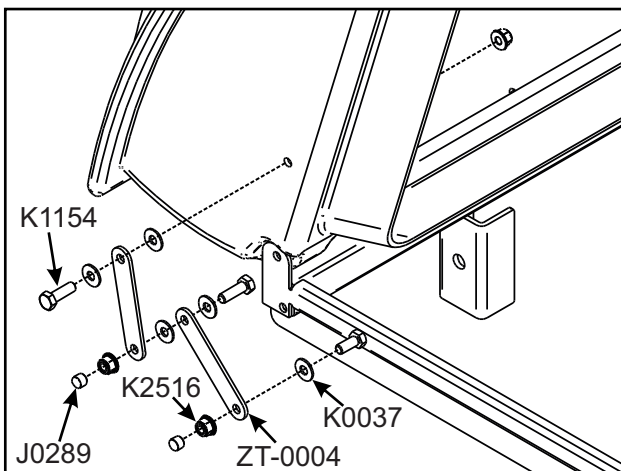
Figure 2-10



2-12 Hinge Kit Assembly Installation

Assemble the hinge kit as shown in Figure 2-12, using (2) 5/16"-18 x 1" HHCS P#(K1154), (3) 5/16"-18 nylon flange locknuts P#(K2516), (5) 1/4" flat washers P#(K0037) and (2) swing arm brackets P#(ZT-0004). Place (1) vinyl cap P#(J0289) on the end of the hex bolts as shown in Figure 2-12. 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 2-12



2-13 ROPS Pivot Bracket Installation

To allow the ROPS to fold down without hitting the bagger top, insert a total of (4) B0872 - ROPS Pivot Brackets, (2) per side with arrow aligned as shown in Figure 2-13a. When folding the ROPS is desired, pin the ROPS as shown in Figure 2-13b. This will prevent damage to the bagger top while mowing or transporting.

Figure 2-13a

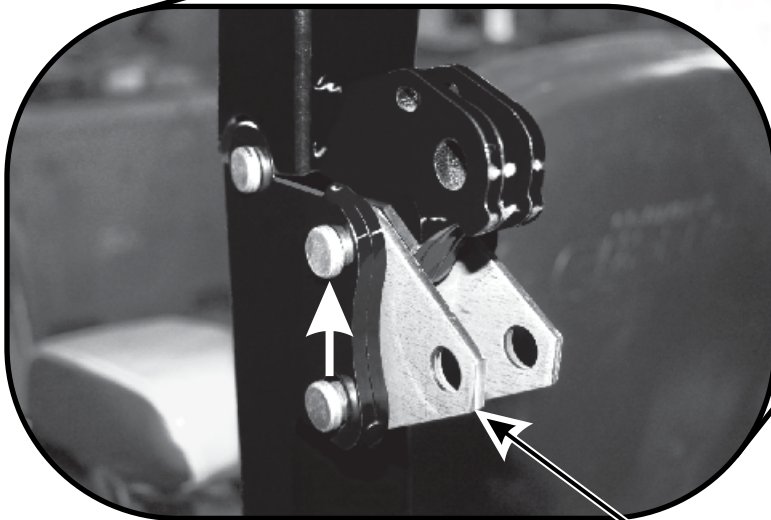
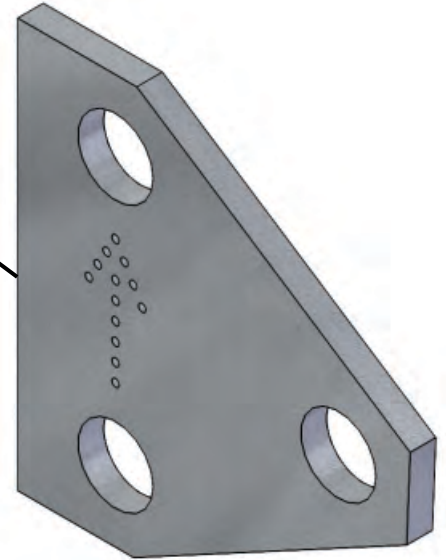
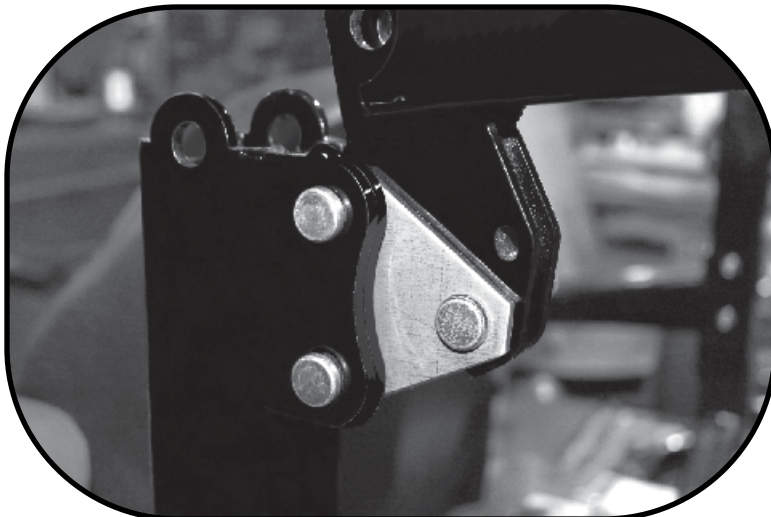


Figure 2-13a



B0872 - ROPS Pivot Bracket

2-14 Boot Plate Installation

Secure the boot plate P#(B0820) to the aluminum boot P#(E1902) 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 top of the boot. This will prevent grass clippings from collecting on the threads. Leave the hardware loose until the boot plate has been attached to the mower deck. Refer to Figure 2-14a and 2-14b for reference.

2-15 Boot To Mower Deck Installation

Remove the hardware from the grass deflector and insert (1) boot rod P#(B4331) into the grass deflector mounting holes as shown in Figure 2-13a. Secure the boot rod using (1) hair pin clip P#(K0099). With the carriage bolts from Section 2-14a still loose, adjust the position of the boot so that there is no gap between the mower deck and the boot. Tighten the hardware at this time.

