



PTO GRASS COLLECTION SYSTEM



DESIGNED TO FIT:

PROCAT SE - H & J SERIES

942520H-J, 942521H-J, 942522H-J, 942523H-J

PREDATOR PRO - J SERIES

942514J, 942515J

2012-2013



MODEL #: 23621222
PTO DRIVE

MODEL #: 23621223
900 SERIES BRIGGS & STRATTON

MODEL #: 23621224
6.5HP BRIGGS & STRATTON
VANGUARD

OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

GRASS COLLECTION SYSTEM

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SAFETY

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

SAFETY

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

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

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

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

Safety Alert Symbol



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

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

Safety Signs

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



White letters on **RED**

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



Black letters on **ORANGE**

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

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

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

It may also be used to alert against unsafe practices.

PECO LIMITED WARRANTY FOR NEW PRODUCTS

A. WHAT IS UNDER WARRANTY?

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

- 1. PRODUCT WARRANTY:** Any part of any consumer product, which is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as PECO elects, without charge for parts or labor, if the defect appears within 12 months from the date of delivery of the product to the original purchaser. ALL DEFECTIVE PARTS MUST BE RETURNED TO PECO FOR INSPECTION TO DETERMINE VALIDITY OF WARRANTY CLAIMS. Freight and mailing will be borne by the customer.
- 2. PARTS REPLACED DURING WARRANTY:** Any new PECO part which is furnished in performance of this warranty and is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, before the expiration of the original warranty period, whichever is later.
- 3. COMMERCIAL USE:** Products put to personal use around a single household or residence is considered 'Residential'; Products put to any business use (agricultural, commercial, or industrial) or used at multiple locations is considered 'Commercial.' Products designated as 'Commercial' are warrantied for 12 months from the date of delivery of the product to the original purchaser when used for in commercial applications. Products designated as 'Residential' are warrantied for 90 days from the date of delivery of the product to the original purchaser when in commercial applications.

B. SECURING WARRANTY ADJUSTMENTS

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

C. ITEMS NOT COVERED BY PECO WARRANTY

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

D. UNAPPROVED ALTERATION OR MODIFICATION

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

E. ACCIDENTS AND NORMAL MAINTENANCE

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

F. NO REPRESENTATIONS ADDITIONAL WARRANTIES, DISCLAIMER

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

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

H. REMEDIED EXCLUSIVE

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

1. NO SERVICE CENTER WARRANTY

The selling Service Center makes no warranty on his own on any item 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

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

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

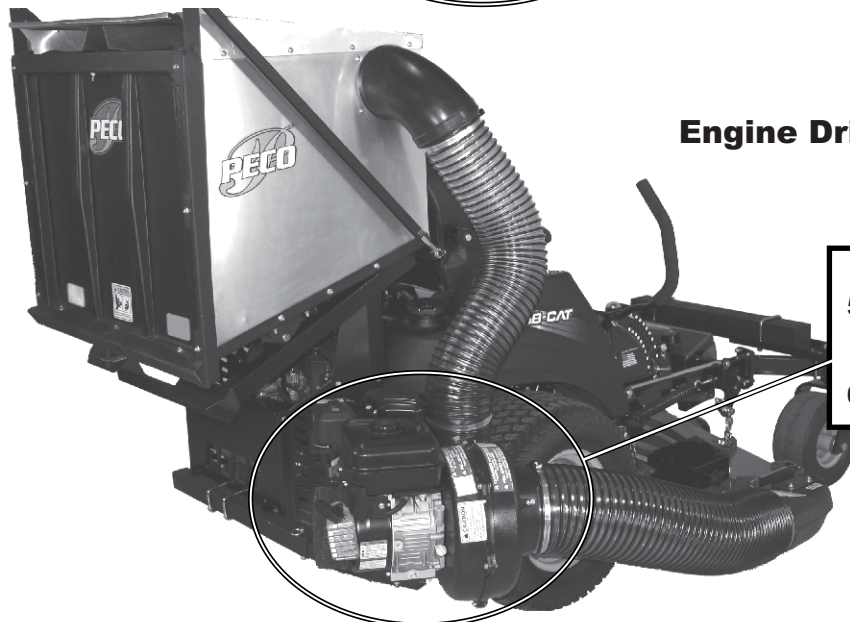
1-2 Description

The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves and in pre-season and post-season clean-up. The blower, mounted on the right side of the unit, uses a belt and gearbox system from the engine PTO shaft. Drive train protection comes through belt slippage. The blower is also available with an external engine option of 5.5HP or 6.5HP. The blower draws grass clippings from the discharge area of the cutter deck back to the 12 cubic foot aluminum box at the rear portion of the mower frame. The operator can engage the blower with a push of the over-center linkage on the right side of the unit, or starting the external engine. Once the bags are full with clippings, they can be released to make for easy dumping.



PTO Drive

Universal PTO
Assembly P#(A0623)



Engine Drive

Engine/Blower/Blade Assembly
5.5HP Briggs and Stratton P#(A602)
or
Engine/Blower/Blade Assembly
6.5HP Briggs and Stratton P#(A639)

SECTION I INTRODUCTION AND DESCRIPTION

Section II INSTALLATION FOR USE

Remove the rear bumper from the mower and save all hardware for use in the next steps of installation. Refer to Figure 2-1b and Figure 2-1c.

2-1 Preparation Of Mower

Carefully dismantle wooden shipping crate from around the components. Cut retaining straps and separate the parts. The collection system will have various parts located inside. Remove and sort all parts for easy identification.

NOTE: Before each step of assembly it will help to study the exploded drawings on pages 16-18.

NOTE: Engine pulley installation instructions are for PTO models only.

From the underside of the engine remove the bolt and bushing from the electric clutch assembly. Replace these parts with the engine pulley assembly #20 P#(A1798), 7/16" lock washer P#(K0140), and 7/16"-20 x 3-3/4" HHCS P#(K0359).

The added pulley will power the collection system. Note the engine pulley's center bushing is extended upward toward the engine (Figure 2-1a). Torque the bolt to 55 ft./lbs.

NOTE: It may be necessary to remove the drive belt from the deck pulley before removing the bushing. Refer to your Bob-Cat owner's manual.

Figure 2-1b

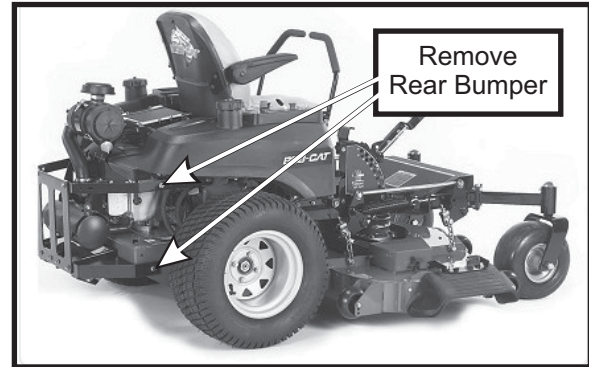
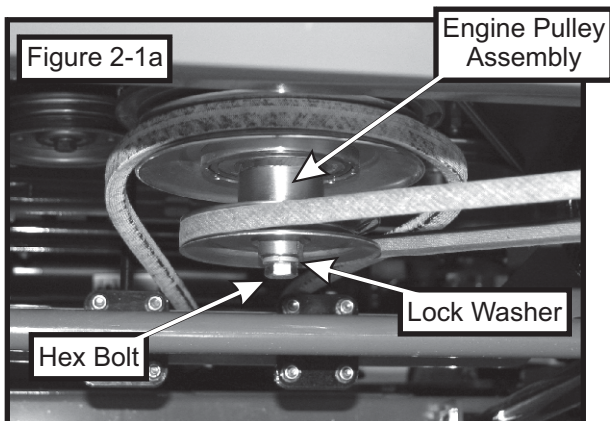
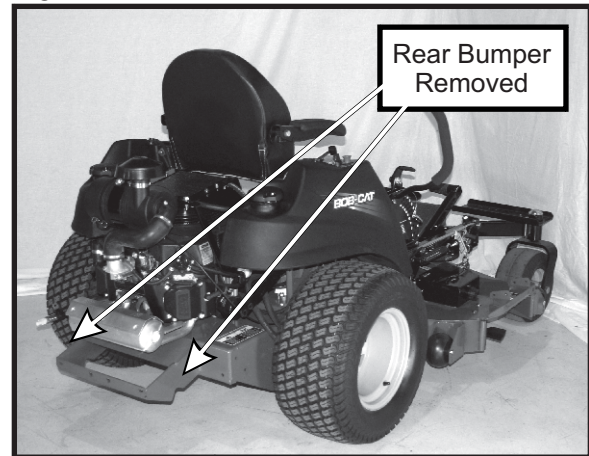


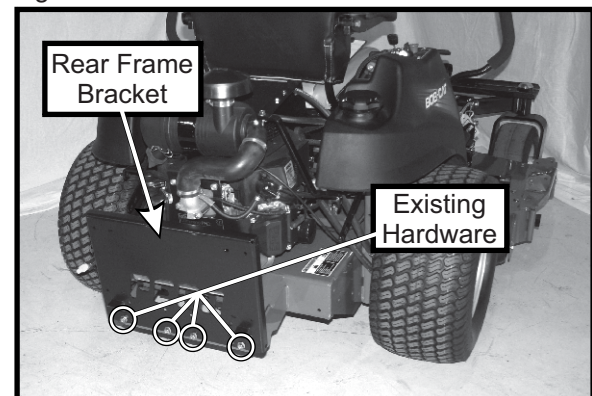
Figure 2-1c



2-2 Rear Frame Bracket Installation

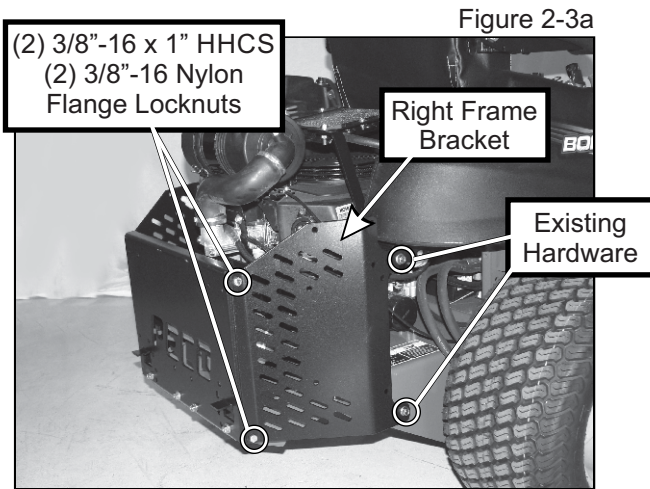
Secure the rear frame bracket P#(B0728) to the rear frame of the mower using the existing hardware removed from the rear bumper. Refer to Figure 2-2.

