

PROFESSIONAL BAGGING SYSTEM

MODEL# CBS2 (49131501)

COUNTRY
CLIPPER
ZERO TURN MOWER

Designed To Fit Charger & Challenger Series Mowers



OPERATOR'S MANUAL

ASSEMBLY ● OPERATION ● MAINTENANCE

MANUAL#: Q0469 v5.0 - 6/12/2018

PART# 629GZ-001A

PROFESSIONAL BAGGING SYSTEM

TABLE OF CONTENTS

SECTION	PAGE	SECTION	PAGE
Safety	2	2-14 Boot Plate Installation	14
Safety Alert Symbols	3	2-15 Boot To Mower Deck Installation	14
Warranty	4	2-16 Length Of Hose Adjustment	15
I INTRODUCTION AND DESCRIPTION	5	2-17 Upper Hose Installation	15
1-1 Introduction	5	2-18 Lower Hose To Blower Cone Installation	15
1-2 Description	5	2-19 Lower Hose To Boot Installation	15
II INSTALLATION FOR USE	5	2-20 Impeller Blade Removal/Installation	16
2-1 Preparation Of Mower	5	2-21 Weight Kit Installation	17
2-2 Right Frame Mount Plate and Rear Mount Plate Installation	6	2-22 Installation and Removal Of Collection Bags	18
2-3 Rear Mount Support Bracket Installation	7	Exploded Part Views and Assemblies	19-24
2-4 PTO Mount Plate Assembly Installation and Exhaust Diverter Installation	8	III OPERATING INSTRUCTIONS	25
2-5 PTO Assembly Installation	9	3-1 General Safety	25
2-6 PTO Handle Installation	9	3-2 Operation & Tips On Mowing	25
2-7 Belt Installation/Removal and Adjustment	9	3-3 Disengagement Of The PTO Assy.	25
2-8 Cam Assembly Adjustment	10	3-4 Unloading The Collection System	25
2-9 Blower Cone Installation	10	IV MAINTENANCE	25
2-10 Lower Mount Tube Installation	11	4-1 Maintenance Checklist	25
2-11 Upper Frame Assembly Installation	12	4-2 Lubrication	26
2-12 Top Assembly To Upper Frame Assembly Installation	12	V PARTS AND SERVICE	26
2-13 Hinge Kit Assembly Installation	13	5-1 Parts And Service Information	26
		Safety Decals	27
		Torque Specifications	28
		Troubleshooting	29

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 warrantied 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

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.

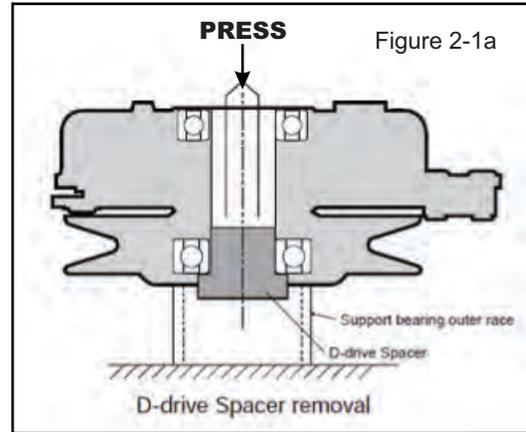
1-2 Description

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.

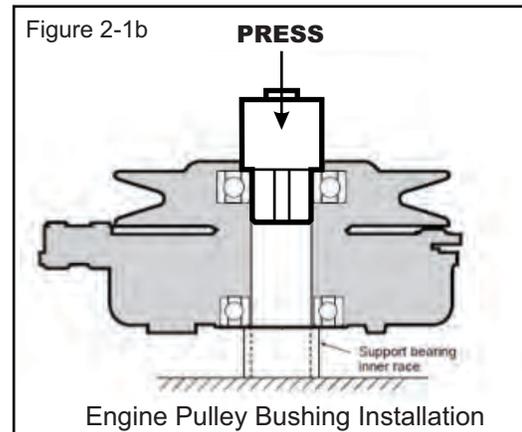
Section II - Installation For Use

2-1 Preparation Of Mower

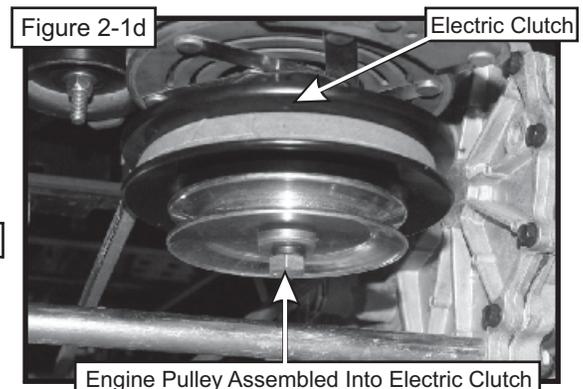
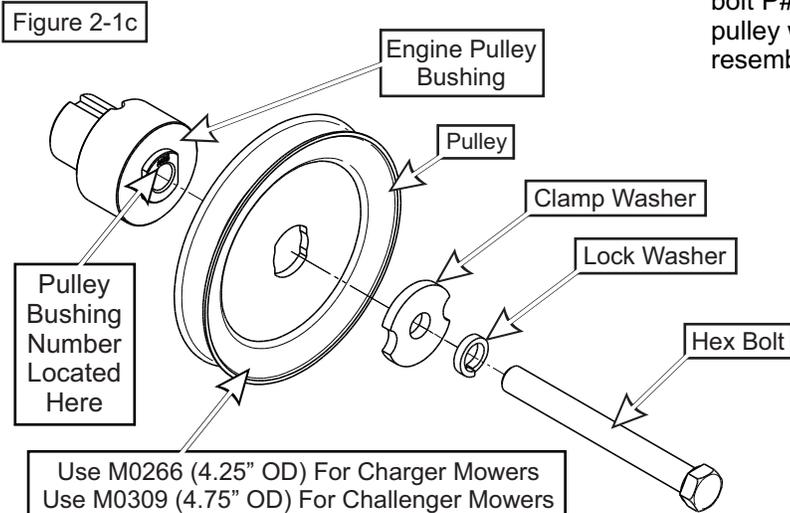
Remove deck drive belt from the clutch pulley (refer to your Country Clipper operator's manual). From the underside of the engine, disconnect the wiring harness attached to the electric clutch. Remove the bolt and electric clutch from the mower. Next, remove the D-drive spacer using an arbor press or equivalent. On removal, adjacent bearing OUTER race must be supported or bearing damage may occur. Refer to Figure 2-1a.



The engine pulley bushing 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 2-1b.



Once the Engine Pulley Bushing P#(S0191) 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" lock washer P#(K0140), and 7/16"-20 x 3-1/2" hex bolt P#(K0550). Torque the bolt to 55 ft./lbs. The added pulley will power the collection system and should resemble Figure 2-1d when installed.



NOTE: The 2013 Charger Series will require an after-market auxiliary cooling kit. Contact your Country Clipper dealer for purchasing information for this auxiliary cooling kit (Part Number 629GE-001A).

2-2 Right Frame Mount Bracket and Rear Mount Plate Installation

Remove rear engine guard and hardware. Secure the right frame bracket P#(B0810) to the rear frame of the mower using (1) 1/2"-13 x 2" P#(K1234) HHCS, (1) 1/2"-13 x 1" HHCS P#(K1231) and (2) 1/2"-13 nylon flange locknut P#(K2012). Secure the rear mount plate to the right frame bracket and rear frame of the mower using (4) 3/8"-16 x 1" HHCS and P#(K1191) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-2a.

Use Figure 2-2b for mounting hole locations specific to your engine model.

Figure 2-2a

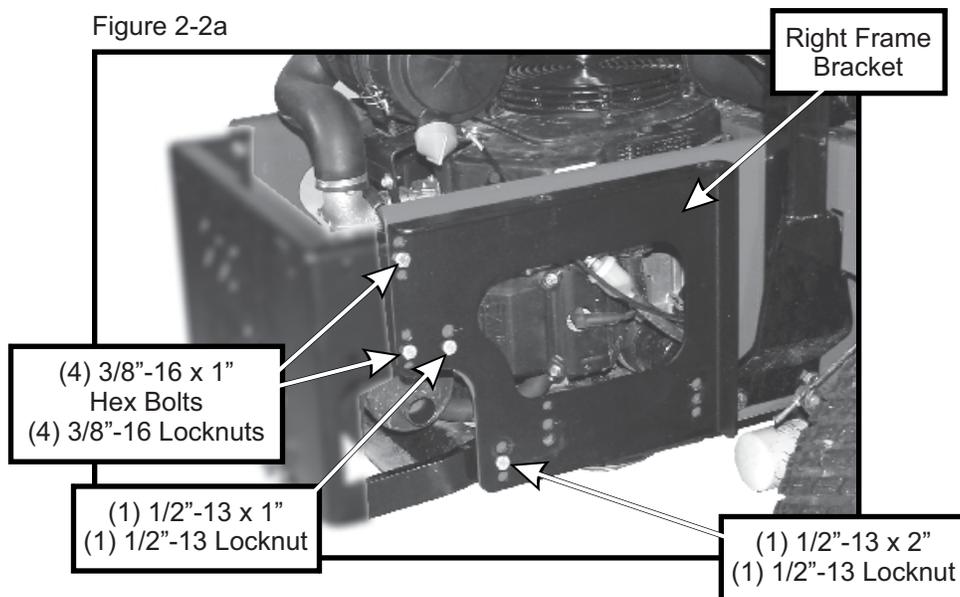
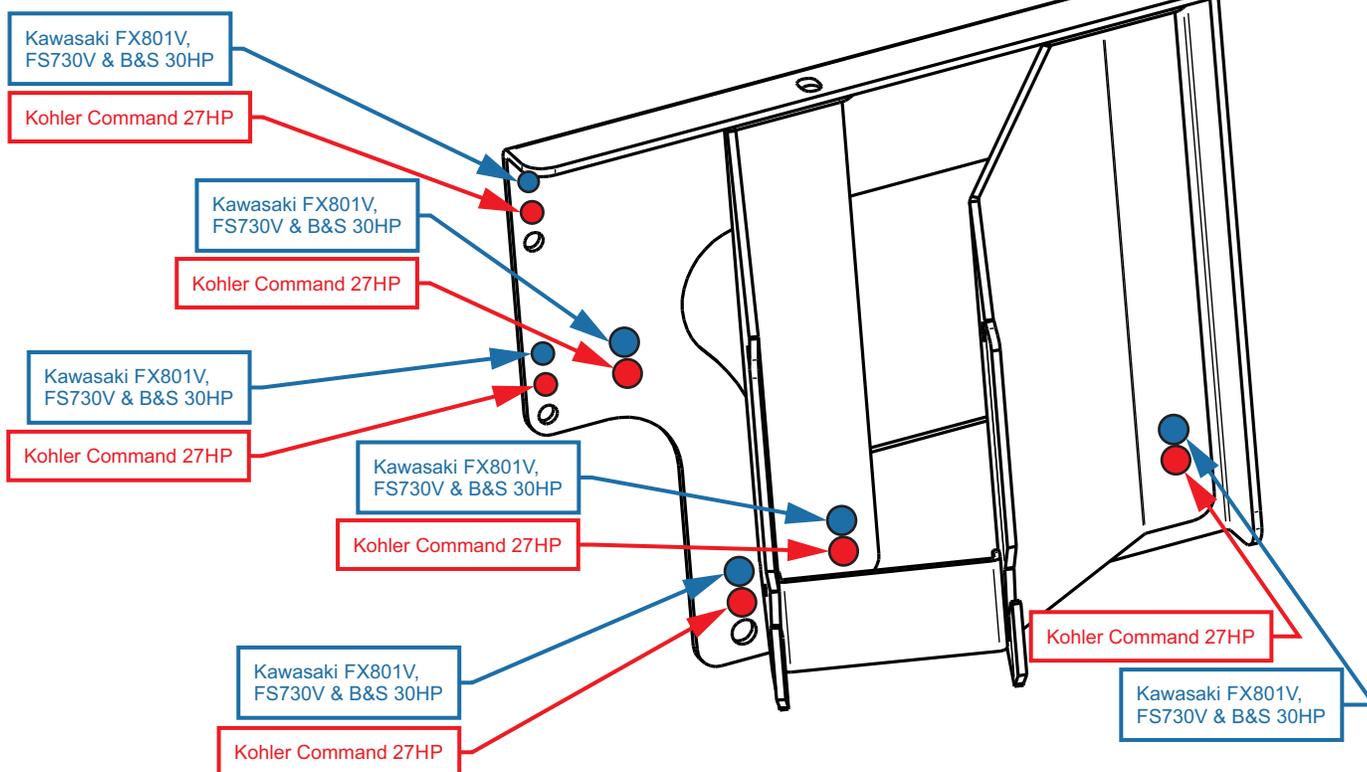