Figure 2-14a

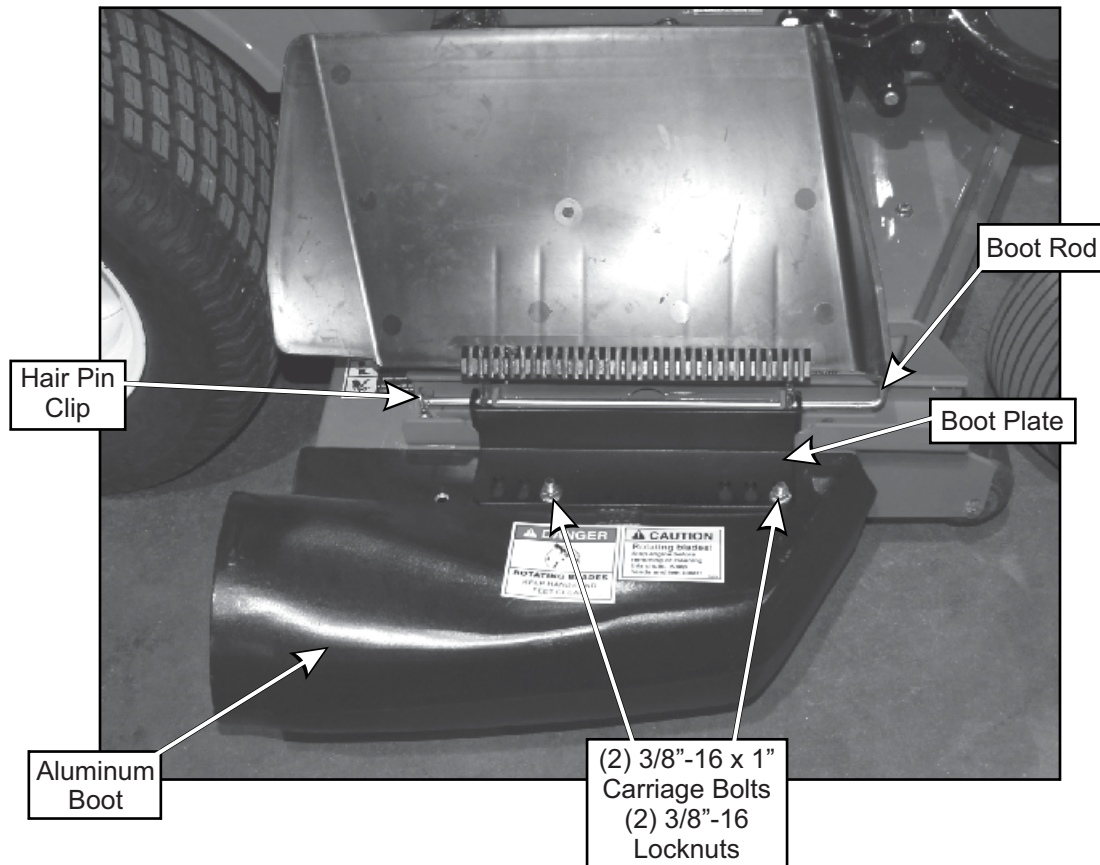
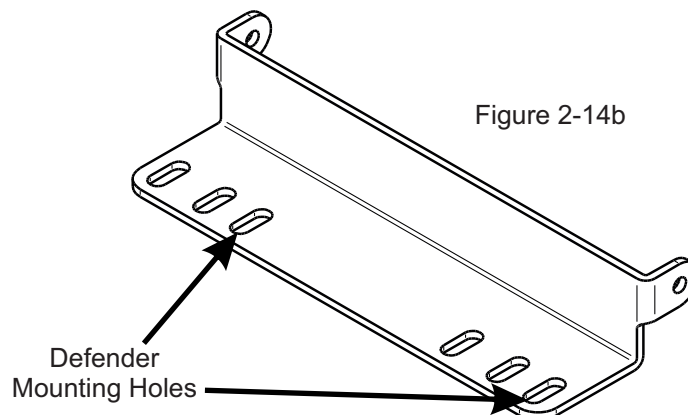


Figure 2-14b



2-16 Length Of Hose Adjustment

The hoses in steps 2-17 and 2-18 must be cut to fit your machine. Follow steps 2-17 and 2-18. 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.

2-17 Upper Hose Installation

Slide a pre-assembled hose clamp P#(J0060) onto both ends of the 6" upper hose (Figure 2-19). Slide one end of the 6" hose onto the plastic inlet P#(V0025). Make sure there is about a two-inch overlap between the hose end and the plastic inlet. Proceed to slide the opposite end of the 6" hose onto the outlet of the blower assembly. See (Figure 2-19) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

2-18 Lower Hose To Blower Cone Installation

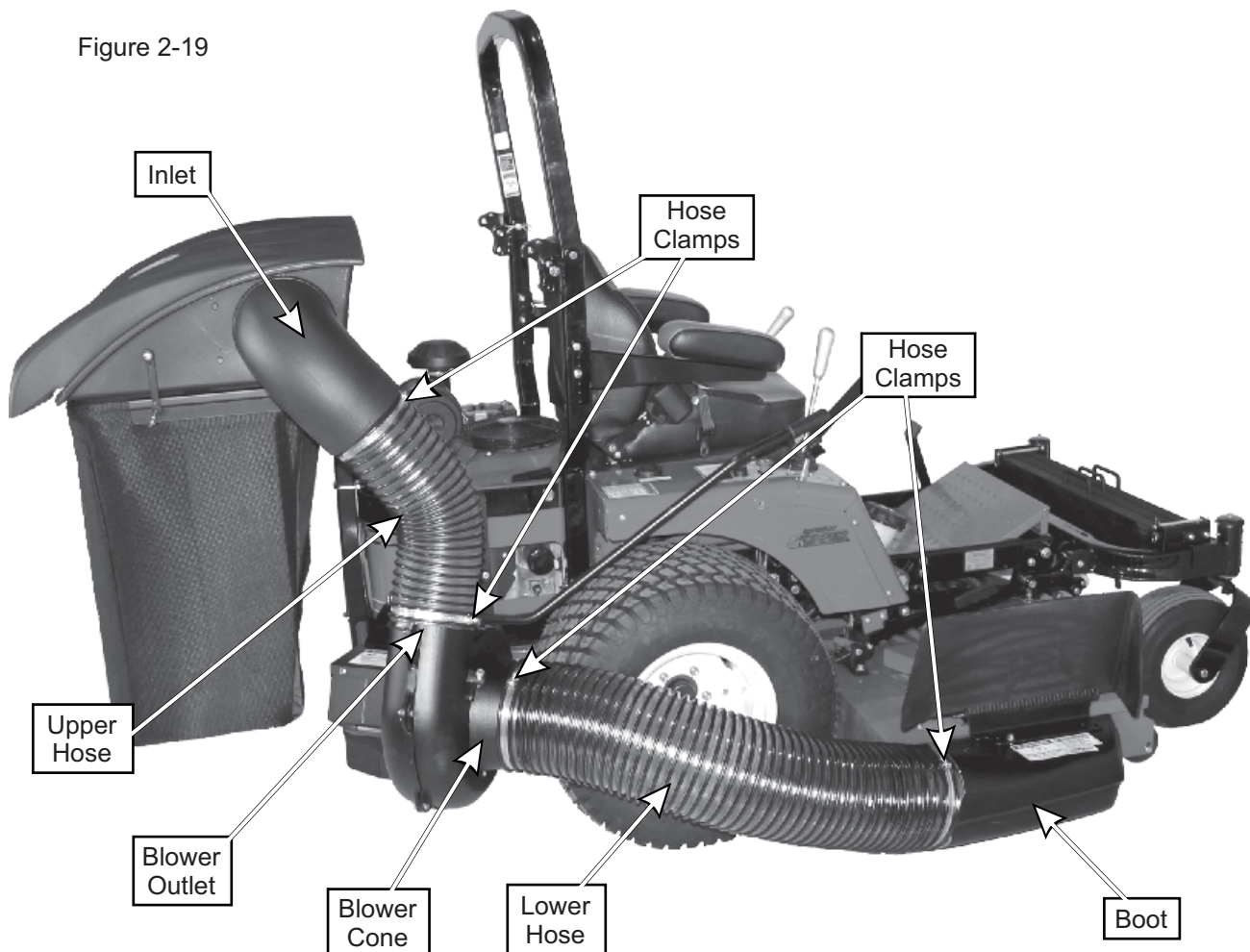
Slide a hose clamp P#(J0080) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. Refer to Figure 2-19.