Figure 2-2

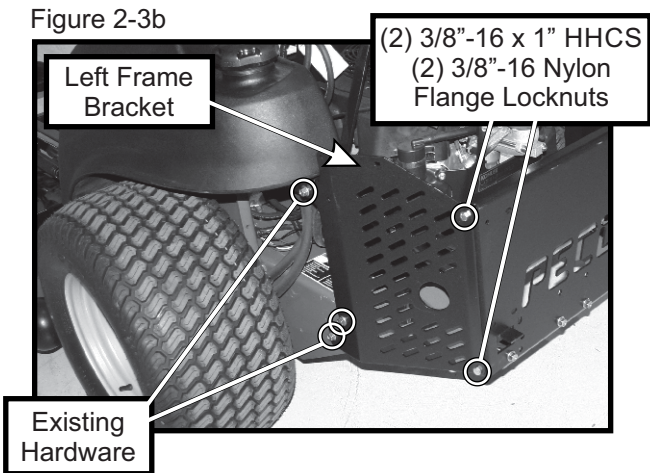


2-3 Right and Left Frame Bracket Installation

Secure the right frame bracket P#(B0785) to the rear frame bracket and rear frame of the mower using (2) 3/8"-16 x 1" HHCS P#(K1191), (2) 3/8"-16 nylon flange locknuts P#(K2038) and existing hardware. Refer to Figure 2-3a.



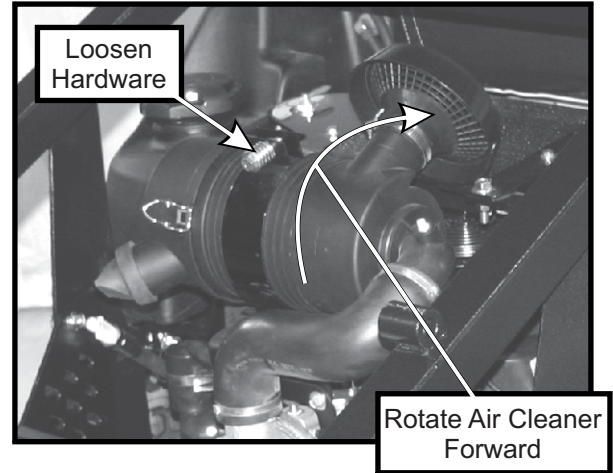
Secure the left frame bracket P#(B0786) to the rear frame bracket and rear frame of the mower using (2) 3/8"-16 x 1" HHCS P#(K1191), (2) 3/8"-16 nylon flange locknuts P#(K2038) and existing hardware. Refer to Figure 2-3b.



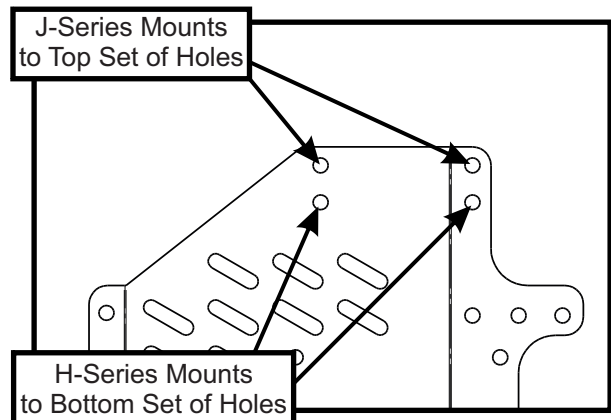
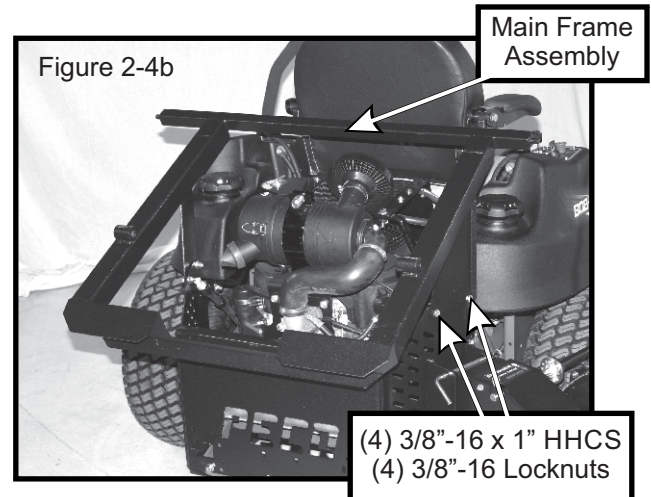
2-4 Main Frame Assembly Installation

NOTE: On units with the Donaldson air cleaner, loosen the hardware and rotate the air cleaner to the forward-most position. Re-tighten the hardware. Refer to Figure 2-4a.

Figure 2-4a

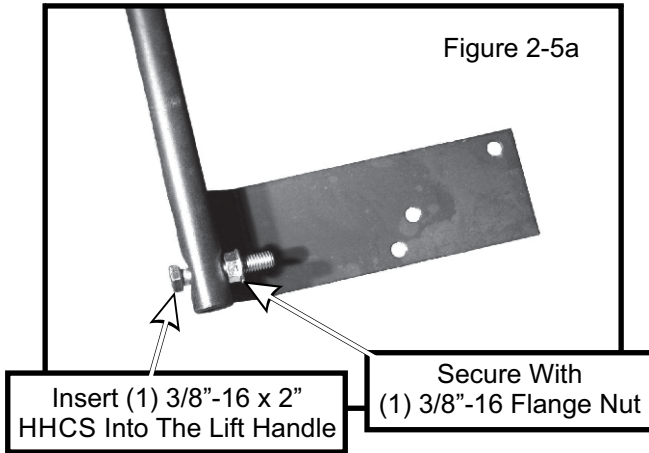


Secure the main frame assembly P#(A1874) to the left and right frame brackets, using (4) 3/8"-16 x 1" HHCS P#(K1191) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Refer to Figure 2-4b.

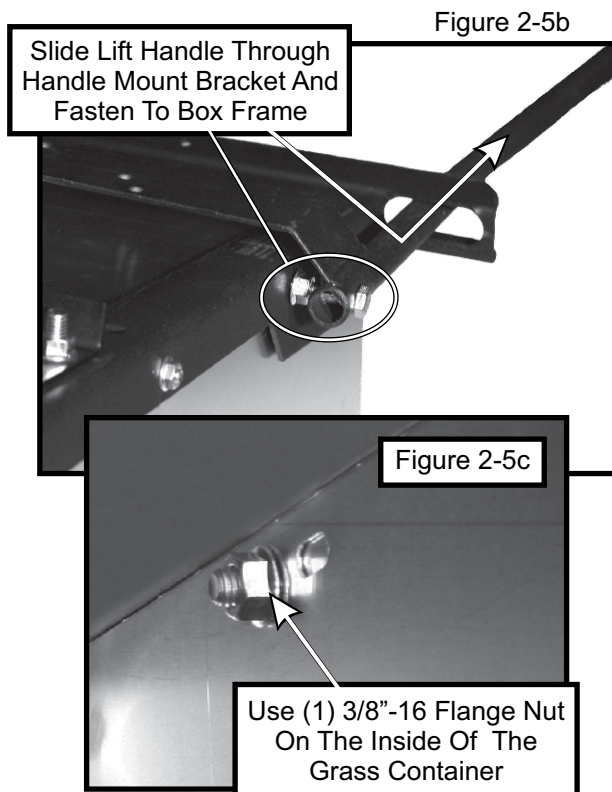


2-5 Lift Handle Installation

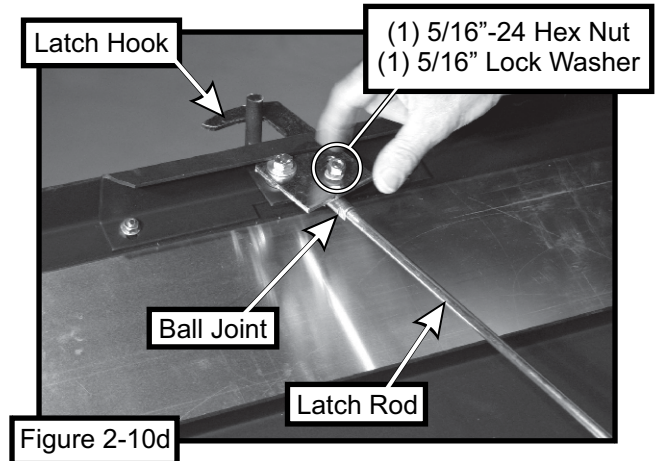
NOTE: Before continuing the lift handle installation, have someone assist you in turning the grass container upside down. Insert (1) 3/8"-16 x 2" HHCS P#(K1208) into the lift handle P#(A0273), and secure with (1) 3/8"-16 flange nut P#(K1215). Thread the flange nut onto the bolt upside down, as shown in Figure 2-5a.