Figure 2-2b



2-3 Rear Mount Support Bracket Installation

Secure the rear mount support bracket P#(B0816) to the rear mount plate and bumper guard, using the (2) existing 1/2" -13 hex bolts and nuts and (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 locknuts P#(K2038). The rear mount support bracket should be installed to the inside of the bumper guard and rear frame bracket. Refer to Figure 2-3a and 2-3b.

Figure 2-3a

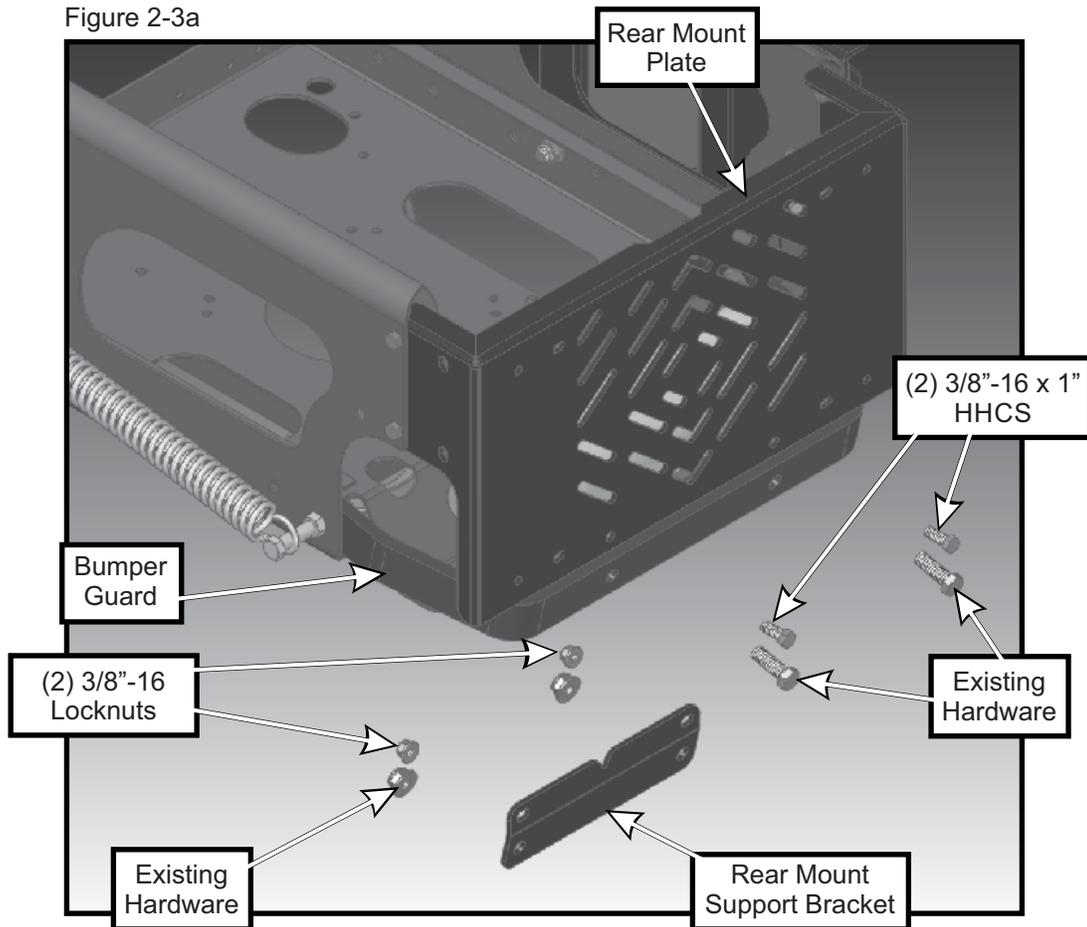
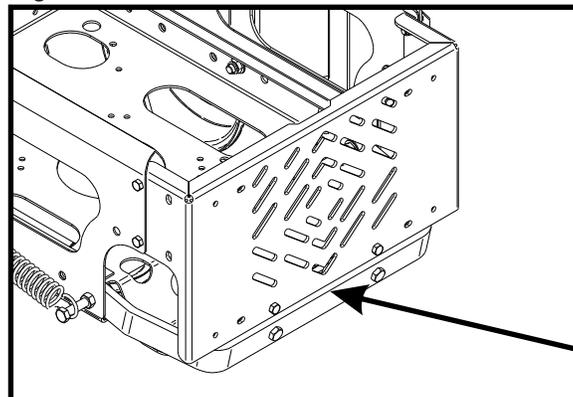


Figure 2-3b

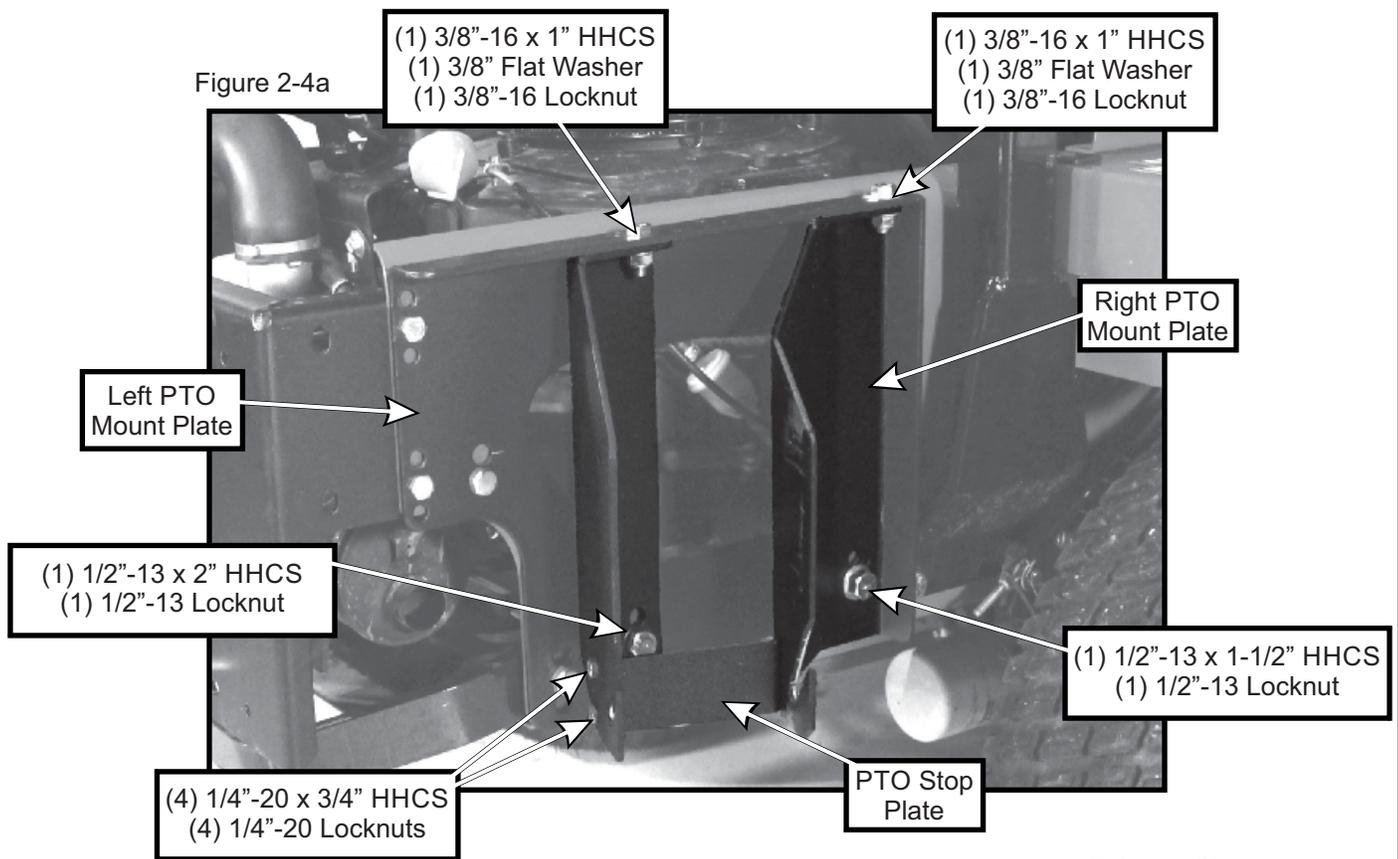


Rear Mount Support Bracket Mounts to Inside of Rear Mount Plate and Bumper Guard

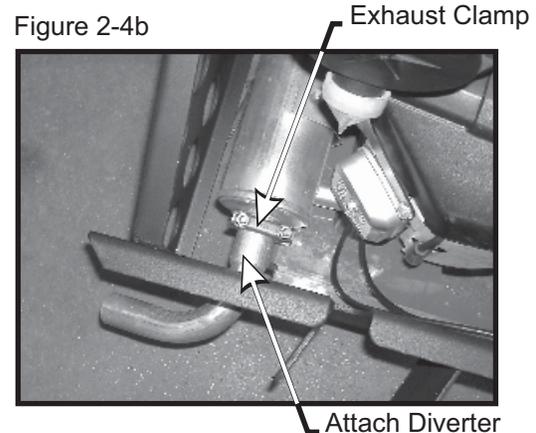
2-4 PTO Mount Plate Assembly Installation and Exhaust Diverter Installation

Secure the left PTO mount plate P#(B0813) to the right frame bracket using (1) 3/8"-16 x 1" HHCS P#(K1191), (1) 3/8" flat washer P#(K0047) and (1) 3/8"-16 nylon flange locknut P#(K2038). Secure the bottom section of the mount plate to the right frame bracket using (1) 1/2"-13 x 2" HHCS and P#(K1234) and (1) 1/2"-13 nylon flange locknut P#(K2012). Refer to Figure 2-4a for reference. Leave the hardware finger tight until the PTO stop plate has been installed.