2-19 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 2-19). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.

Note: For maximum collection system performance, adjust the hose lengths (Step 2-16) to achieve the smoothest transition between components. Avoid any sharp bends in the upper and lower hoses.

Figure 2-19



2-20 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 2-21.

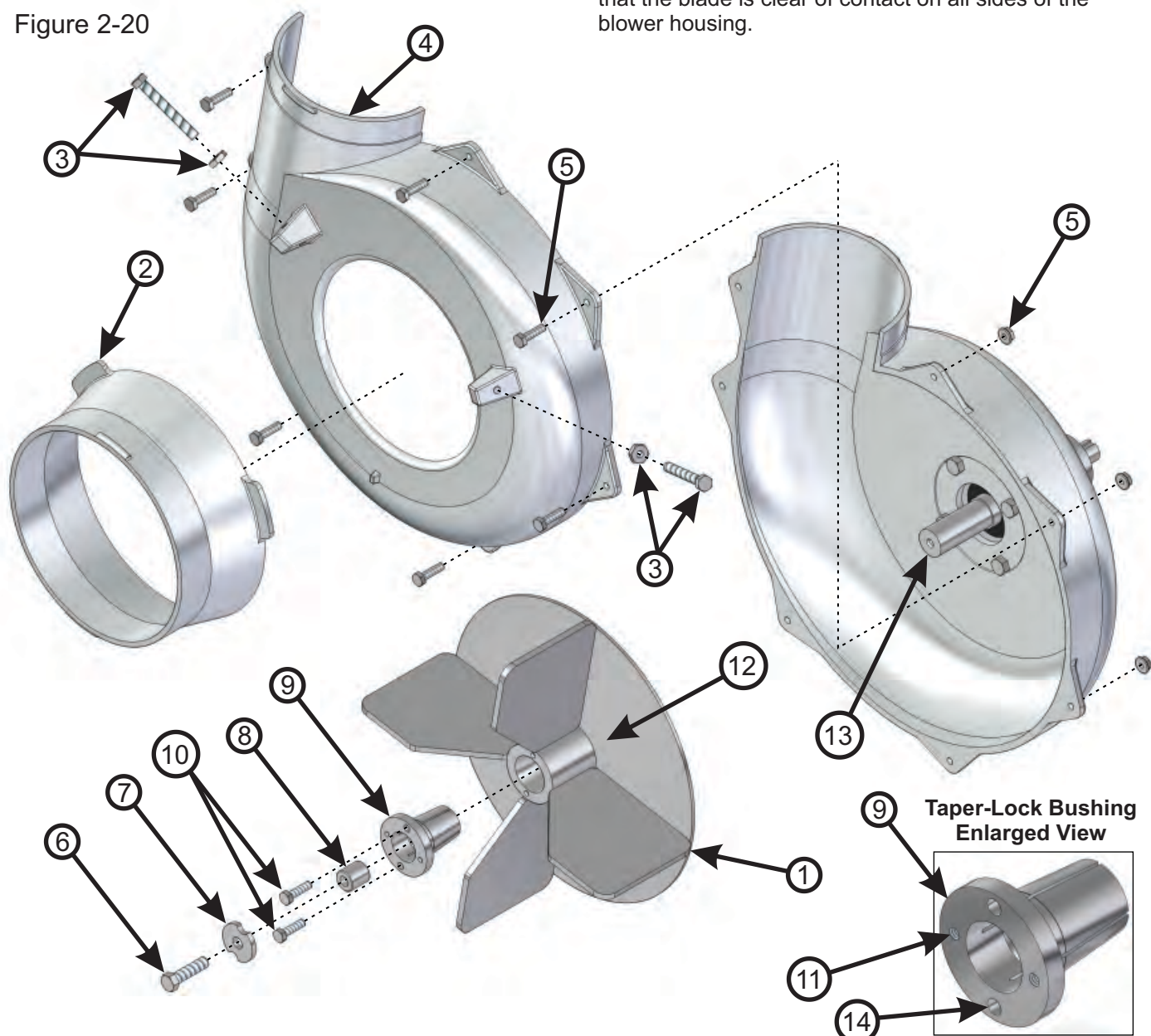
To Remove: First, remove one 3/8"-16 x 1-1/2" HHCS P#(K1211) (#6), one taper-lock bushing washer P#(K0278) (#7) and one spacer bushing P#(S3242) (#8) from the taper-lock bushing (#9). See Figure 2-20. Next, remove two 1/4"-20 x 1" HHCS (#10) and place them into the threaded holes (#11) of the taper-lock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