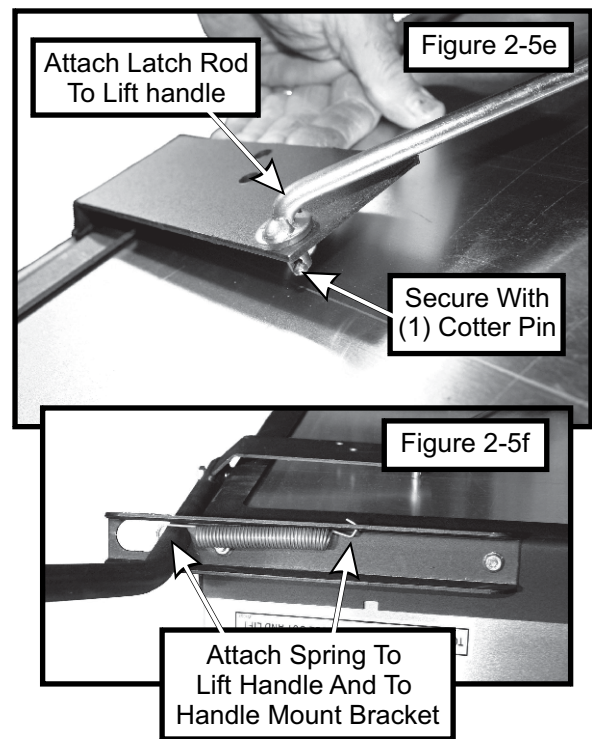
Slide the lift handle through the slot on the handle mount bracket. Insert the lift handle into the box frame as shown in Figure 2-5b, and secure using (1) 3/8"-16 flange nut P#(K1215) on the inside of the container as shown in Figure 2-5c. Attach black handle grip P#(J0522) to handle end.



Fasten the ball joint P#(K1442) to the end of the latch rod P#(A0620). Tighten the ball joint to approximately half way down the threads on the latch rod. Attach the ball joint to the latch hook as shown in Figure 2-5d, using (1) 5/16"-24 hex nut P#(K1444) and (1) 5/16" lock washer P#(K0043).

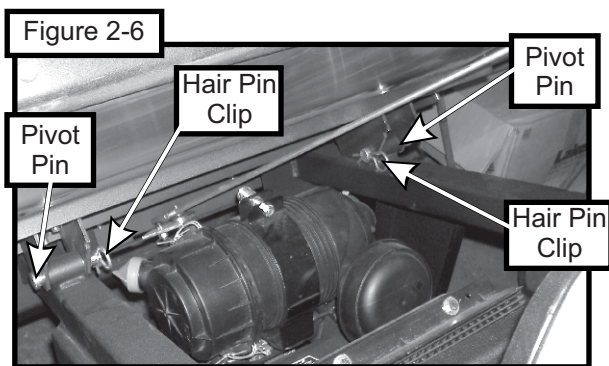


Attach the other end of the latch rod to the lift handle, as shown in Figure 2-5e. Attach on end of the spring P#(J0176) to the lift handle and the other end of the spring to the handle mount bracket as shown in Figure 2-5f. Adjust the ball joint up or down on the latch rod threads until the latch hook closes completely. After adjusting the latch hook, secure the latch rod to the lift handle using (1) cotter pin P#(K0094).



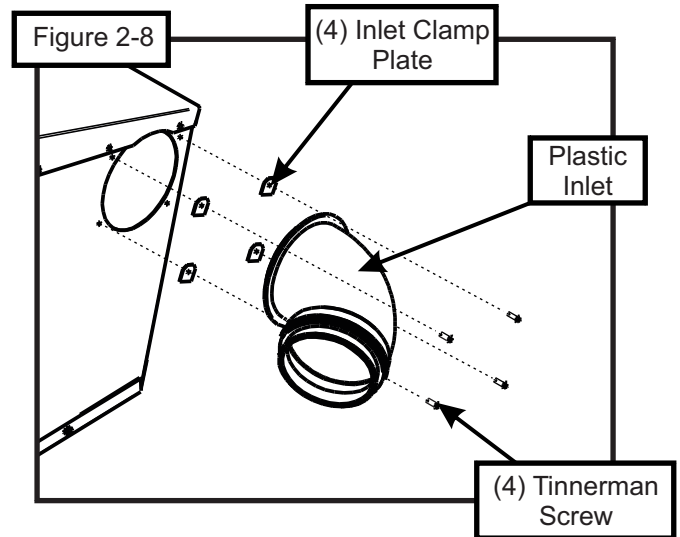
2-6 Aluminum Grass Container Installation

NOTE: It is recommended that (3) people assist in mounting the container. With three people available, two can lower the container onto the frame while the third person inserts the pivot pins P#(K0172) through the holes. Insert the pins from the outside to the inside. Secure with (1) 5/8" washer P#(K0058) and (1) 5/32" x 2-5/8" hair pin clip P#(K0088) per pivot pin (Figure 2-6). Reattach the bottom ends of the door opening linkages to the main frame by using (1) Rue-Ring cotter pin P#(K1437) per side. To test the functionality of the dump mechanism, pull the lift handle away from the unit, and lift upward. The door of the container should open and the box should pivot clockwise towards the ground.



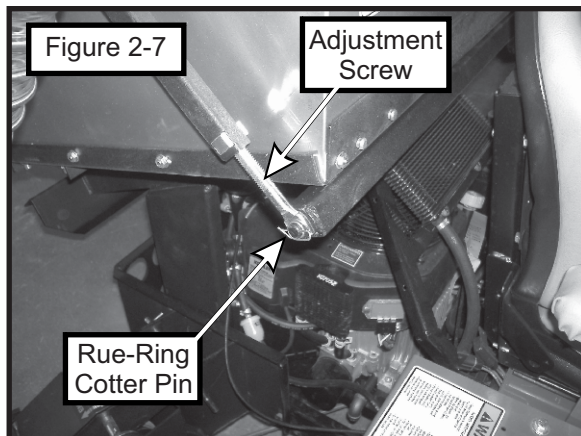
2-8 Inlet Installation

Remove the (4) tinnerman screws P#(K1092) and (4) inlet clamp plates P#(B1668) from the inlet opening on the aluminum box. Insert the plastic inlet from the inside of the aluminum box, through the inlet opening. Secure the inlet with (4) tinnerman screws and (4) inlet clamp plates. Refer to Figure 2-8.

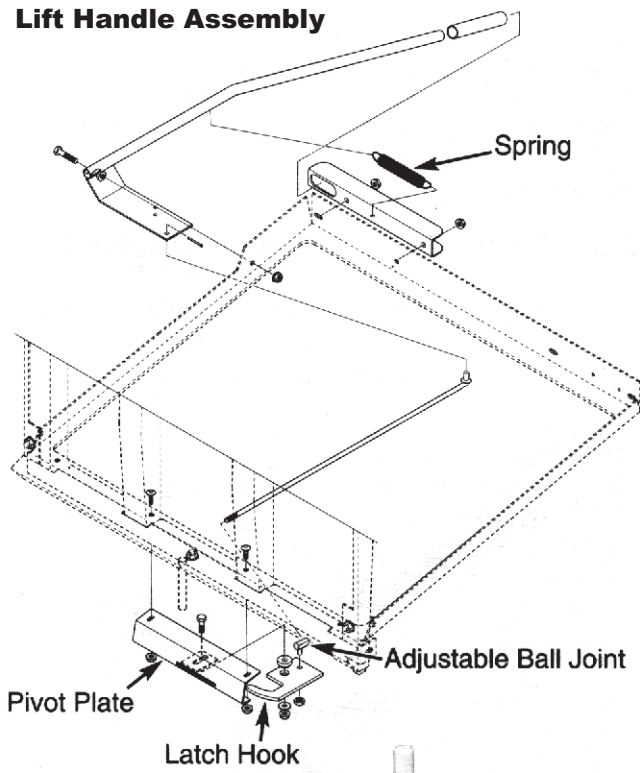


2-7 Dump Mechanism Adjustment

The linkage may be adjusted in two places, at the adjusting screw P#(K1435) and the latch assembly items. See page 13 for visual clarification. To change the door closure tightness, screw the adjusting screw (Figure 2-7) in or out. To adjust the latch, change the length of the latch rod by screwing the latch adjusting ball joint in or out. The latch hook pivot should be in the middle of the slot in the latch hook pivot plate. Slide the pivot back or forth and then re-tighten.