Secure the right PTO mount plate P#(B0814) to the right frame bracket using (1) 3/8"-16 x 1" HHCS P#(K1191), (1) 3/8" flat washer P#(K0047) and (1) 3/8"-16 nylon flange locknut P#(K2038). Secure the bottom section of the mount plate to the right frame bracket using (1) 1/2"-13 x 1-1/2" HHCS P#(K1233) and 1/2"-13 locknut P#(K2012). Refer to Figure 2-4 for reference. Leave the hardware finger tight until the PTO stop plate has been installed. Secure the PTO stop plate P#(B0733) to the left and right PTO mount plates using (4) 1/4"-20 x 3/4" HHCS P#(K1222) and (4) 1/4"-20 nylon flange locknuts P#(K2014). Tighten all hardware at this time. Refer to Figure 2-4a.



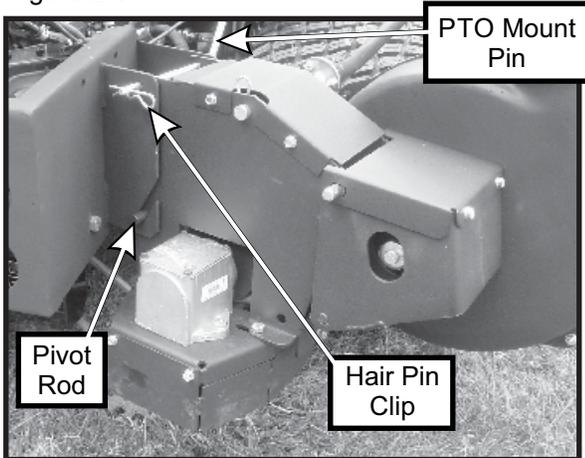
For engine models that divert exhaust to the right side, attach the exhaust diverter P#(J0292) to the muffler as shown in Figure 2-4b. Fasten the deflector using the exhaust clamp P#(X1064). Angle the diverter so that the exhaust does not burn the cloth bags.



2-5 Universal PTO Installation

To mount the PTO assembly, insert the pivot rod on the PTO assembly P#(A1623) into the mounting slots located on the left & right PTO mount plates. 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 2-5.

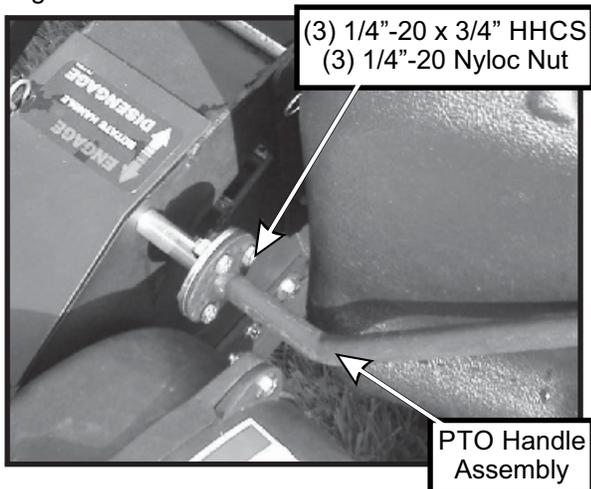
Figure 2-5



2-6 PTO Handle Assembly Installation

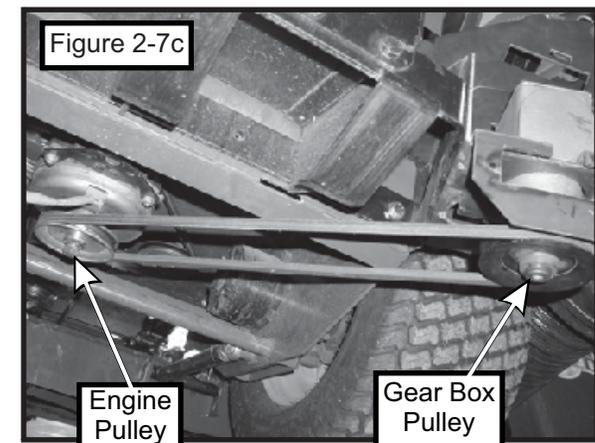
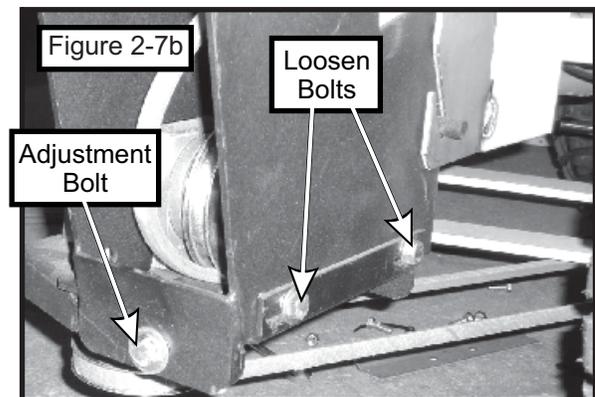
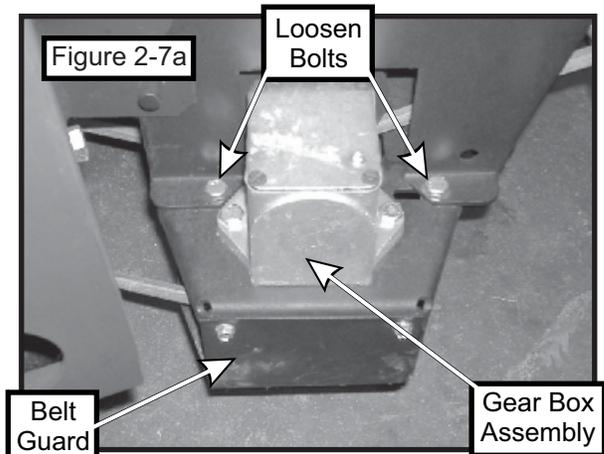
Mount the PTO handle assembly P#(A1142) to the universal PTO P#(A1623) using (3) 1/4"-20 x 3/4" HHCS P#(K1222) and (3) 1/4"-20 nyloc nuts P#(K1128). Before fastening, make sure that there is room for the handle to engage and disengage without the handle hitting the mower's fuel tank. Attach the handle grip P#(J0522) to the PTO handle assembly. See Figure 2-6 for reference.

Figure 2-6



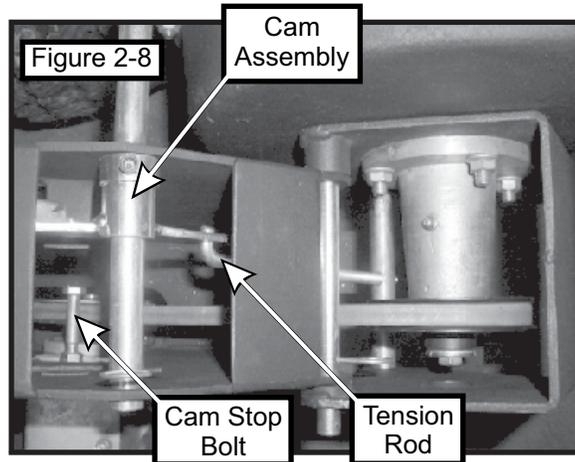
2-7 Belt Installation

Remove the belt guard. Loosen the (4) bolts P#(K1191), (2) on each side, that secure the gear box assembly to the PTO assembly P#(A1623) (Figure 2-7a and 2-7b). 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). Connect the kevlar cord belt (A54K P#(M0255) for Charger Mowers) or (A55K P#(M0248) for Challenger Mowers) from the engine pulley to the lower gear box pulley (Figure 2-7c). To tension the drive belt, turn the adjustment bolt clockwise 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. Once the correct tension of the belt is achieved, tighten the (4) bolts that secure the gear box assembly. Replace the belt guard.



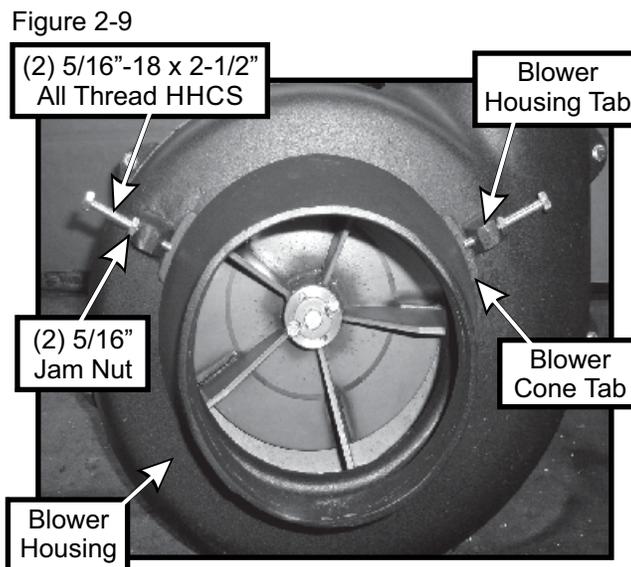
2-8 Cam Assembly Adjustment

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 2-8).



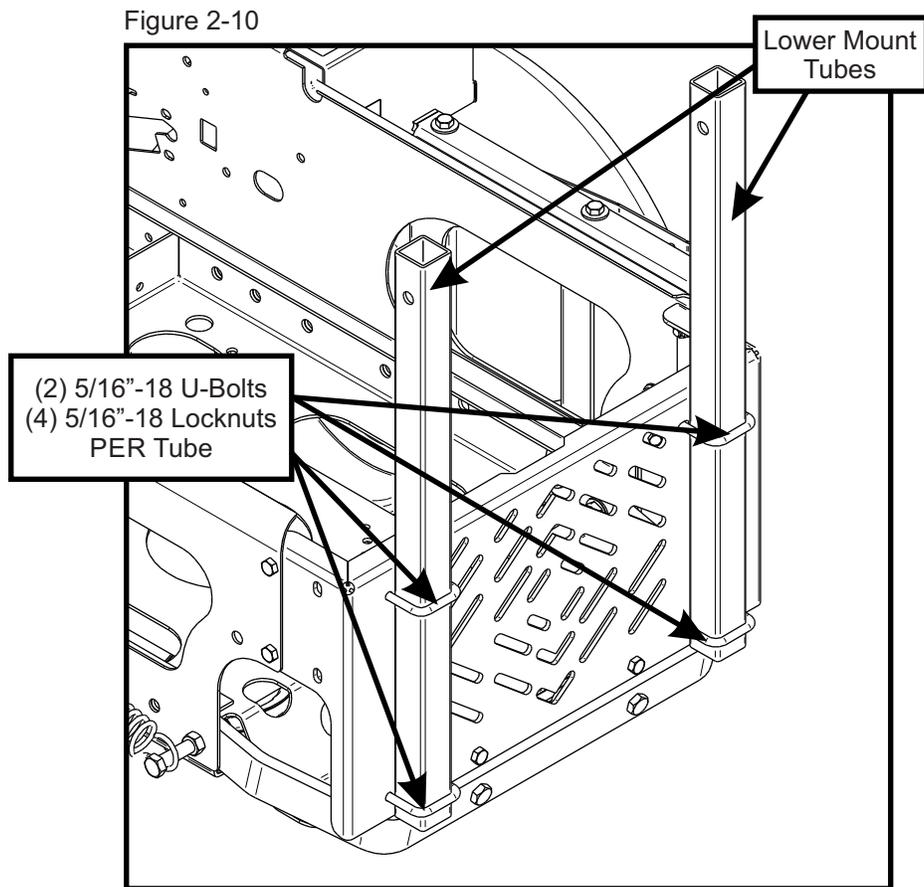
2-9 Blower Cone Installation

Thread (1) 5/16"-18 jam nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125). Now partially thread the bolts into each of the two tabs located on the blower housing. Place blower cone so the two tabs line up with the bolts then tighten completely. Refer to Figure 2-9 for reference.