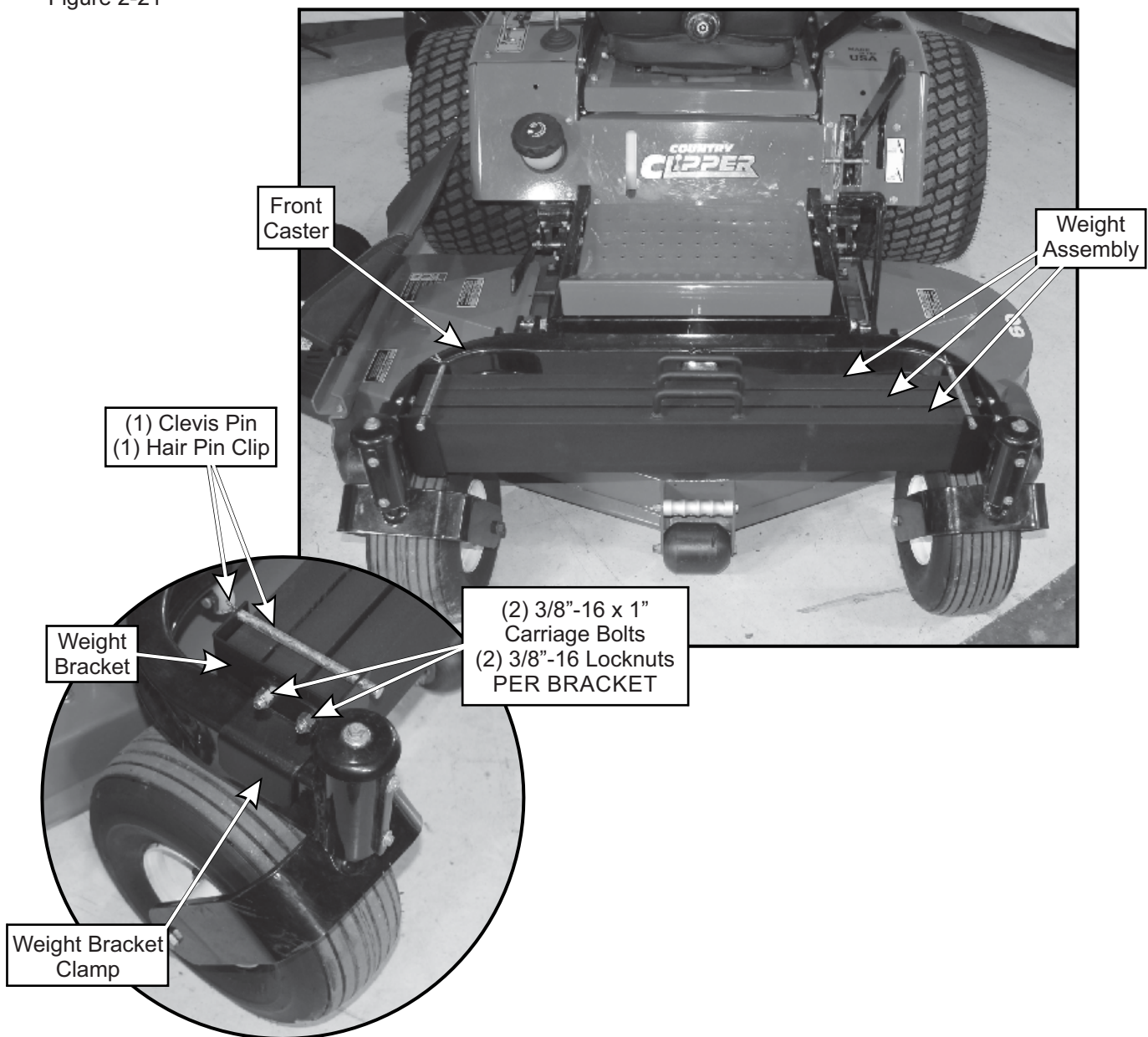
Figure 2-20



2-21 Front Weight Installation

Before installing the weight kit, first remove the front step and hardware (Refer to Step 2-1). Next, fasten (1) weight bracket P#(B0418) and (1) weight bracket clamp P#(B0834) to the the left and right front caster area using (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 nyloc nuts P#(K1216) PER SIDE. Insert carriage bolts with head to the inside of caster area. Tighten bolts until each bracket assembly is held firmly in place. Then, insert (3) weight assemblies P#(A0852) into the weight mount bracket slots. Secure the left and right weight bracket assemblies using (1) 3/8" x 6-1/8" clevis pin P#(K1624) and (1) hair pin clip P#(K0086) PER SIDE. See Figure 2-21 for reference. If difficult to insert weight assemblies, loosen the bracket assemblies to readjust, then tighten fully.

Figure 2-21

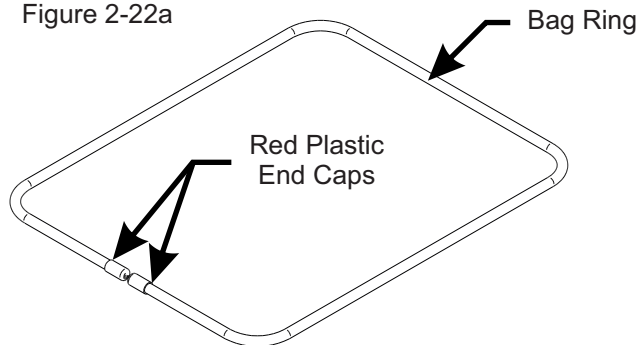


2-23 Installation/Removal Of Collection Bags

IMPORTANT!

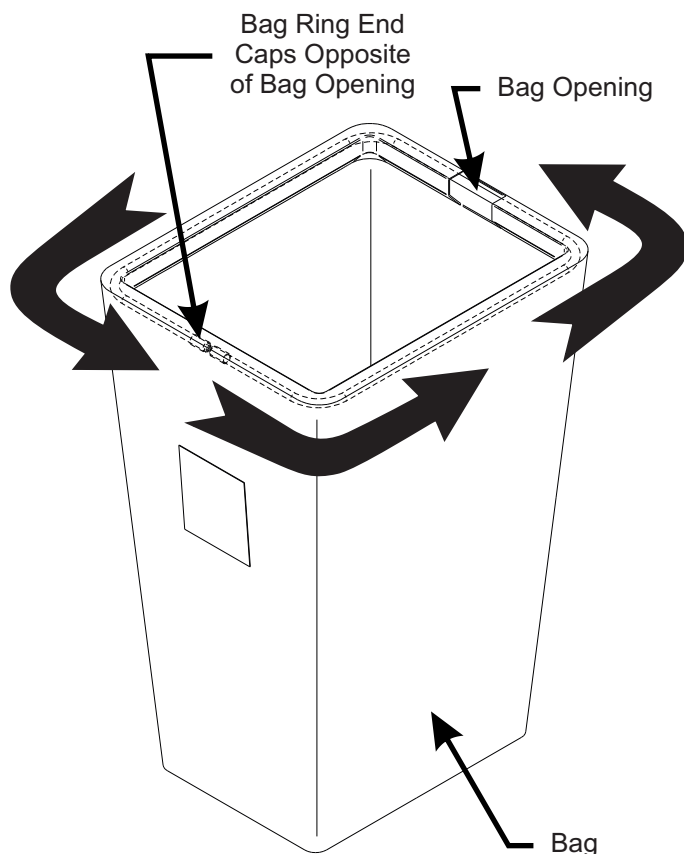
To prevent bag wear, install (2) red plastic end caps P#(J0274), as shown in Figure 2-22a, on each bag ring before installing bags.