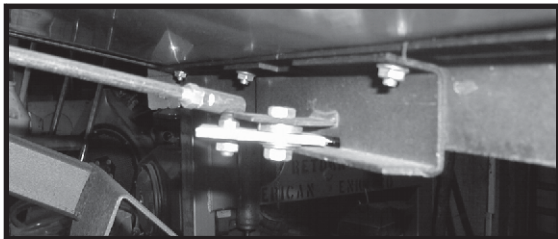
Lift Handle Assembly



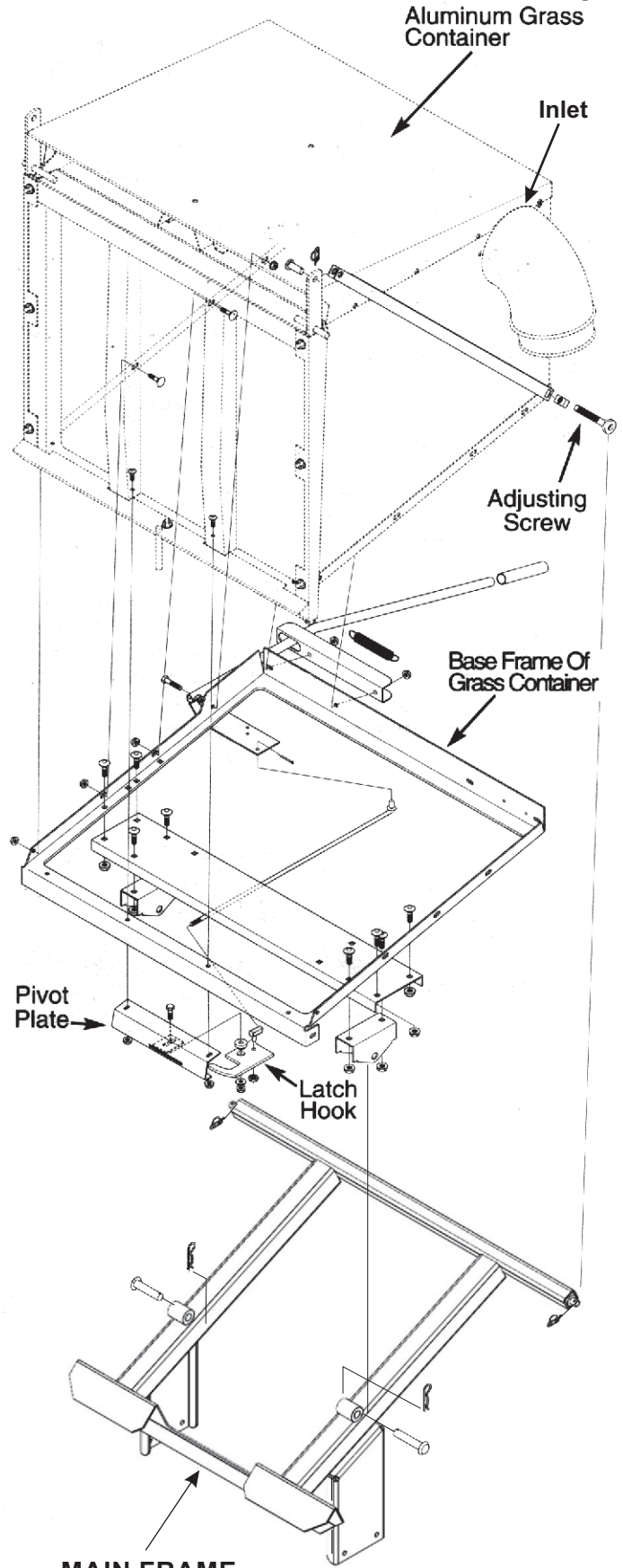
Aluminum Grass Container With Handle Attached



Latch Hook Mechanism Assembly



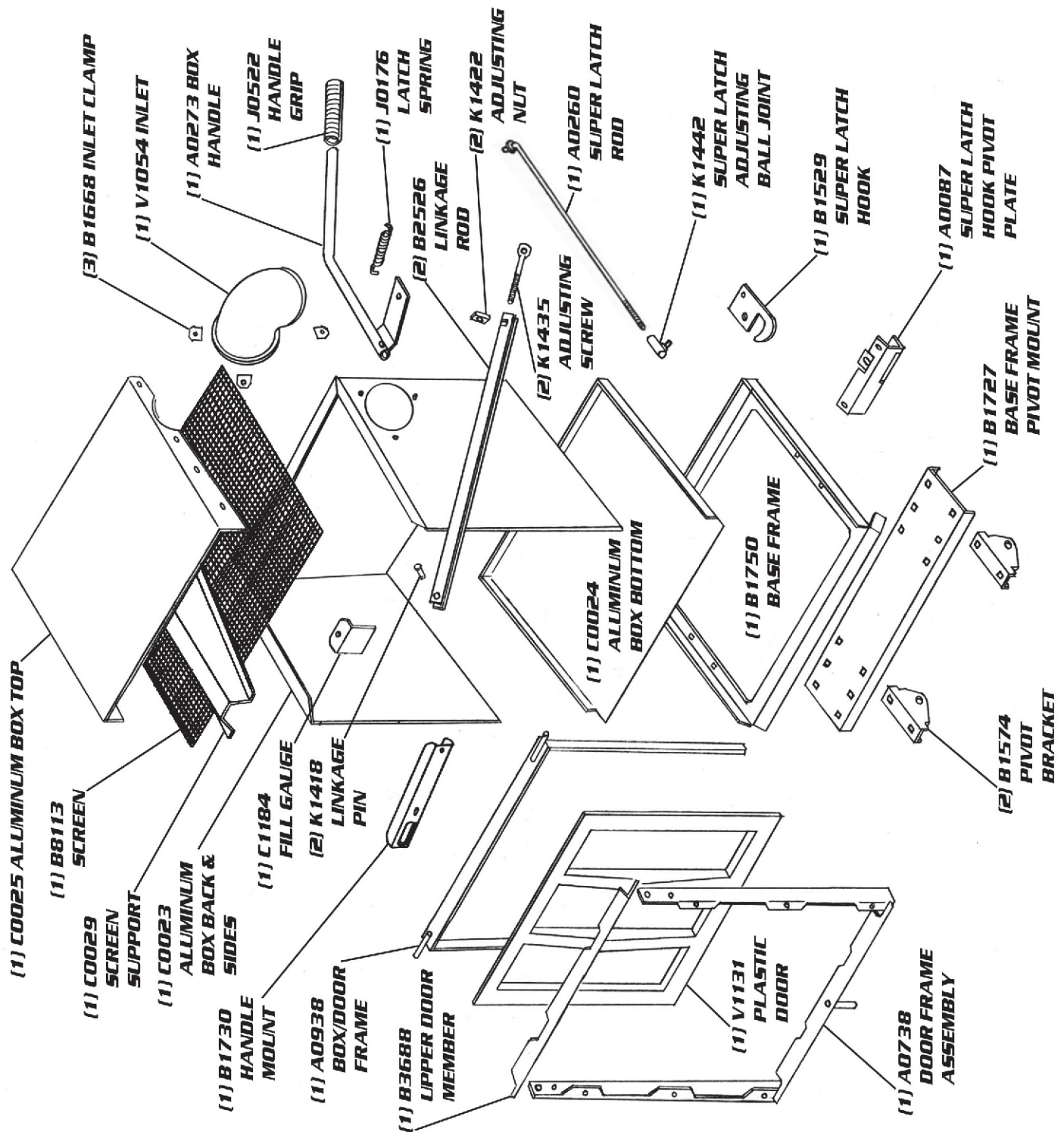
Aluminum Grass Container Assembly



MAIN FRAME

Exploded Parts View

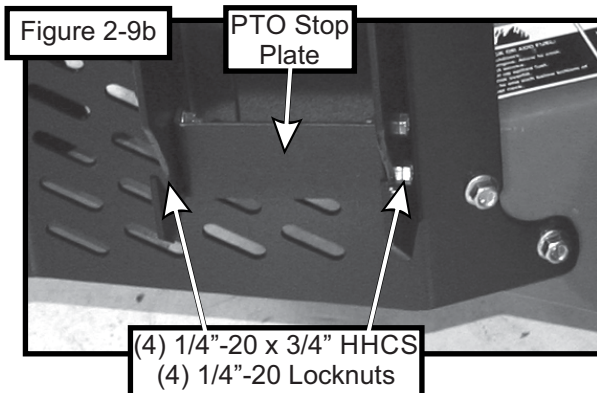
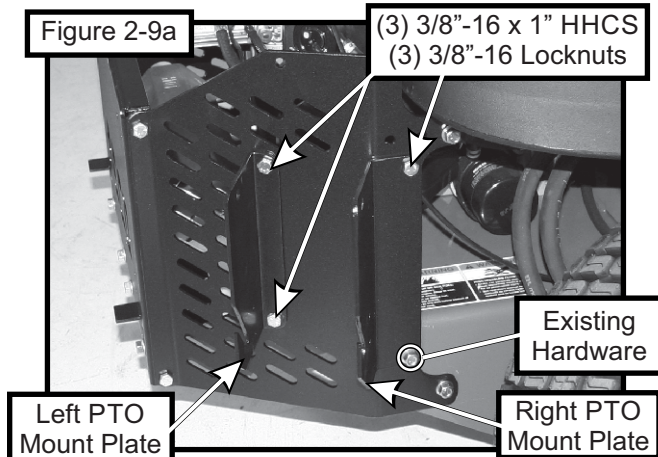
A0794 Aluminum Grass Container



2-9 PTO Mount Plate Installation

PTO MODELS ONLY

Secure the right PTO mount plate P#(B0787) and left PTO mount plate P#(B0788) to the right frame bracket using (3) 3/8"-16 x 1" HHCS P#(K1191) and (3) 3/8"-16 nylon flange locknuts P#(K2038). Secure the PTO stop plate P#(B0736) to the left and right PTO mount plate using (4) 1/4"-20 x 3/4" HHCS P#(K1222) and (4) 1/4"-20 nylon flange locknuts P#(K0124). Refer to Figure 2-9a and 2-9b.