2-10 Lower Mount Tube Installation

Secure the lower mount tubes P#(B0752) to the rear mount bracket 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 top edge of the bumper guard before the hardware is tightened. Refer to Figure 2-10.



2-11 Upper Frame Assembly Installation

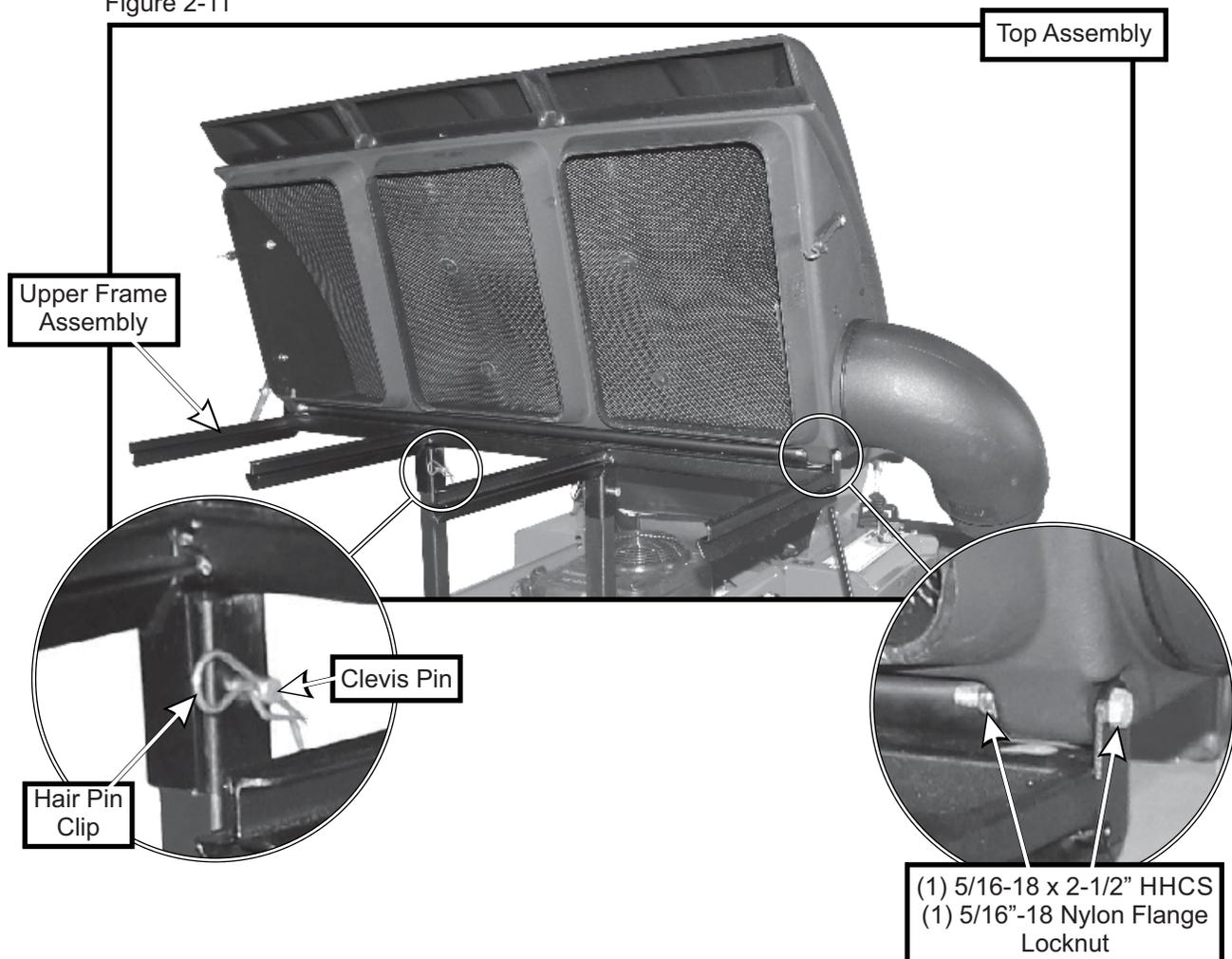
NOTE: During this step, it is suggested that two people install the upper frame to the lower mount tube.

Lift the upper frame assembly P#(A1058) above the lower mount assembly and lower the top assembly onto the two vertical tubes. Secure the top assembly to the lower mount assembly using (2) clevis pins P#(K0133) and (2) hair pin clips P#(K0088). Refer to Figure 2-11.

2-12 Top Assembly To Upper Frame Assembly Installation

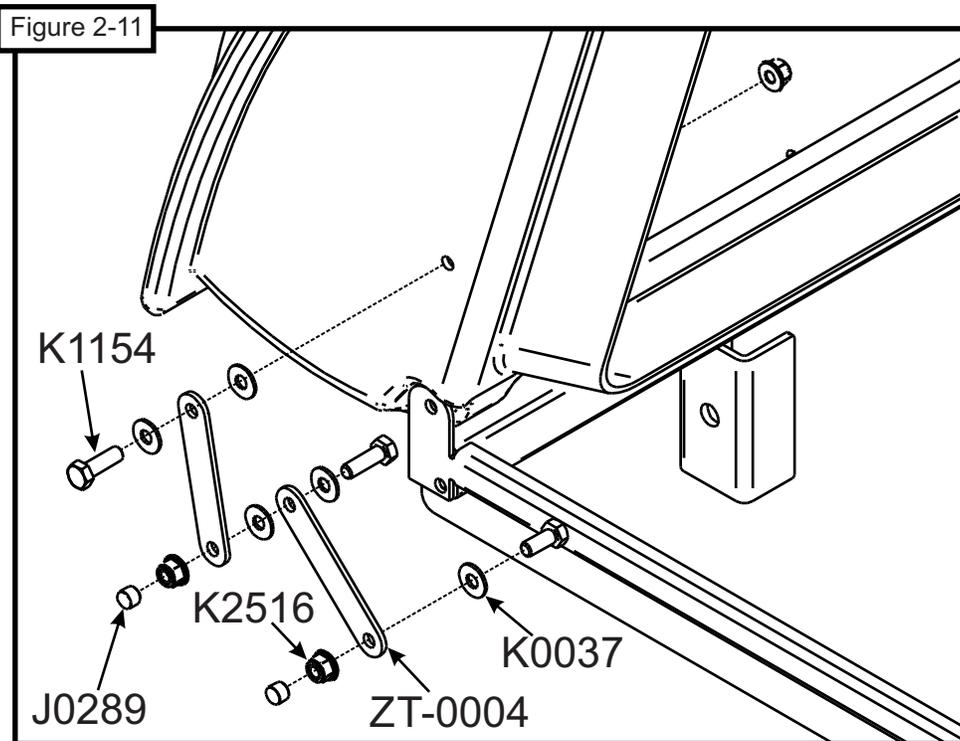
Position the top assembly P#(A1190) above the upper frame assembly as shown in Figure 2-11. Fasten the top assembly to the upper frame assembly using (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) and (2) 5/16"-18 nylon flange locknuts P#(K2516). Leave the locknuts slightly loose, to allow the top assembly to open and close easily.

Figure 2-11



2-13 Hinge Kit Assembly Installation

Assemble the hinge kit as shown in Figure 2-13, 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 2-13. 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.



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 Challenger Mowers or 2-14c for Charger Mowers.

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 2-14a. Secure the boot rod using (1) hair pin clip P#(K0099). With the carriage bolts from Section 2-14 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