Figure 2-22a



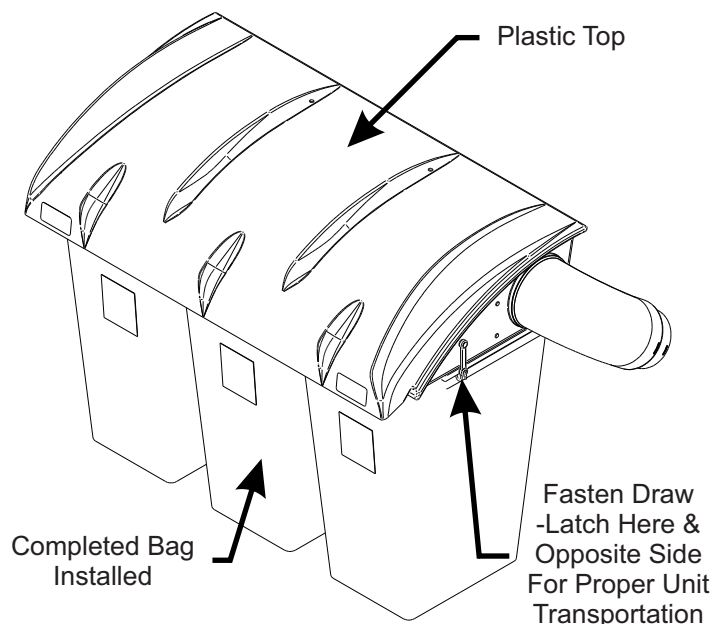
To install the bag onto the bag ring, place the seam openings of the bag onto the bag ring openings and turn the bag one full turn (360°) so the plastic end caps are located opposite to the opening in the bag (Figure 2-22b). Do this for each of three bags.

Figure 2-22b



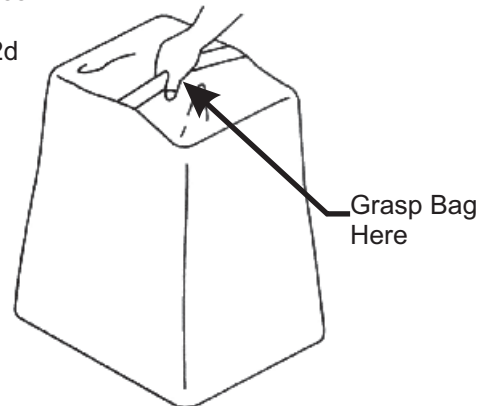
Install the completed assemblies onto the support frame and close the plastic top. Fasten both draw-latches to hold the plastic top closed (Figure 2-22c).

Figure 2-22c



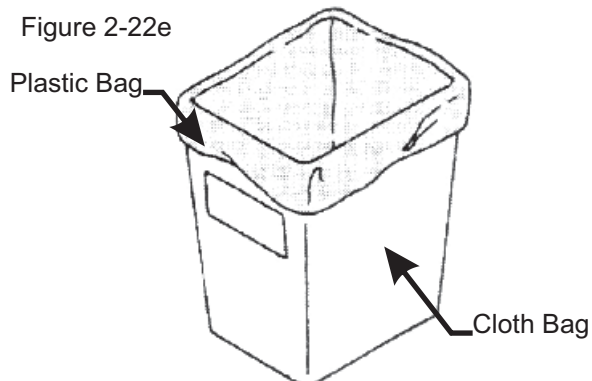
To empty the bag, first unlatch and lift top, next remove the bag and bag ring by sliding rearward, then grasp the loop on the bottom of the bag, and last turn it upside down to empty the collected debris (Figure 2-22d). Repeat for the other bags. Reinstall all bags, line with plastic bags if desired, close the plastic top and reattach the draw latches.


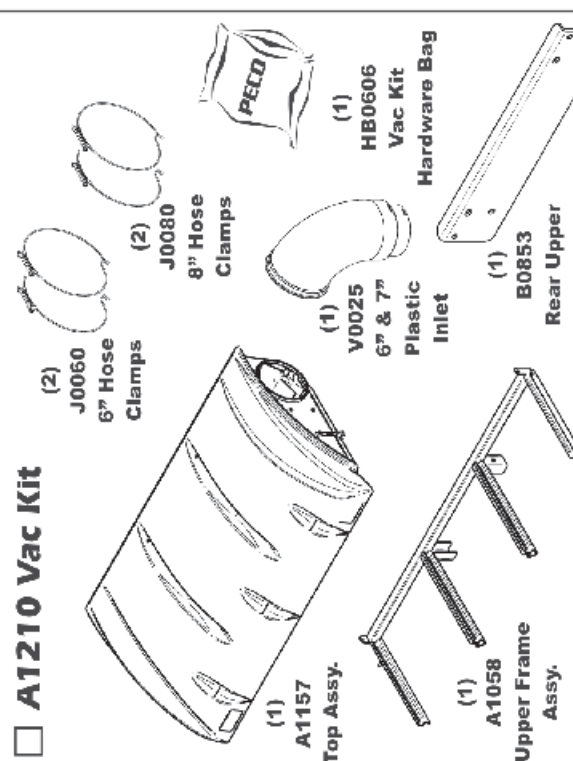
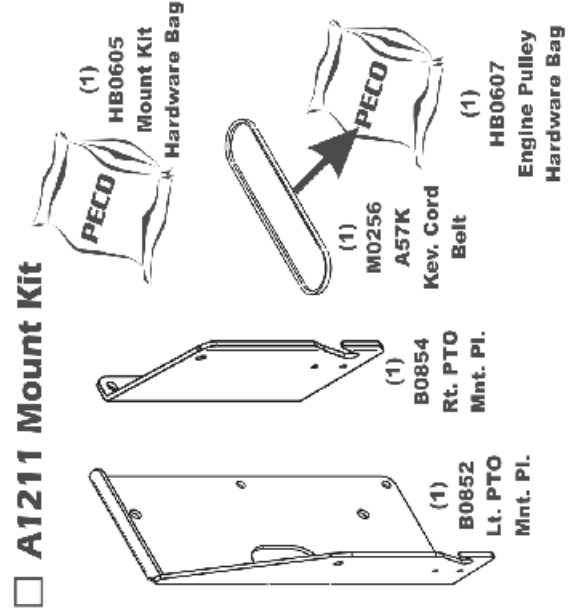
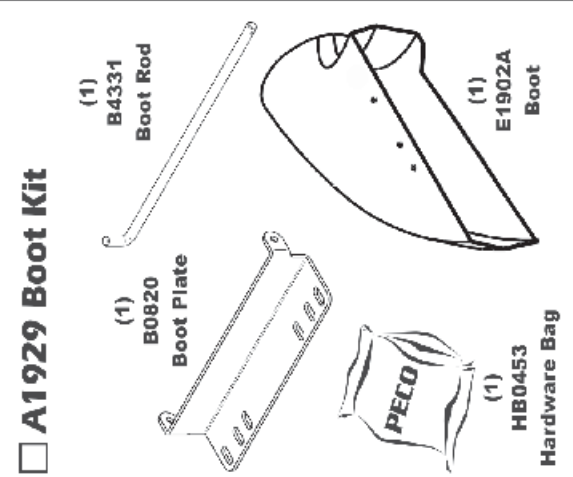
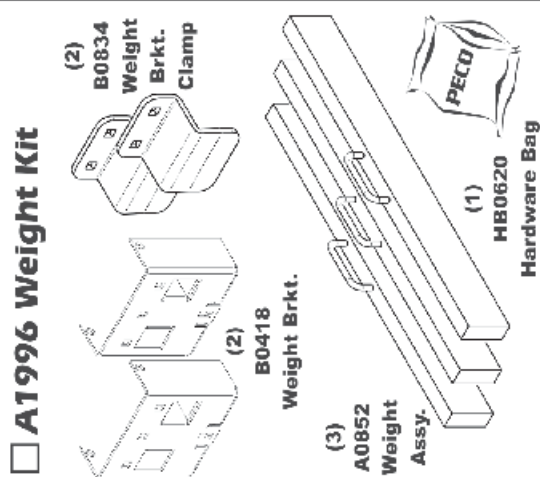
Figure 2-22d