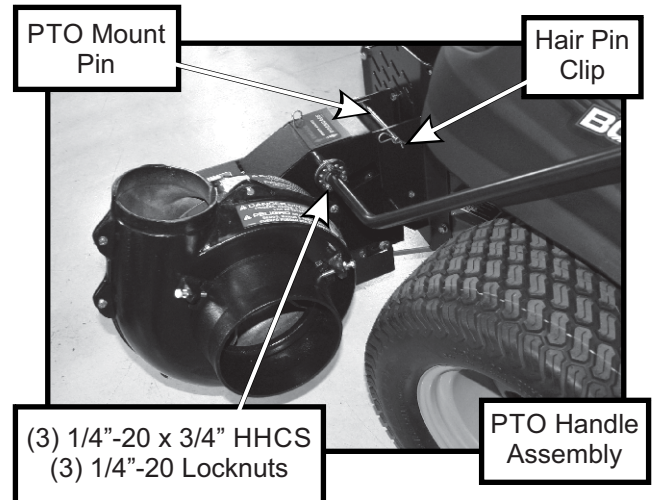


2-10 PTO Assembly Installation

PTO MODELS ONLY

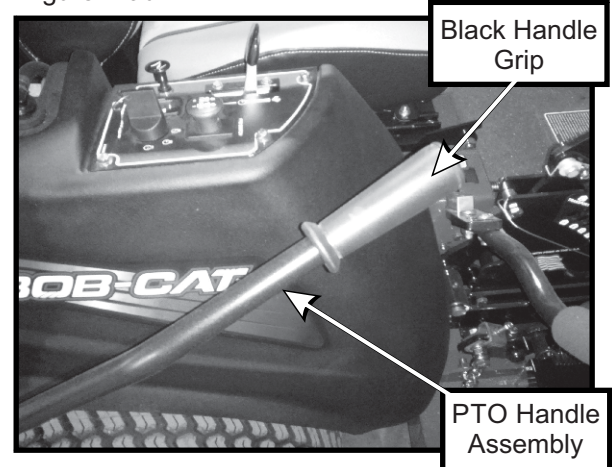
Insert the PTO assembly P#(A0623) into the mounting slots on the PTO mount plates and secure using (1) PTO mount pin P#(B0274) and (1) hair pin clip P#(K0086). Attach the PTO handle assembly P#(A1142) to the PTO assembly using (3) 1/4"-20 x 3/4" HHCS P#(K1222) and (3) 1/4"-20 nylon flange locknuts P#(K2014). Refer to Figure 2-10a.

Figure 2-9a



Slide the handle grip P#(J0522) onto the end of the PTO handle. Refer to Figure 2-9b.

Figure 2-9b



2-11 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#(A1803) (Figure 2-11a and 2-11b). Remove the belt guard and hardware.

Figure 2-11a

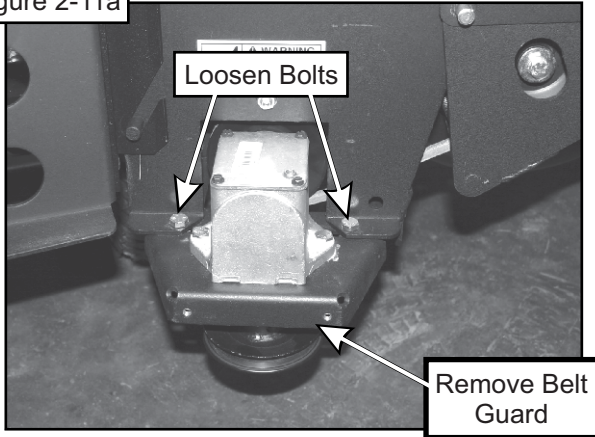
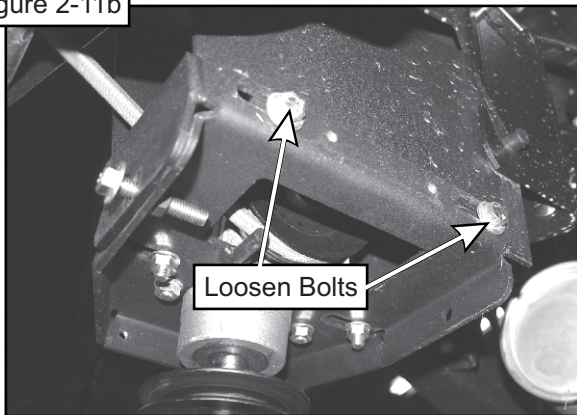
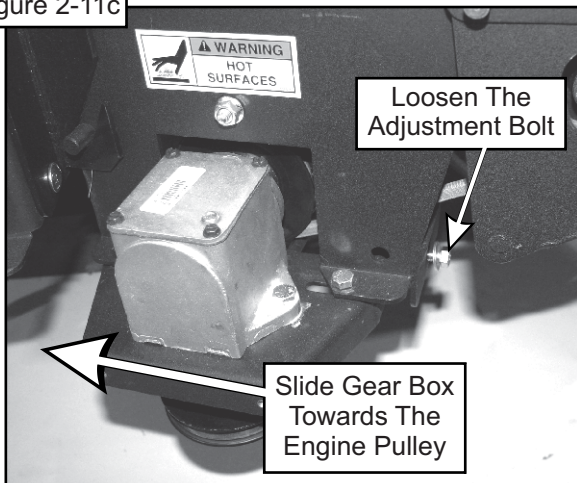


Figure 2-11b



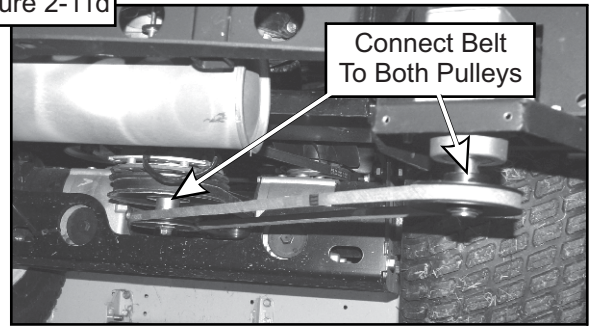
Loosen the adjustment bolt P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved toward the mower's engine pulley). Refer to Figure 2-11c.

Figure 2-11c



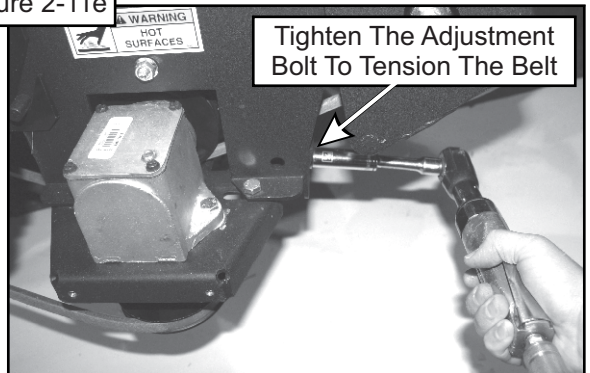
Connect the kevlar cord belt A57K P#(M0256) from the engine pulley to the lower gear box pulley as shown in Figure 2-11d.

Figure 2-11d



To tension the drive belt, turn the adjustment bolt clockwise (Figure 211e) 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 2-11e



Once the correct tension of the belt is achieved, tighten the (4) bolts that secure the gear box assembly. Refer to Figures 2-11f and 2-11g. Replace the belt guard and hardware.

Figure 2-11f

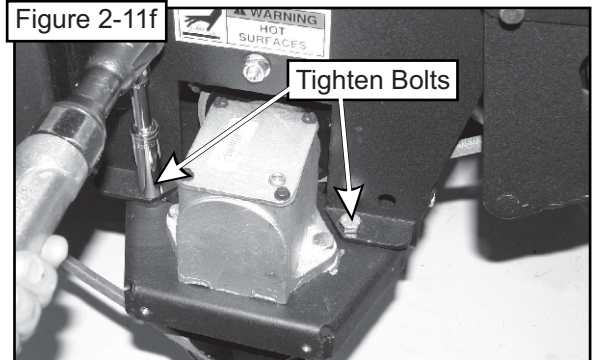
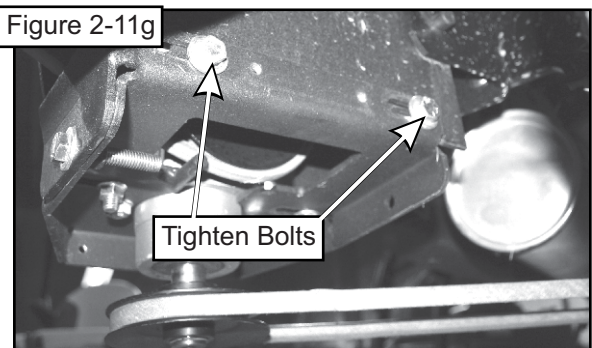