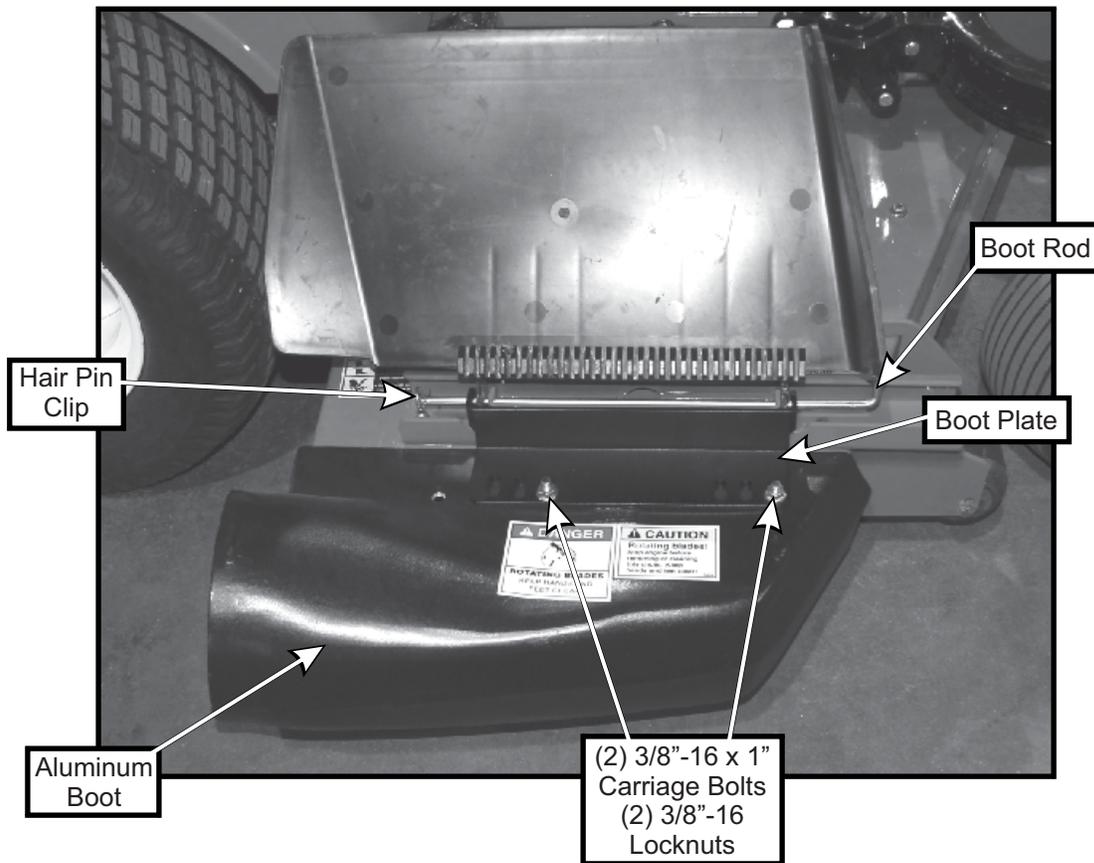


Figure 2-14b

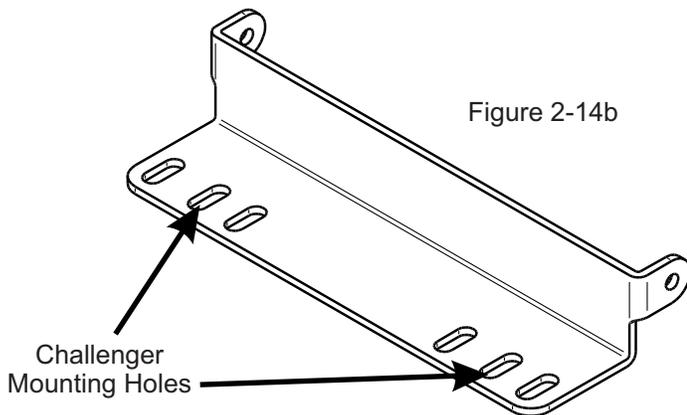
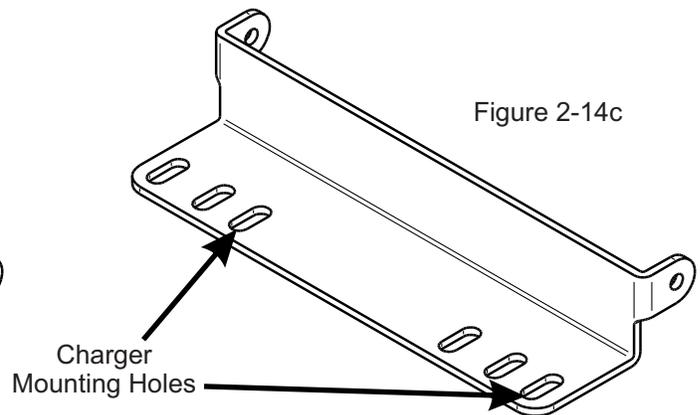


Figure 2-14c



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 have to be long enough to adjust for the blower assembly's movement as well as allow for enough clamping surface between the inlet, blower assembly, and the deck boot.

2-17 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 2-19). 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 2-19) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

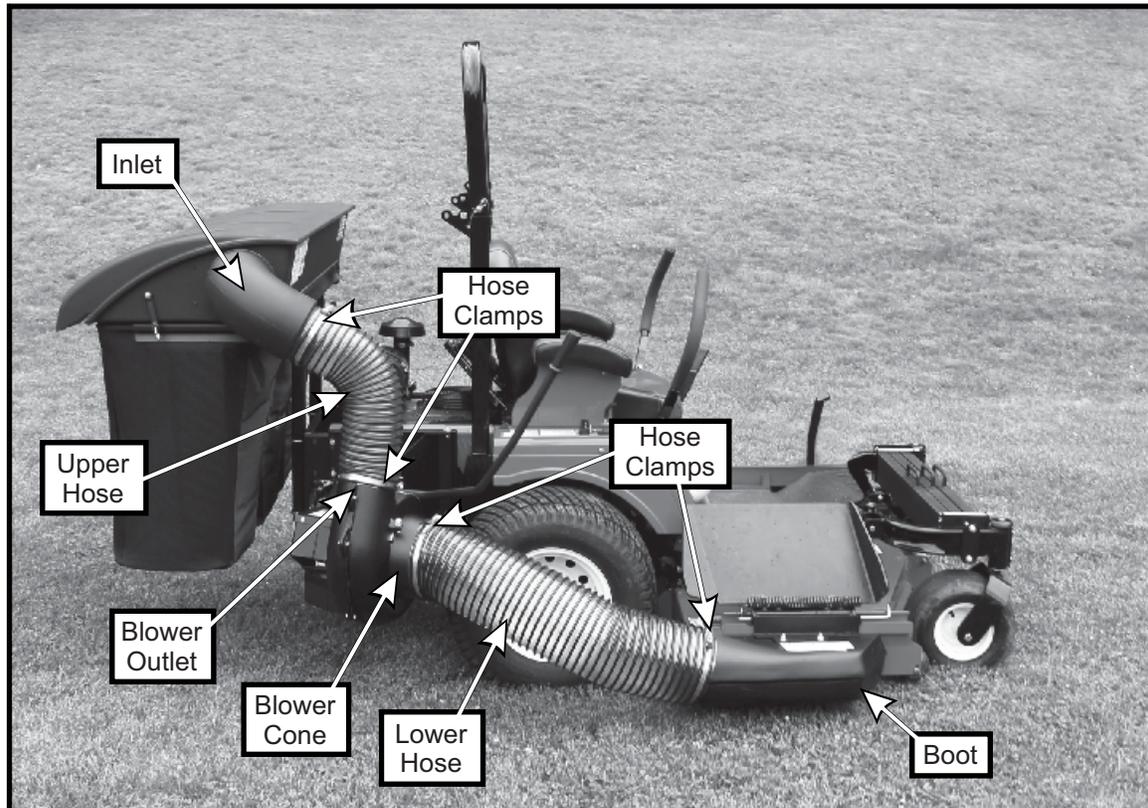
2-18 Lower Hose To Blower Cone Installation

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.

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 2-20.

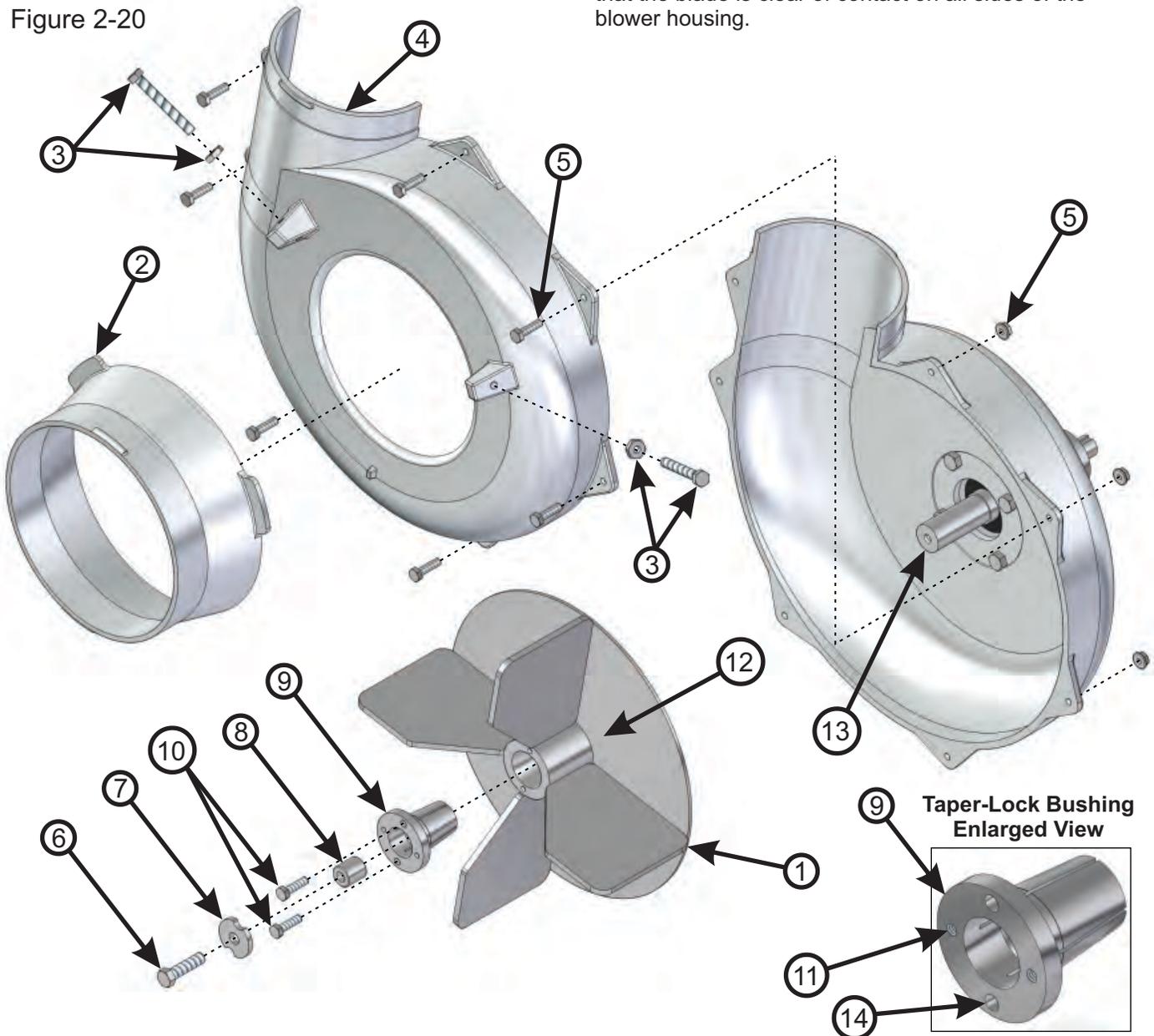
To Remove: First, remove one 3/8"-16 x 1-1/2" HHCS P#(K1211) (#6), one taper-lock bushing washer P#(K0278) (#7) and one spacer bushing P#(S3242) (#8) from the taper-lock bushing (#9). See Figure 2-20. Next, remove two 1/4"-20 x 1" HHCS (#10) and place them into the threaded holes (#11) of the taper-lock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



Weight Kit Installation

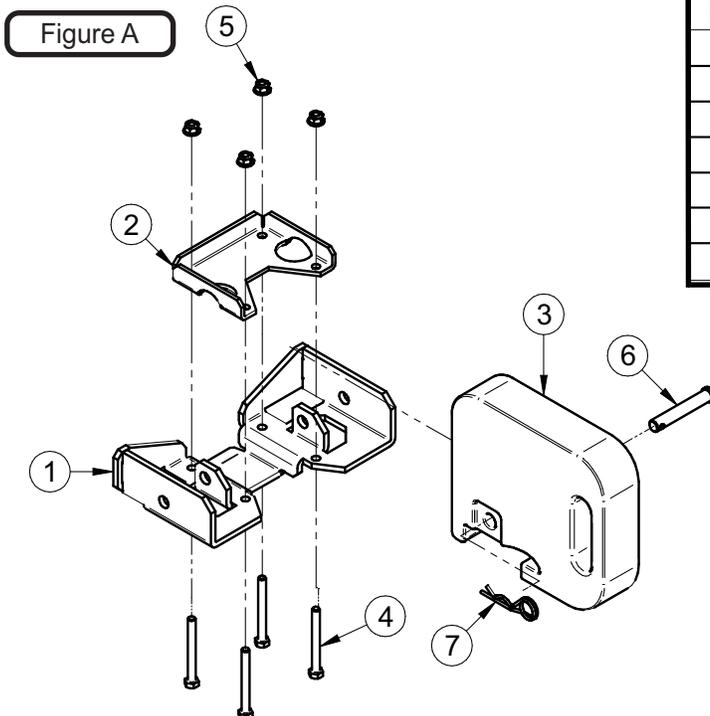
Review Figure A. Position the Dual Weight Bracket Base (Item#1) under the right caster tubing w/ opening towards caster fork. Next, position the Weight Bracket Clamp (Item#2) on top of caster tubing w/ opening towards caster fork.