Plastic lawn and leaf bags, 33 gallon size, may be used inside the cloth bags. Be sure to leave enough plastic bag hanging over the frame so the plastic bags can be twist tied before emptying (Figure 2-22e).

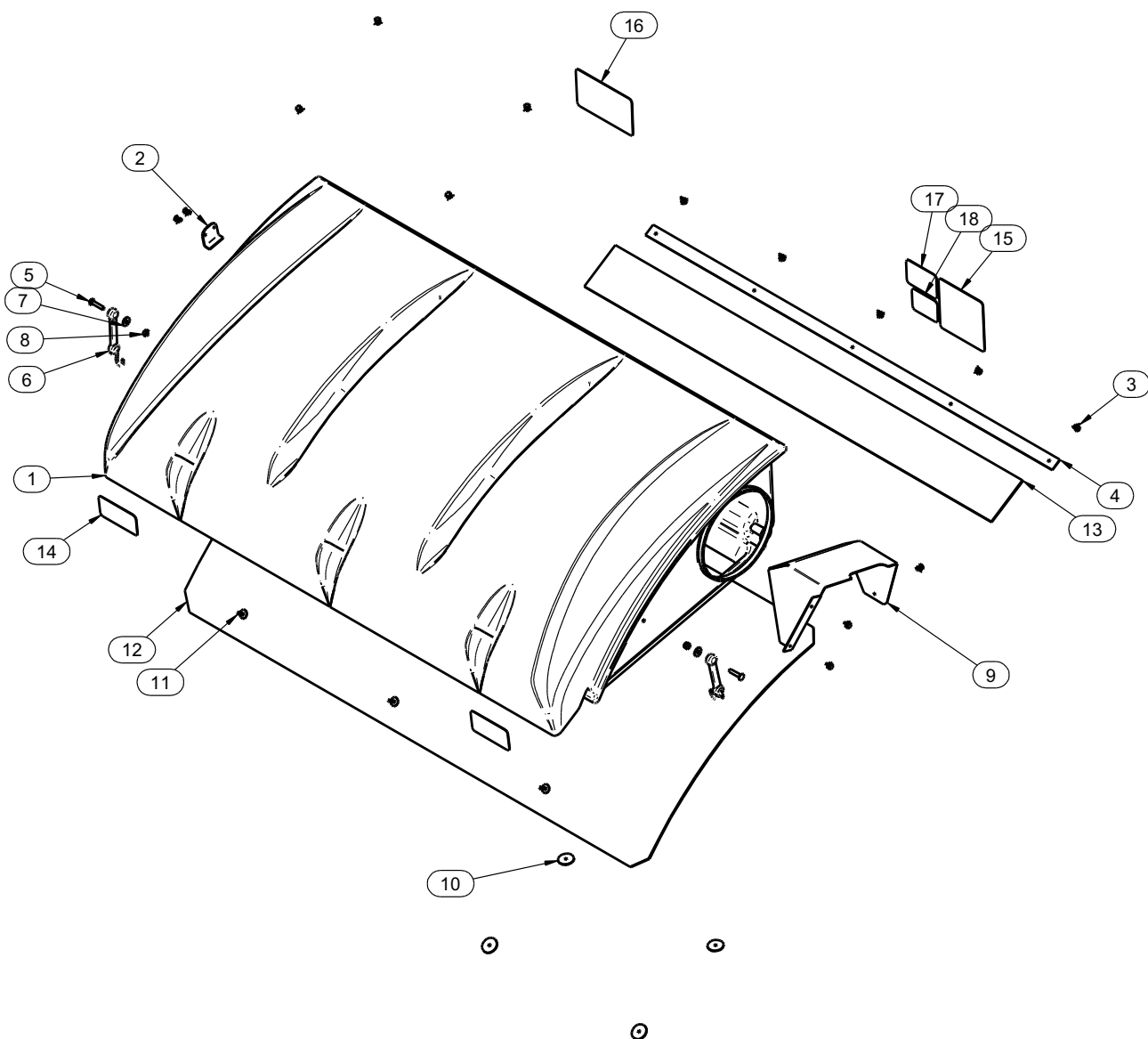
Figure 2-22e



<div data-bbox="89 1501 381 1984">  </div> <div data-bbox="89 109 381 1501"> <p>Unit Model #: 49131502 (629GR-001A)</p> <p>Mower & Type:Country Clipper Boss XL</p> <p>Engine Type:25.5HP Kawasaki FX801V, 35HP Kawasaki FX1000V, 27 & 29HP Kohler Command</p> <p>Deck Size & Type:60"</p> <p>Owner's Manual: Q0478</p> <p>Vac Type:Pro 3 Bagger (15 Cu. Ft.)</p> <p>Drive Type:PTO Driven</p> <p>Fits Year[s]: 2013 - 2017</p> </div>	<p><input type="checkbox"/> A1210 Vac Kit</p>  <p>(1) A1157 Top Assy.</p> <p>(1) A1058 Upper Frame Assy.</p> <p>(3) B0227 Bag Ring</p> <p>(2) J0060 6" Hose Clamps</p> <p>(2) J0080 8" Hose Clamps</p> <p>(1) V0025 6" & 7" Plastic Inlet</p> <p>(1) B0853 Rear Upper Frame Brkt.</p> <p>(1) B0851 Rear Lower Frame Brkt.</p> <p>(1) F0060 6" x 21" Upper Hose</p> <p>(1) F0080 8" x 41" Lower Hose</p> <p>(1) HB0606 Vac Kit Hardware Bag</p>	<p><input type="checkbox"/> A1211 Mount Kit</p>  <p>(1) HB0605 Mount Kit Hardware Bag</p> <p>(1) M0256 A57K Kev. Cord Belt</p> <p>(1) HB0607 Engine Pulley Hardware Bag</p> <p>(1) B0854 Rt. PTO Mnt. Pl.</p> <p>(1) B0852 Lt. PTO Mnt. Pl.</p> <p>(1) B0736 PTO Stop Plate</p> <p>(1) E6009 8" Blower Cone</p> <p>(1) A1950 PTO Assembly</p> <p>(1) A1142 PTO Handle Assy.</p>	<p><input type="checkbox"/> A1929 Boot Kit</p>  <p>(1) B0820 Boot Plate</p> <p>(1) B4331 Boot Rod</p> <p>(1) E1902A Boot</p> <p>(1) HB0453 Hardware Bag</p>	<p><input type="checkbox"/> A1996 Weight Kit</p>  <p>(2) B0834 Weight Brkt. Clamp</p> <p>(2) B0418 Weight Brkt.</p> <p>(3) A0852 Weight Assy.</p> <p>(1) HB0620 Hardware Bag</p>
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Exploded Parts View