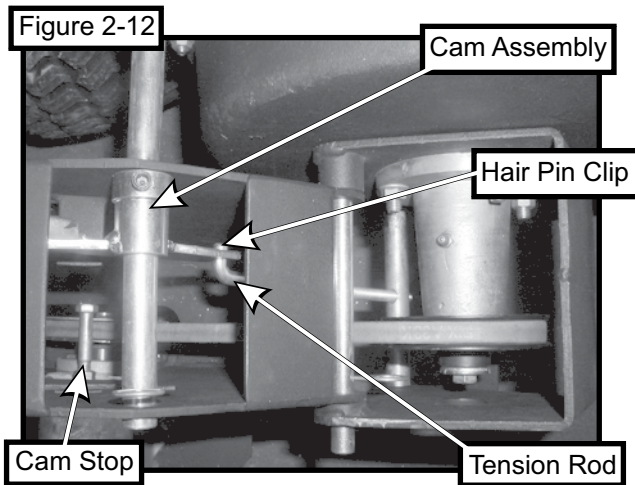
Figure 2-11g



2-12 Cam Assembly Adjustment

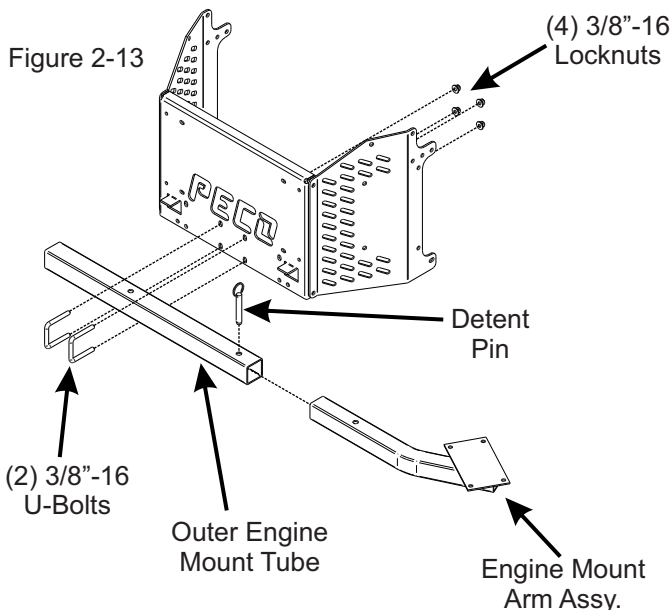
PTO MODELS ONLY

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#(K0099) from the belt tension rod P#(K0326) and pull the "L" end of the rod out of its hole in the cam assembly. The tension rod may then be screwed out to tighten the belt or screwed in to loosen the belt. Replace the "L" end into the top hole in the cam and replace the hair pin clip. Adjust the cam stop bolt P#(K1159) to allow the cam to rotate slightly over center when the blower is disengaged (Figure 2-12).



2-13 Outer Engine Mount Tube Installation

Secure the outer engine mount tube P#(B1117) to the rear frame bracket using (2) 3/8"-16 u-bolts P#(K1119) and (4) 3/8"-16 nylon flange locknuts P#(K2038). Leave the locknuts finger tight until the blower assembly has been installed. Refer to Figure 2-13.

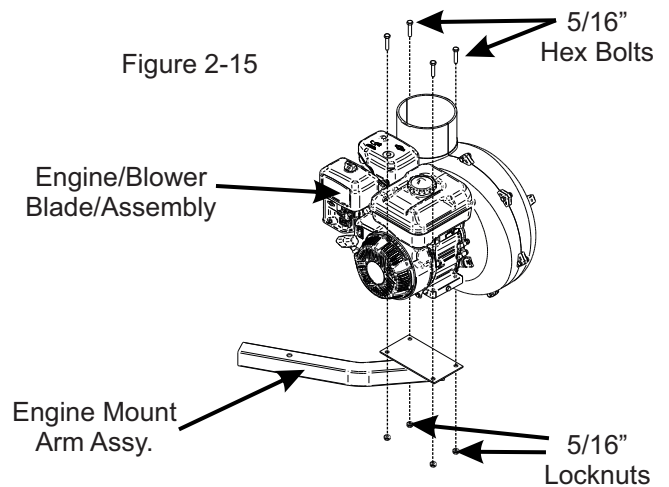


2-14 Engine Mount Arm Assembly Installation

Insert the engine mount arm assembly P#(A1824) into the end of the outer engine mount tube and secure using (1) detent pin P#(J0248). Refer to Figure 2-13.

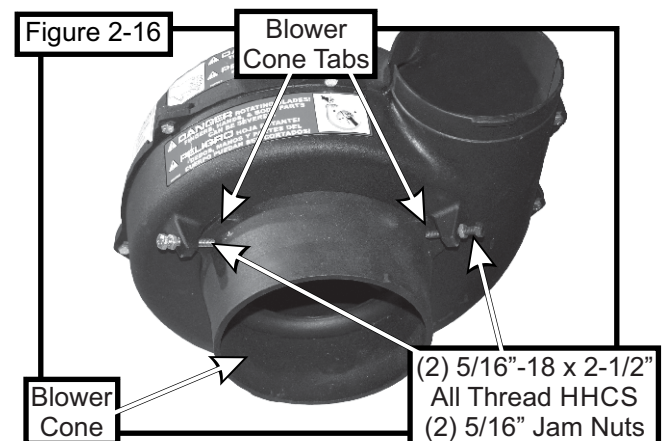
2-15 Engine/Blower/Blade Assembly Installation

Place the engine blower blade assembly on top of the engine mount arm. Secure the assembly using (4) 5/16"-18 x 1-1/2" HHCS P#(K1157) and (4) 5/16"-18 nylon flange lock nuts P#(K2516). Refer to Figure 2-15. Adjust the position of the blower assembly by sliding the engine mount tubes left or right. There should be a minimum of 1" clearance between the blower housing and the rear tire. Tighten all hardware in Section 2-13.



2-16 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. See Figure 2-16.



2-17 Impeller Blade Removal/Replacement

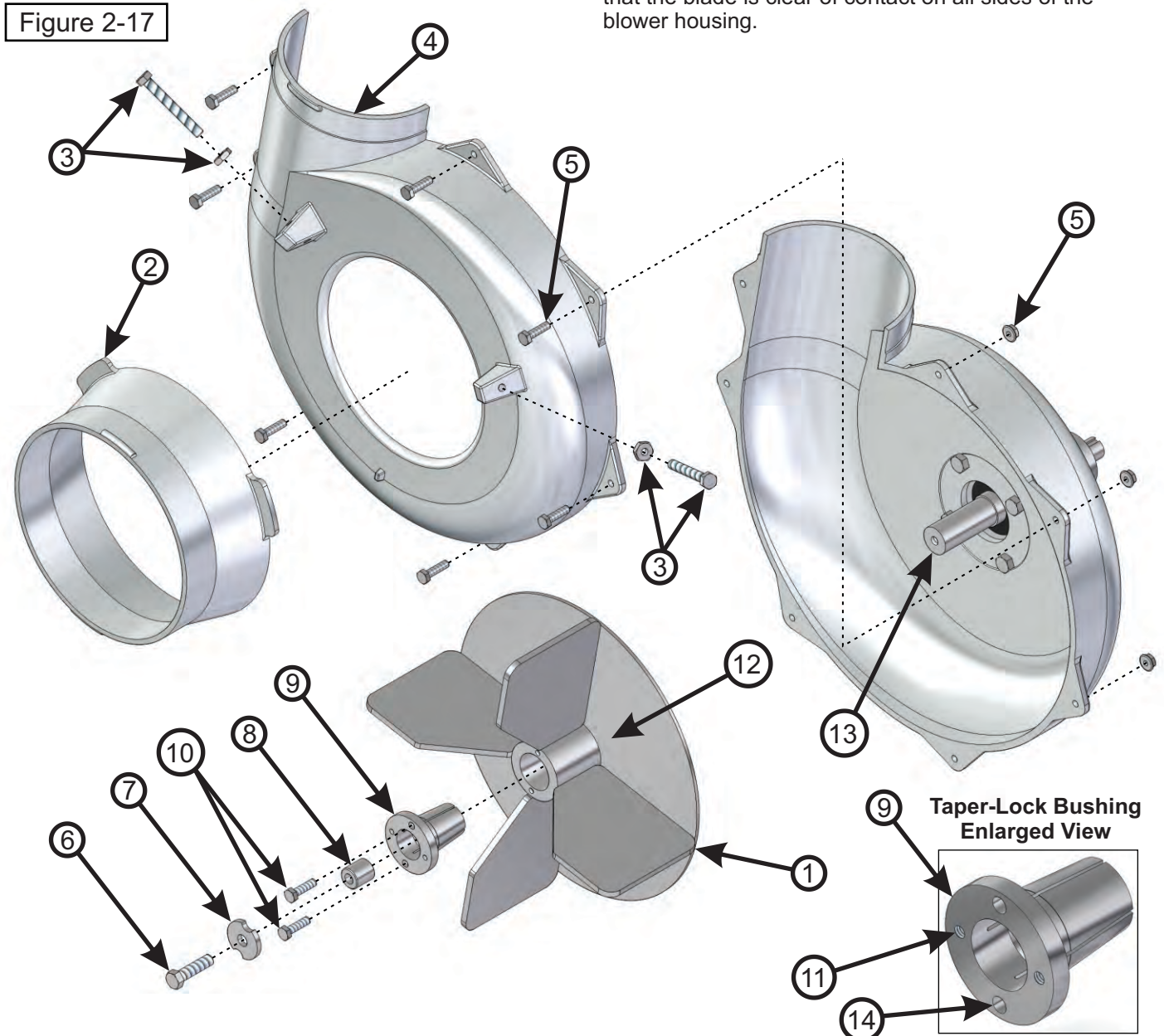
To gain impeller blade (#1) access, first remove the blower cone (#2) from the blower housing, located on the PTO assembly P#(A1821), by removing two blower cone bolts and nuts (#3). Next, remove the blower housing front (#4) by removing seven bolts and nuts (#5) around the outer housing edge. Refer to Figure 2-17.