Align the (4) holes of the Weight Bracket Clamp (Item#2) to the holes in the Dual Weight Bracket Base (Item#1). Loosely fasten the Weight Bracket Clamp (Item#2) to the Weight Bracket Base (Item#1) using (4) 5/16"-18 x 3" Bolts (Item#4) & (4) 5/16"-18 Ny-Flange Lock Nuts (Item#5).

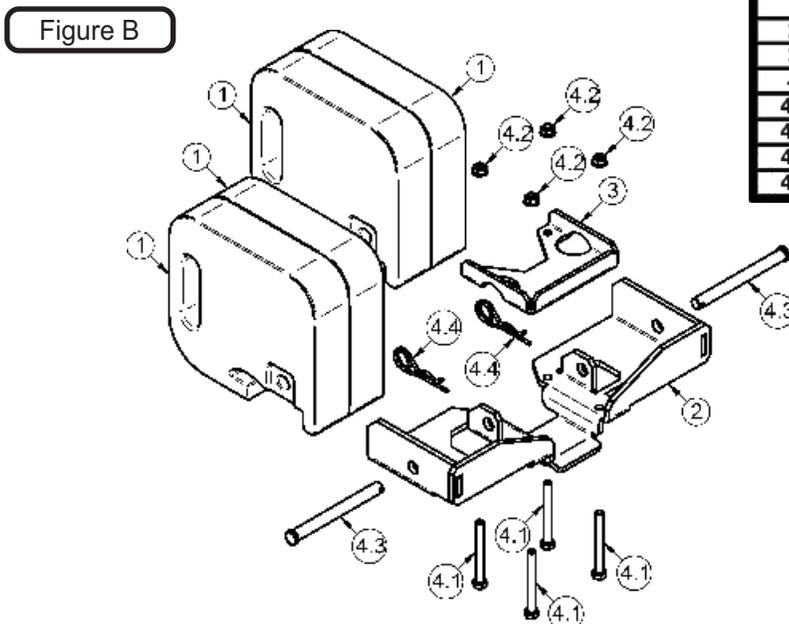
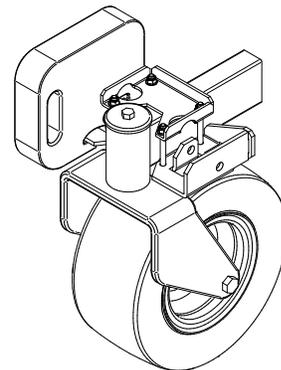
Position the Weight Bracket Base and the Weight Bracket Clamp assembly along the caster tubing to prevent interference from caster forks or any other objects. Tighten the fasteners in an 'X' pattern until assembly is firmly clamped to caster tubing. Do not over tighten which may result in bending Weight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

Insert (1) Weight (Item#3) Into the Weight Bracket Base (Item#2) & align the holes of the Weight w/ the holes of the Weight Bracket Base (Item#2). Fasten the Weight (Item#1) to the Weight Bracket Base Using (1) Clevis Pin (Item#6) & (1) Hair Pin Clip (Item#7) per weight.

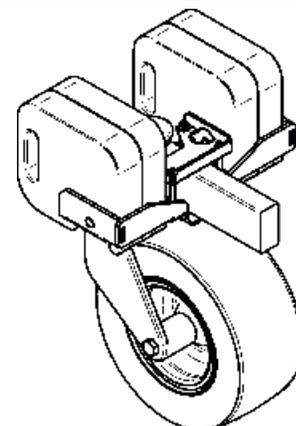
Repeat on right caster with Quad Weight Kit, Figure B



Item #	Part #	Desc.	Qty.
1	B1014	Dual Weight Bracket / Base	1
2	B1015	Weight Bracket / Clamp	1
3	Y0025	28 lb. Suitcase Weight	2
4	K1472	HHCS 5/16"-18 x 3" GR5	4
5	K2516	Ny-Flange Lock Nut 5/16"-18	4
6	K1473	Clevis Pin 1/2" x 3"	2
7	K1478	Hair Pin Cotter / Double Loop	2



Item #	Part #	Desc.	Qty.
1	Y0025	28 lb. Suitcase Weight	4
2	B1063	Quad Weight Bracket / Base	1
3	B1015	Weight Bracket / Clamp	1
4	HB0687	Quad Weight Kit Hardware Bag	1
4.1	K1472	HHCS 5/16"-18 x 3" GR5	4
4.2	K2516	Ny-Flange Lock Nut 5/16"-18	4
4.3	K1482	1/2" x 5" Steel Clevis Pin	2
4.4	K1478	Hair Pin Cotter / Double Loop	2

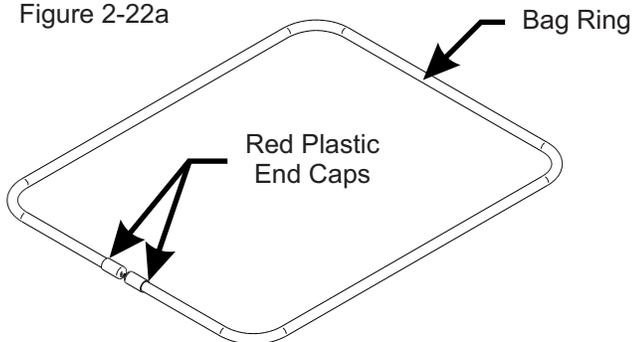


2-22 Installation/Removal Of Collection Bags

IMPORTANT!

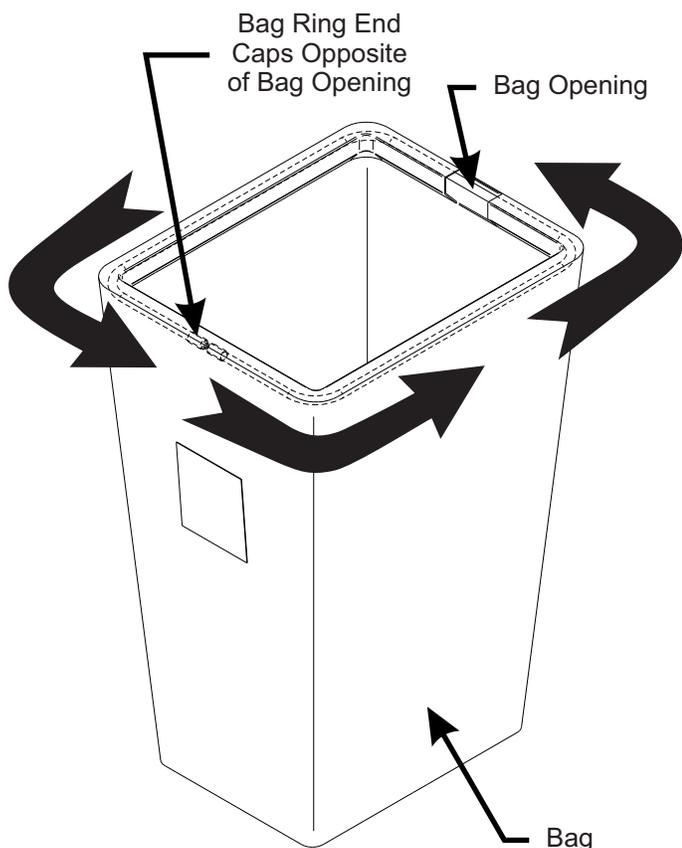
To prevent bag wear, install (2) red plastic end caps P#(J0274), as shown in Figure 2-22a, on each bag ring before installing bags.

Figure 2-22a



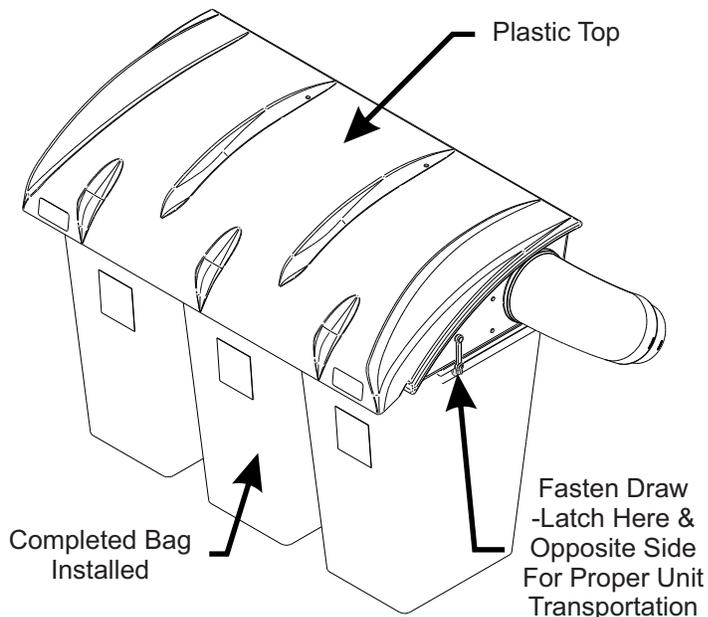
To install the bag onto the bag ring, place the seam openings of the bag onto the bag ring openings and turn the bag one full turn (360°) so the plastic end caps are located opposite to the opening in the bag (Figure 2-22b). Do this for each of three bags.

Figure 2-22b



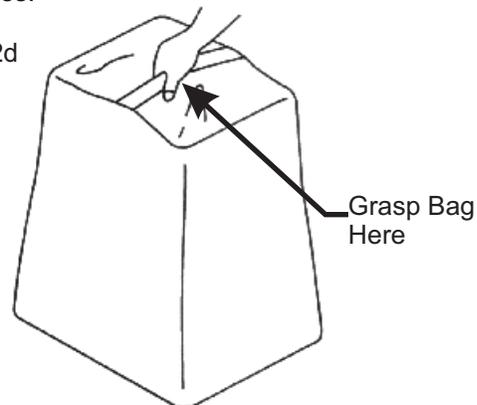
Install the completed assemblies onto the support frame and close the plastic top. Fasten both draw-latches to hold the plastic top closed (Figure 2-22c).