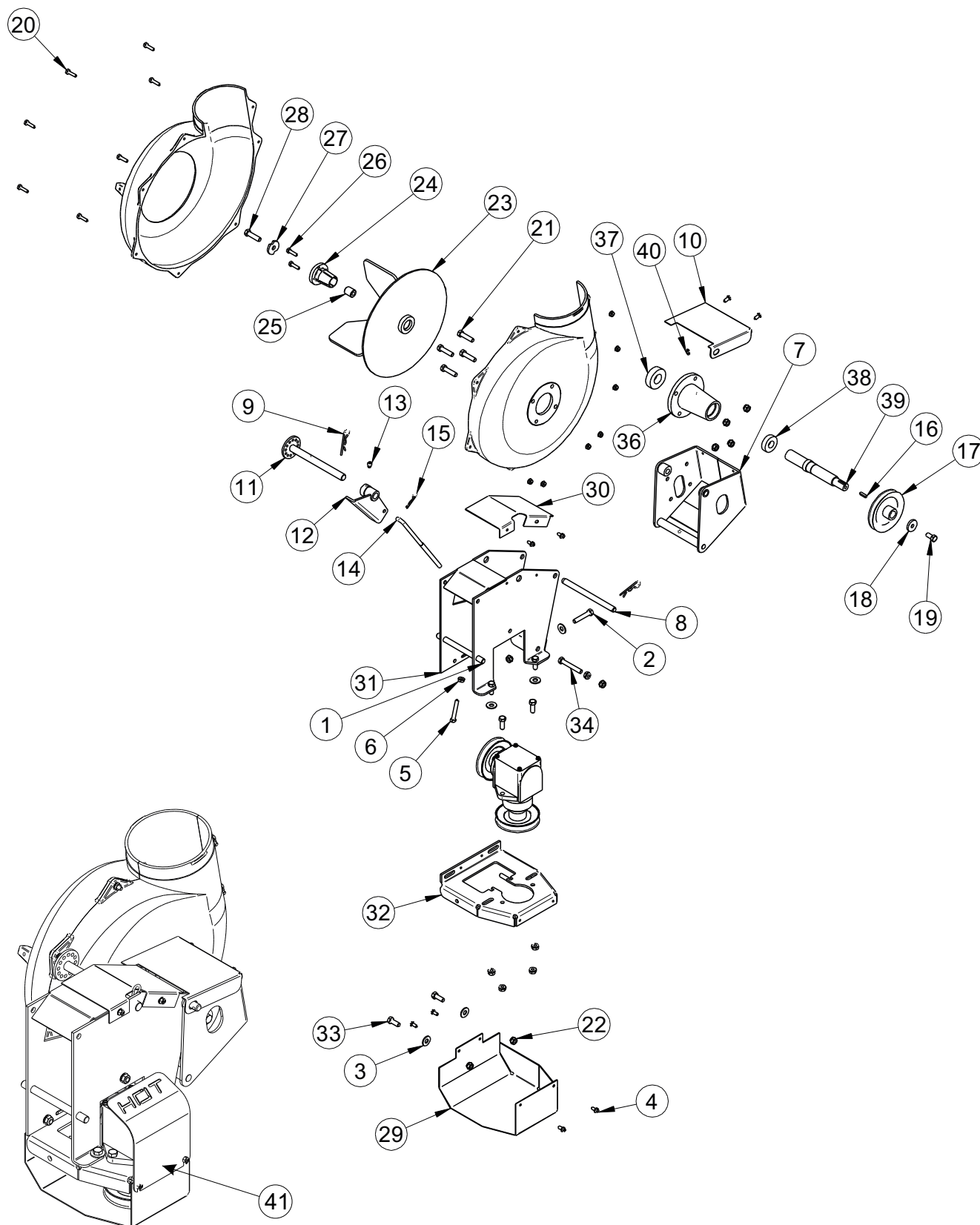
A1190 Top Assembly



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

Exploded Parts View

A1950 PTO Assembly



PTO Parts List

A1950 PTO Assembly

Item Number	Document Number	Title	Quantity
1	A0429	GEAR BOX ASSEMBLY	1
2	K0348	3/8"-16 x 2" ALL THREAD HHCS	1
3	K0047	3/8" FLAT WASHER 1.00 OD x .446 ID x .075 T	5
4	K0353	1/4"-20 x 1/2" HHSTS	8
5	K1159	5/16"-18 x 2" ALL THREAD HHCS	1
6	K1178	5/16"-18 FLANGE NUT	1
7	A0144	BLOWER MOUNT BRACKET ASSEMBLY	1
8	B1755	BLOWER PIVOT ROD	1
9	K0086	.125 OD x 2.50 HAIR PIN CLIP	2
10	B0121	BLOWER BELT GUARD	1
11	A0604	PTO HANDLE MOUNT ASSY	1
12	A0422	CAM BRACKET ASSEMBLY	1
13	K0356	3/8"-16 TAPERED SET SCREW	1
14	K0326	BELT TENSION ROD 3/8"-16	1
15	K0130	.091 OD x 1.625 L HAIR PIN CLIP	1
16	J0254	3/16" SQ. x 3/4" LONG KEYWAY	1
17	M0228	BLOWER PULLEY	1
18	K1446	1.187 OD x .380 ID x .187 WASHER	1
19	K1190	3/8"-16 x 3/4" HHCS	1
20	E4004A	BLOWER HSG. ASSY.	1
21	K1193	3/8"-16 x 1-1/2" HHCS	4
22	K1215	3/8"-16 FLANGE NUT	12
23	A0645	SMALL 4-BLADE IMPELLER	1
24	S4302	TAPER-LOCK BUSHING	1
25	S3242	PLATED BUSHING	1
26	K1225	1/4"-20 X 1" HHCS GRADE 8	2
27	K0278	TAPER-LOCK BUSHING WASHER	1
28	K1211	3/8"-16 x 1-1/2" HHCS GRADE 8	1
29	B0269	GEAR BOX PULLEY GUARD	1
30	B0270	PTO ARM GUARD	1
31	A0622	PTO ARM ASSY.	1
32	A0624	BASE PLATE ASSY.	1
33	K1191	3/8"-16 x 1" HHCS	6
34	K1197	3/8"-16 X 2 1/2" HHCS	1
35*	M0250	A30K KEVLAR BELT	1
36	E0121	PTO SHAFT HOUSING	1
37	N0147	BEARING 2.0472 OD, 0.9843 ID, 0.5906 W (6205RS PEER)	1
38	N0148	BEARING 1.625 OD, 0.75 ID, 0.4375 W (9R12 PEER)	1
39	B1758	PTO SHAFT	1
40	J0801	1/4"-28 ZIRC FITTING	1
41	B0833	GEAR BOX HEAT GUARD	1

SECTION III - P3B

OPERATING INSTRUCTIONS

3-1 General Safety

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

3-2 Operation And Tips On Mowing

- A. Perform BEFORE EACH USE the maintenance list in paragraph 4-1.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. While seated in the operator's seat, rotate the engagement handle of the collection system away from the mower. Continue to rotate the handle until it stops in an over center position. With the 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. Proceed to section 3-3, and review the sections regarding PTO assembly Installation and belt installation/removal and adjustment. 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 5 mph, but thick, heavy damp conditions will require reduced ground speed.
- * Mow with sharp blades- A sharp blade cuts cleaner.
- * Wet grass and leaves will decrease effectiveness and will increase horsepower requirements.
- * Mow at higher cutting heights- Remove and mulch no more than 2" of grass length with each mowing. (Experts recommend not cutting off more than 1/3 of the grass blade length at any given time.)
- * Mow twice, at different height settings, (high, then low), if grass is extra tall.