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 2-17. 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.



Unit Model #: 23621222

Mower & Type: Bob-Cat ProCat SE (H & J-Series) & Predator Pro (J-Series)

Owner's Manual: Q0446

Mower Model: 942520H-J, 942521H-J, 942522H-J, 942523H-J, 942514J, 942515J

Deck Size: 52" & 61"

Vac Type: 12 Cu. Ft. Pro 12 DFS

Deck Type: DuraDeck

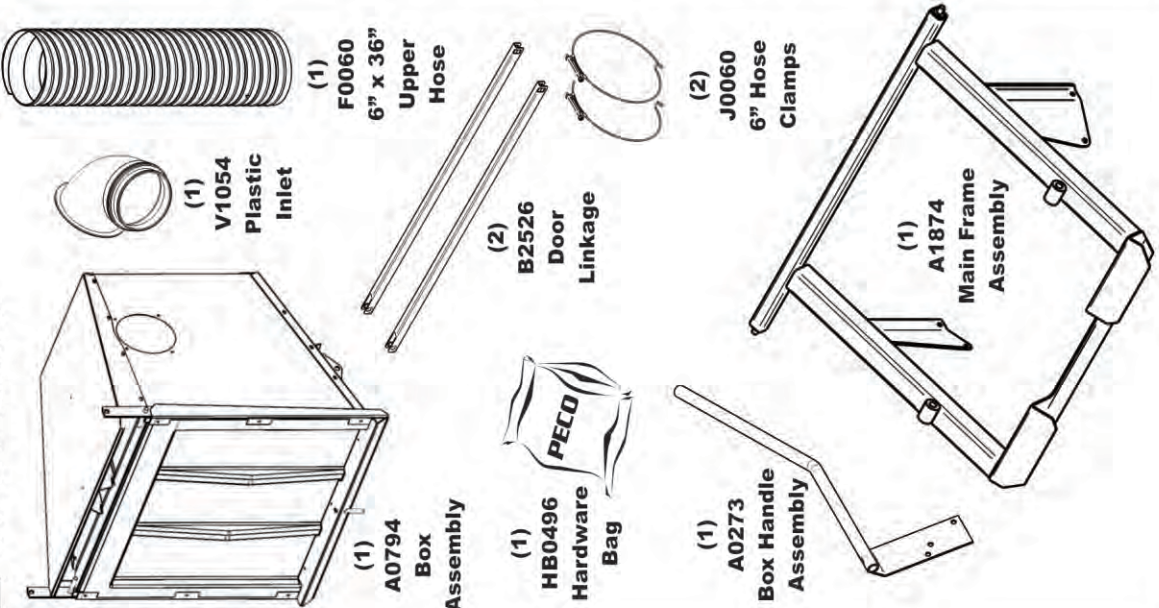
Drive Type: PTO Drive

Revision #: Final Release 10/18/2012

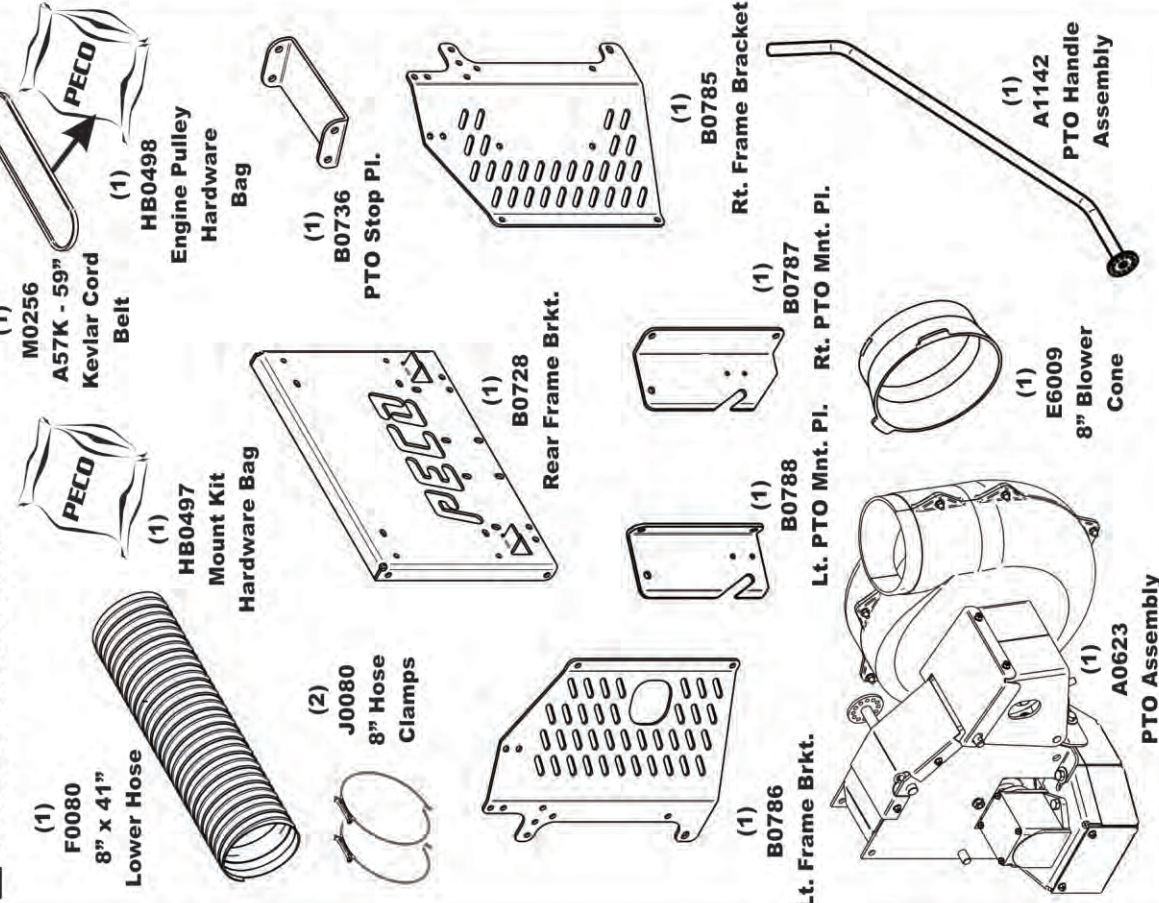
Fits Year(s): 2012 - 2013



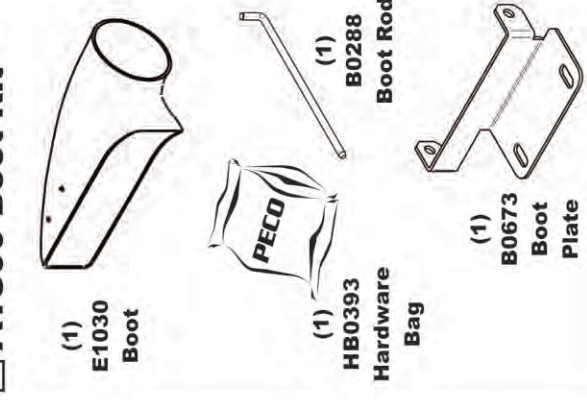
A1884 Vac Kit



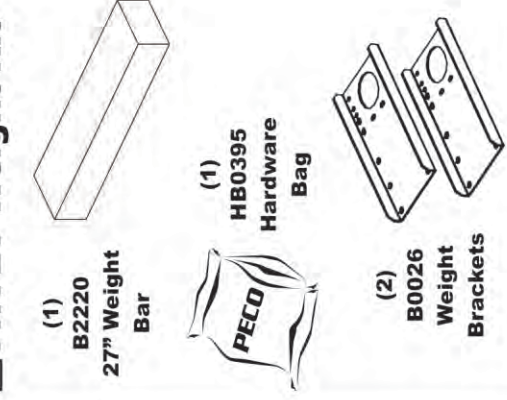
A1886 Mount Kit



A1800 Boot Kit



A1729 Weight Kit



Unit Model #: 23621223

Mower & Type: Bob-Cat ProCat SE (H & J-Series) & Predator Pro (J-Series)

Owner's Manual: Q0446

Mower Model: 942520H-J, 942521H-J, 942522H-J, 942523H-J, 942514J, 942515J

Deck Size: 52" & 61"