Figure 2-22c



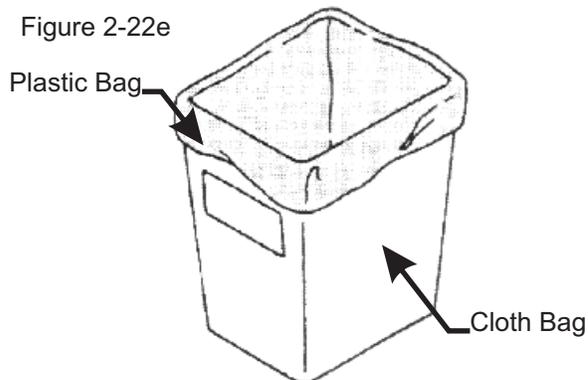
To empty the bag, first unlatch and lift top, next remove the bag and bag ring by sliding rearward, then grasp the loop on the bottom of the bag, and last turn it upside down to empty the collected debris (Figure 2-22d). Repeat for the other bags. Reinstall all bags, line with plastic bags if desired,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





Unit Model #: 49131501 (629GZ-001A)

Mower/Type: Country Clipper / Charger & Challenger

Owner's Manual: Q0469

Engine Type: Kawasaki FS730V, Kawasaki FX801V, Kohler 27HP & Briggs & Stratton 30HP

Deck Size: 52" & 60"

Vac Type: 15 Cubic Foot Pro 3 Bagger

Deck Type:

Drive Type: PTO-C (4-Blade)

Revision #: 4 - Updated Weight Kit - 1/12/2018

Fits Year(s): 2013-2018 Charger & 2013-2017 Challenger

A1923 Vac Kit

- (2) R0017 Country Clipper Logo
- (2) J0080 8" Hose Clamps
- (2) J0060 6" Hose Clamps
- (1) A1190 TOP ASSEMBLY
- (1) A2068 Upper Frame Assy.
- (1) V0025 6" & 7" Plastic Inlet
- (1) B0810 Rt. Frame Bracket
- (1) B0816 Rear Mnt. Support Brkt.
- (2) B0752 Lwr. Mnt. Tube
- (3) B0227 Bag Ring
- (3) G0003 4 Cu. Ft. Collection Bags
- (1) B0808 Rear Mount Plate
- (1) F0060 6" x 28" Upper Hose
- (1) F0080 8" x 40" Lower Hose
- (1) HB0562 Vac Kit Hardware Bag

A1925 Mount Kit

- (1) B0813 Lt. PTO Mnt. Pl.
- (1) M0255 4L560DWK A54K Kev. Cord Belt For Charger
- (1) M0248 4L570DWK A55K Kev. Cord Belt For Challenger
- (1) HB0564 Mount Kit Hardware Bag
- (1) HB0565 Engine Pulley Hardware Bag
- (1) B0736 PTO STOP PLATE
- (1) B0814 Rt. PTO Mnt. Pl.
- (1) E6009 8" BLOWER CONE
- (1) A1142 PTO HANDLE ASSY.
- (1) A1623 PTO Assembly

A1929 Boot Kit

- (1) B0820 Boot Plate
- (1) B4331 Boot Rod
- (1) HB0453 Hardware Bag
- (1) E1902A Boot

A2121 Dual Weight Kit / Single Caster

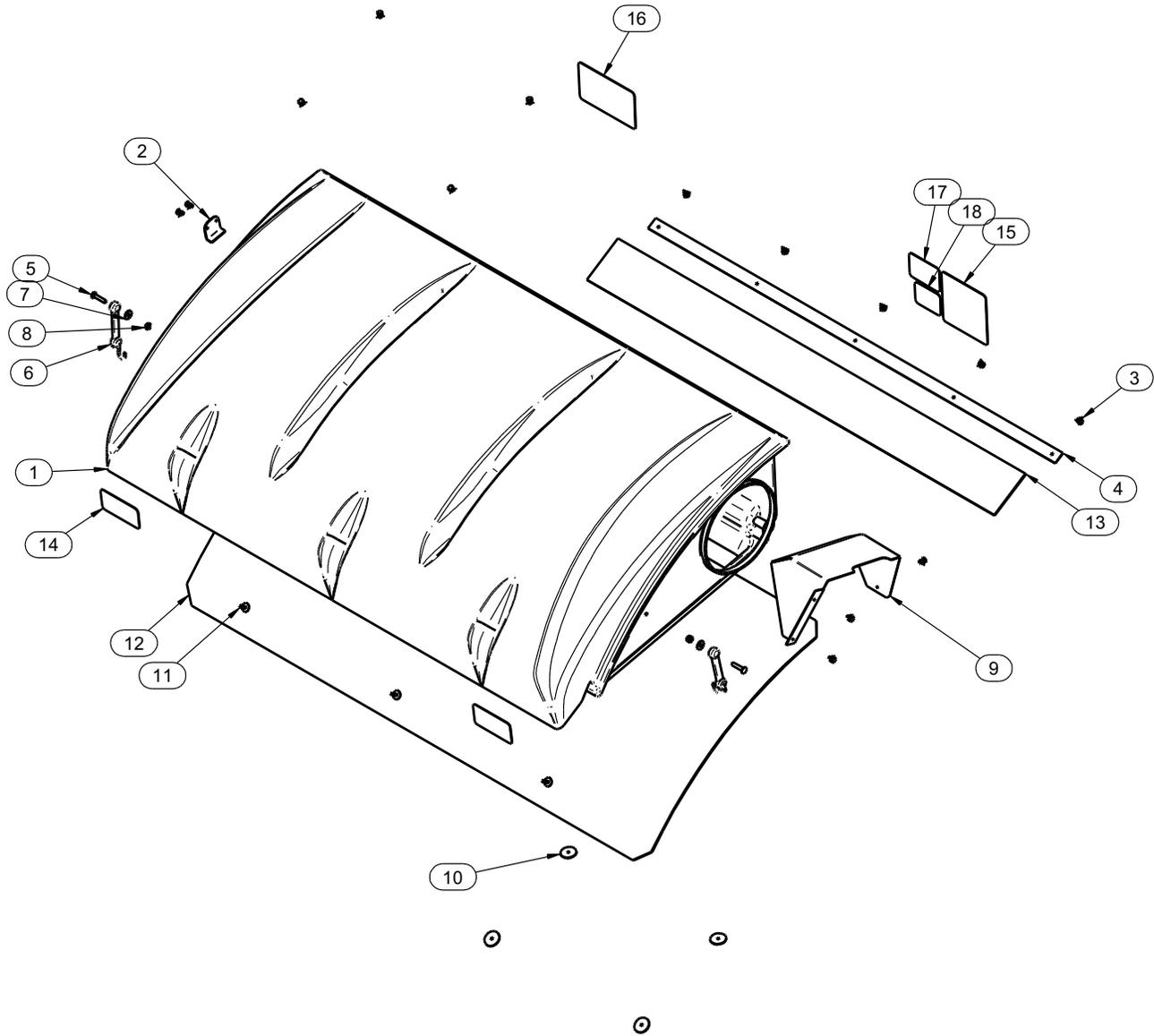
- (1) Y0025 28 lb. Weight
- (2) B1015 Weight Bracket
- (1) B1014 Dual Weight Bracket Base
- (1) HB0687 Hardware Bag

A2162 Quad Weight Kit / Single Caster

- (4) Y0025 28 lb. Weight
- (1) B1015 Weight Bracket
- (1) B1014 Dual Weight Bracket Base
- (1) HB0713 Hardware Bag
- (1) B1063 Dual Weight Bracket Base