- * Remember that horsepower requirements will vary with the mowing conditions such as type and height of turf grass, moisture content, amount of leaves, whether the terrain is flat or hilly, etc.

3-3 Disengagement Of The PTO Assy.

- 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 adjustment section of the manual.

3-4 Unloading The Collection System

NOTE: To determine when the collection bags are full, follow the following steps:

- A. Stop the forward movement of the mower.
- B. Disengage the mower deck.
- C. Disengage the blower.
- 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 I - MAINTENANCE

4-1 Maintenance Checklist

NOTE: REMOVE PTO ASSEMBLY BEFORE RAISING DECK FOR MAINTENANCE.

Before each use:

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

3. Make sure all shields are in place and in good condition. Repair or replace any missing or damaged shields.
4. Perform lubrication per paragraph 4-2.
5. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
6. 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:

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

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

Blower Assembly:

NOTE: The following is for older PTO models that contain a greaseable 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 Country Clipper 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: _____

Country Clipper Division of Shivers Mfg. Inc

613 W. English | Corydon, IA | 50060

Phone: 1-800-344-8237 | 641-872-2544

Fax: 641-872-1593

E-Mail: countryclipper@countryclipper.com

SAFETY DECALS

To promote safe operation, Country Clipper 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 #: R4037
Warning: Hot Surface Label



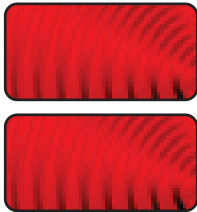
Part #: R2008
Rotating Blades Label



Part #: R1051
Warning: Hearing Protection Label



Part #: R2007
Never Use Hands Label



Part #: R1057 - (2)



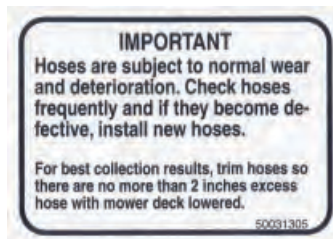
Part #: R1065
Made In America Label



Part #: R1069
Warning: Turn Off Blower Label



Part #: R1100
Engage-Disengage Label



Part #: R1054
Important Label



Part #: R4015
Danger: Rotating Blades Label



Part #: R4008
Caution: Rotating Blades Label



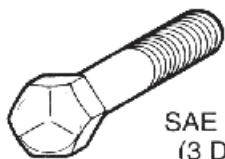
Part #: R1052
Small Warning: Turn Off Blower Label

TORQUE SPECIFICATIONS

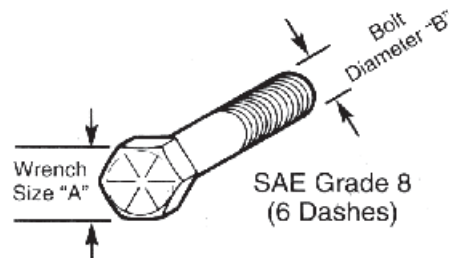
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



SAE Grade 5
(3 Dashes)

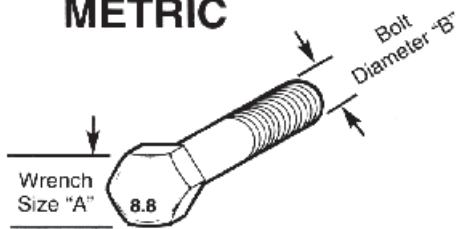


SAE Grade 8
(6 Dashes)

Recommended Torque in Foot Pounds (Newton Meters).*

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

METRIC



Numbers appearing on bolt heads indicate ASTM class.

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.

Notes



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