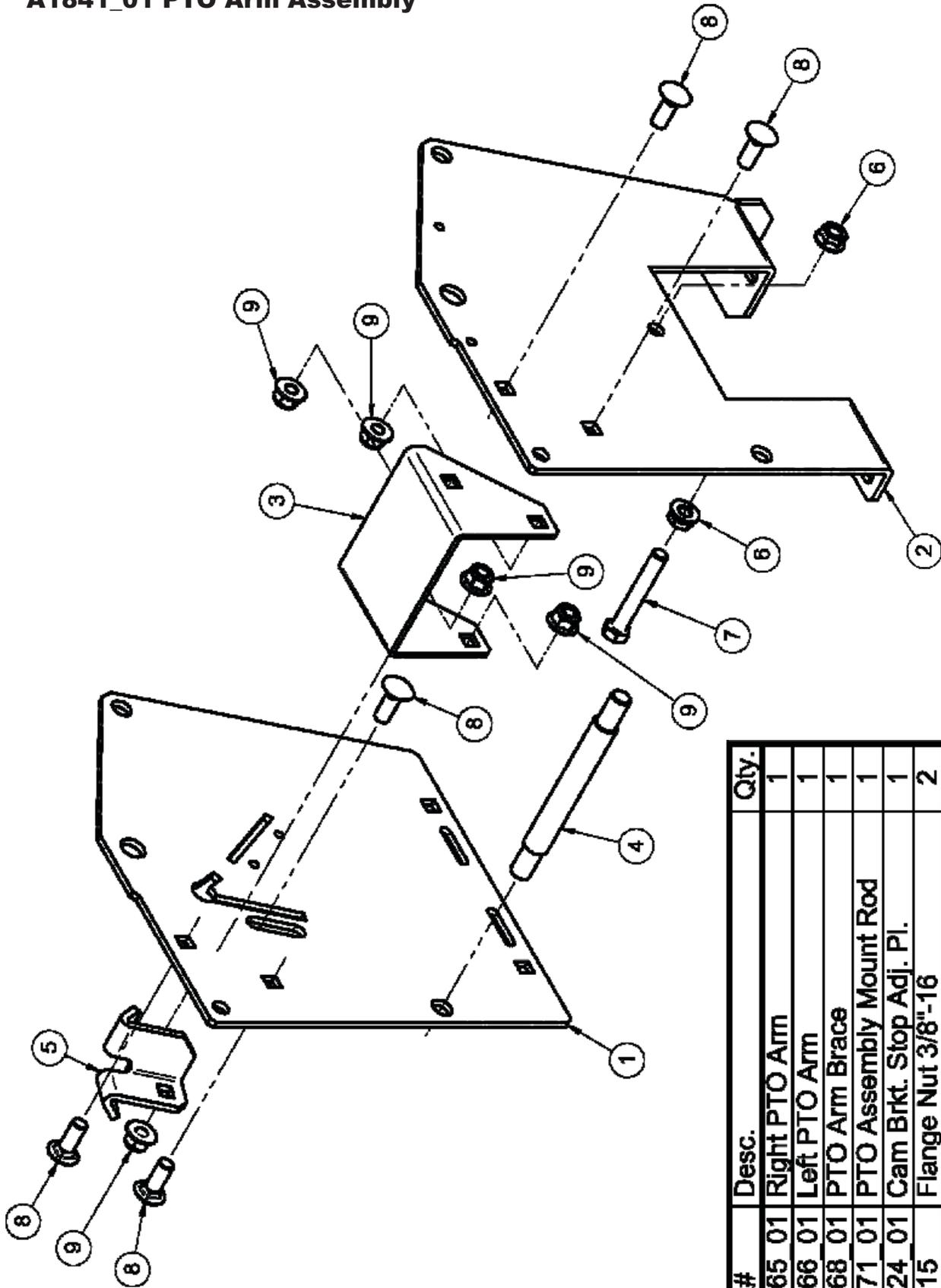
Exploded Parts View

A1190 Top Assembly



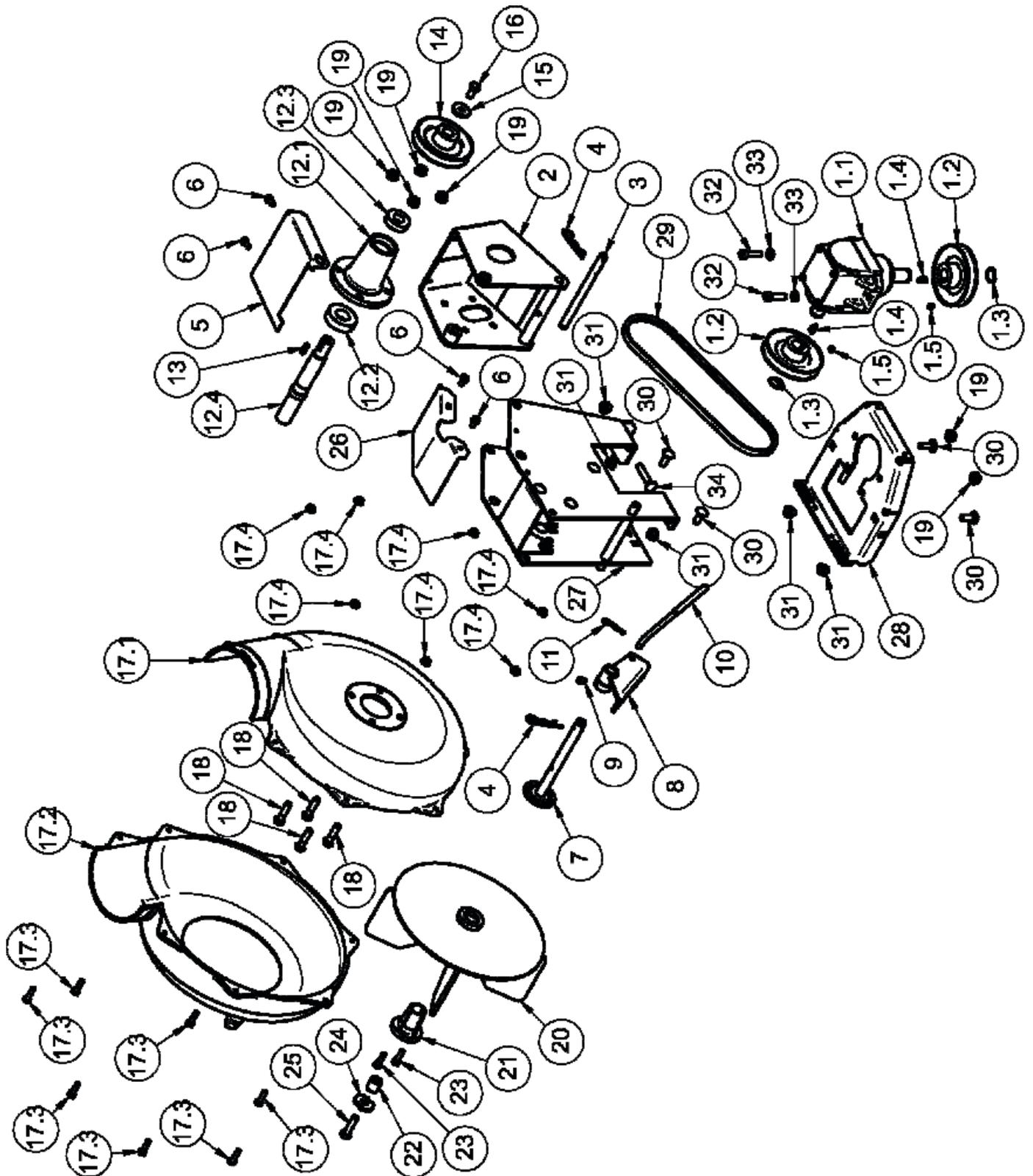
Item #	Doc #	Title	Qty
1	V0022	PRO 3 BAGGER TOP	1
2	B0676	Hinge Stop Pl.	1
3	K0114	BLACK PLASTIC RIVET	14
4	C0069	DUST GUARD BRACE	1
5	K1030	1/4"-20 x 1-1/4" CARRIAGE BOLT	2
6	J4009	SHORT RUBBER STRAP W/ S HOOK	2
7	K0037	1/4" FLAT WASHER .75 OD x .314 ID x .060 T	2
8	K1128	1/4"-20 NYLOC NUT	2
9	C0026	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

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

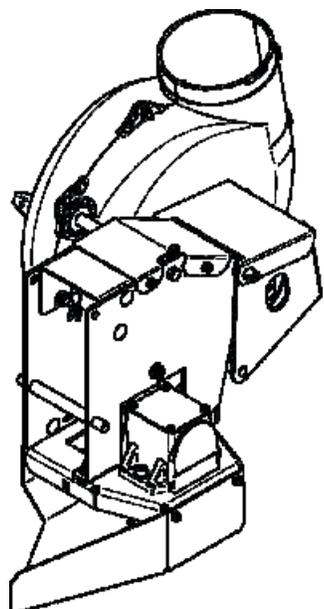
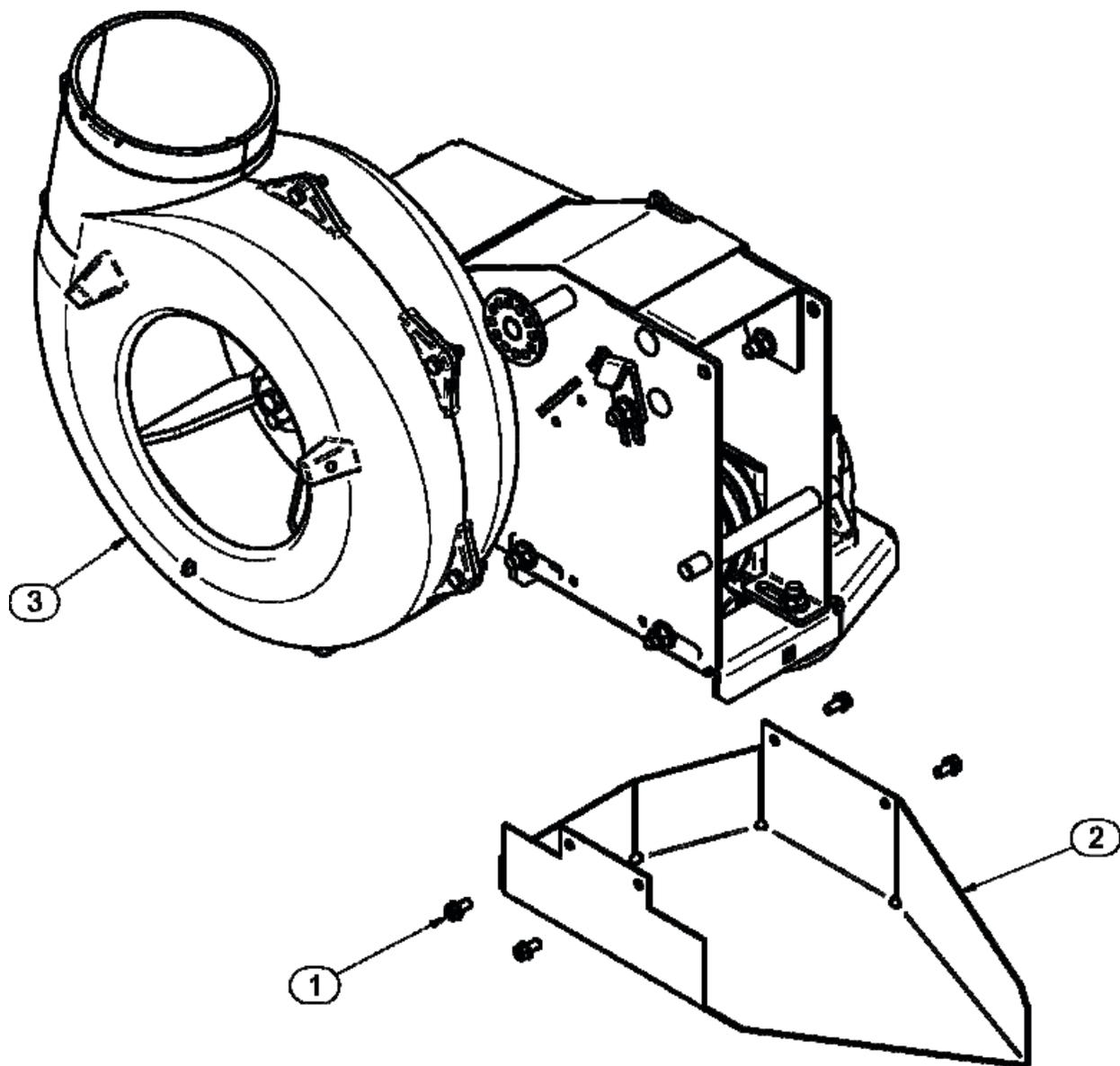
A1941_01 PTO Base Assembly Exploded Parts View



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 Base Assembly Exploded Parts View



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

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



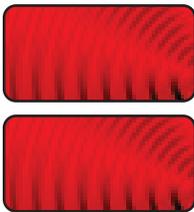
Part #: R2008
Rotating Blades Label



Part #: R1051
Warning: Hearing Protection Label



Part #: R2007
Never Use Hands Label



Part #: R1057 - (2)



Part #: R1065
Made In America Label



Part #: R1100
Engage-Disengage Label



Part #: R1054
Important Label



Part #: R1069
Warning: Turn Off Blower Label



Part #: R4015
Danger: Rotating Blades Label



Part #: R4008
Caution: Rotating Blades Label



Part #: R1052
Small Warning: Turn Off Blower Label

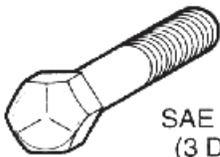
TORQUE SPECIFICATIONS

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

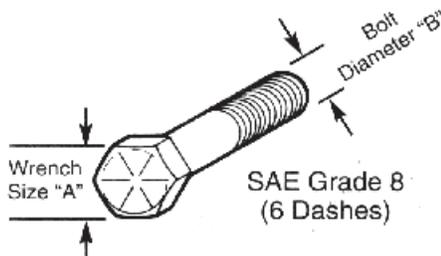
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



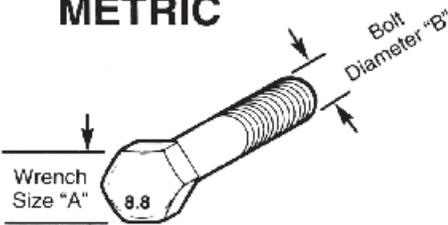
SAE Grade 5
(3 Dashes)



SAE Grade 8
(6 Dashes)

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

METRIC



Numbers appearing on bolt heads indicate ASTM class.

Proper torque for metric fasteners used on PECO equipment.
Recommended torque in foot pounds (newton Meters).*

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (568)	1119 (1516)		1547 (2096)

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

Troubleshooting

2017 (v1.0)

Collection System Performance

Problem	Possible Cause	Corrective Action
Abnormal Vibration	<ul style="list-style-type: none"> • Cutting blades are bent or unbalanced • Loose blower pulley or pulley assembly • Impeller blade out of balance 	<ul style="list-style-type: none"> • Install new cutting blade • Tighten the pulley • Contact dealer to replace
Reduced collection system performance	<ul style="list-style-type: none"> • Low engine speed • Plugged screen • Loose belt • Full collection bags 	<ul style="list-style-type: none"> • Always operate collection system at full throttle • Remove debris, leaves, or grass clippings from the screen • Replace/tighten belt • Empty the collection bags
Blower and hoses plugging too frequently	<ul style="list-style-type: none"> • Collection bags are too full • Low engine speed • Grass is too wet • Grass is too long • Ground speed is too fast • Worn belt • Loose belt 	<ul style="list-style-type: none"> • Dump more frequently • Always operate collection system at full throttle • Cut grass when it is dry • Cut the grass several times • Drive slower at full throttle • Replace belt • Adjust the pulley and tighten belts
Debris blowout	<ul style="list-style-type: none"> • Collection bags are too full • Plug/clog in the collection system • Ground speed is too fast 	<ul style="list-style-type: none"> • Dump more frequently • Clean the collection system • Drive more slowly at full throttle
Impeller doesn't rotate freely	<ul style="list-style-type: none"> • Plug in the blower housing • Worn impeller blade • Shaft bearings bad/failing 	<ul style="list-style-type: none"> • Clean the blower housing • Contact dealer to replace • Contact dealer to replace

C O U N T R Y
CLIPPER
Z E R O T U R N M O W E R

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