Deck Type: DuraDeck

Drive Type: Briggs and Stratton 900 Series

Revision #: Final Release 3/7/13

Fits Year(s): 2012 - 2013



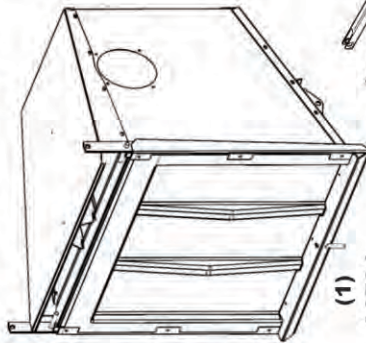
A1884 Vac Kit



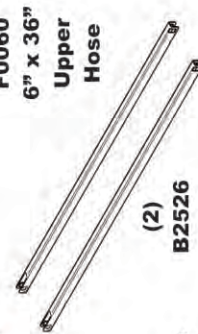
(1) F0060
6" x 36"
Upper
Hose



(1) V1054
Plastic
Inlet



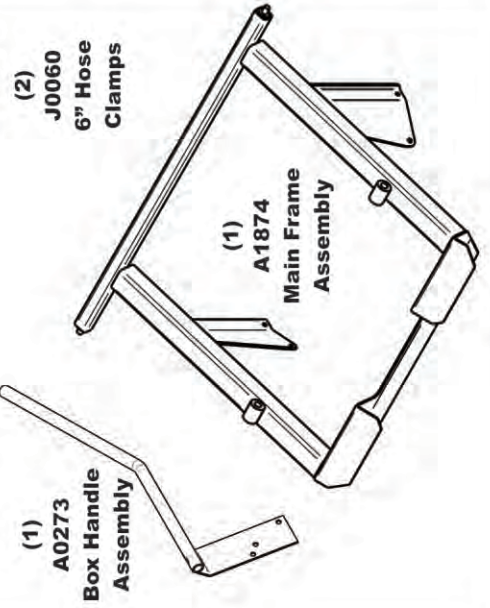
(1) A0794
Box
Assembly



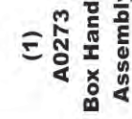
(2) B2526
Door
Linkage



(1) HB0496
Hardware
Bag

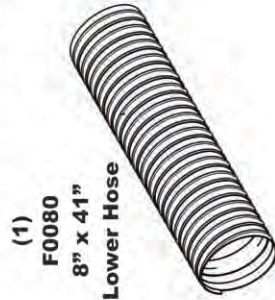


(1) A1874
Main Frame
Assembly



(1) A0273
Box Handle
Assembly

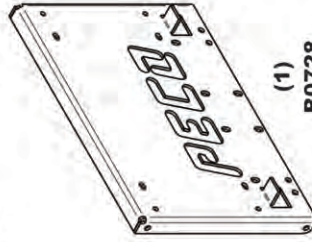
A1894 Mount Kit



(1) F0080
8" x 41"
Lower
Hose



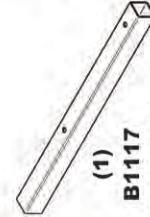
(2) J0080
8" Hose
Clamps



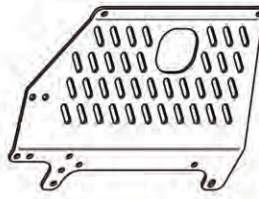
(1) B0728
Rear Frame Brkt.



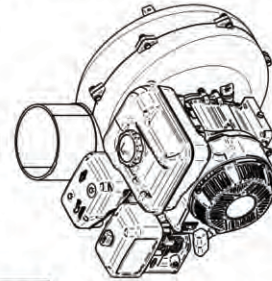
(1) A1824
Engine Mnt.
Arm Assy.



(1) B1117
Outer Engine
Mount Tube



(1) B0786
Lt. Frame Brkt.



(1) A602
Engine/Blower
Blade
Assembly



(1) E6009
8" Blower
Cone

A1800 Boot Kit



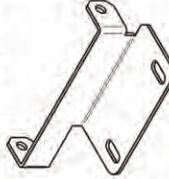
(1) E1030
Boot



(1) HB0393
Hardware
Bag

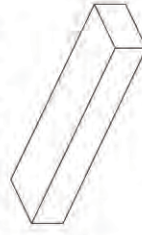


(1) B0288
Boot Rod



(1) B0673
Boot
Plate

A1729 Weight Kit



(1) B2220
27" Weight
Bar

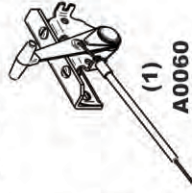


(1) HB0395
Hardware
Bag

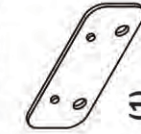


(2) B0026
Weight
Brackets

A0619 Throttle Kit



(1) A0060
70° Throttle



(1) A0666
Throttle
Mnt. Pl.
Assy.



(1) HB0249
Hardware
Bag

(1) B0785
Rt. Frame Bracket

Unit Model #: 23621224

Mower & Type: Bob-Cat ProCat SE (H & J-Series) & Predator Pro (J-Series)

Owner's Manual: Q0446

Mower Model: 942520H-J, 942521H-J, 942522H-J, 942523H-J, 942514J, 942515J

Deck Size: 52" & 61"

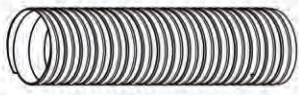
Deck Type: DuraDeck

Drive Type: Briggs & Stratton 6.5HP Vanguard

Revision #: Final Release 3/7/13

Fits Year(s): 2012 - 2013

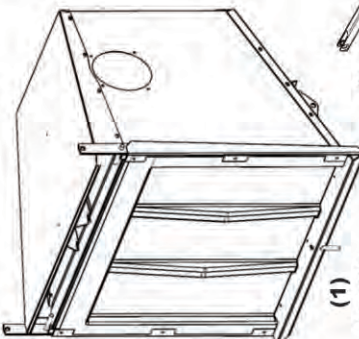
☐ A1884 Vac Kit



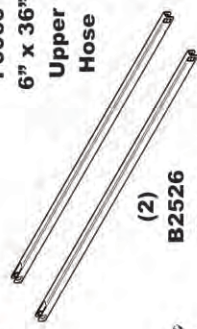
(1) F0060
6" x 36"
Upper
Hose



(1) V1054
Plastic
Inlet



(1) A0794
Box
Assembly



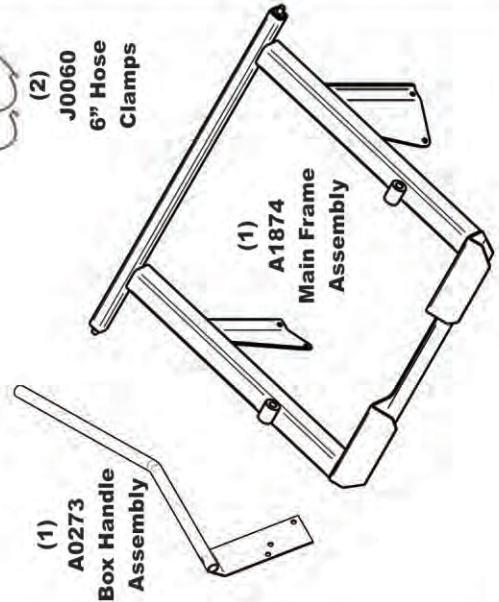
(2) B2526
Door
Linkage



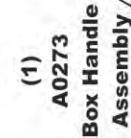
(1) HB0496
Hardware
Bag



(2) J0060
6" Hose
Clamps

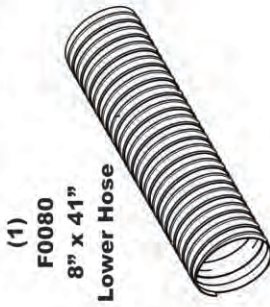


(1) A1874
Main Frame
Assembly



(1) A0273
Box Handle
Assembly

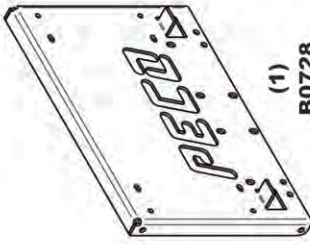
☐ A1895 Mount Kit



(1) F0080
8" x 41"
Lower Hose



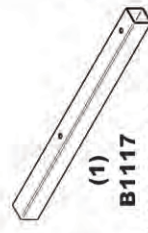
(2) J0080
8" Hose
Clamps



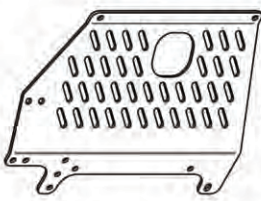
(1) B0728
Rear Frame Brkt.



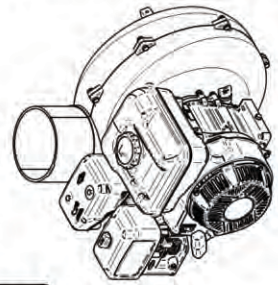
(1) A1824
Engine Mnt.
Arm Assy.



(1) B1117
Outer Engine
Mount Tube



(1) B0786
Lt. Frame Brkt.



(1) A639
Engine/Blower
Blade
Assembly



(1) E6009
8" Blower
Cone

☐ A1800 Boot Kit



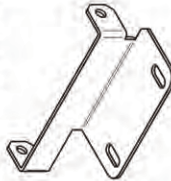
(1) E1030
Boot



(1) HB0393
Hardware
Bag

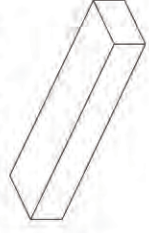


(1) B0288
Boot Rod



(1) B0673
Boot
Plate

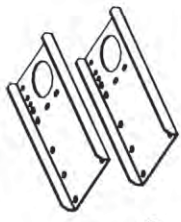
☐ A1729 Weight Kit



(1) B2220
27" Weight
Bar



(1) HB0395
Hardware
Bag

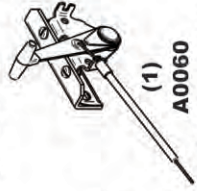


(2) B0026
Weight
Brackets

☐ A0619 Throttle Kit



(1) A0666
Throttle
Mnt. Pl.
Assy.



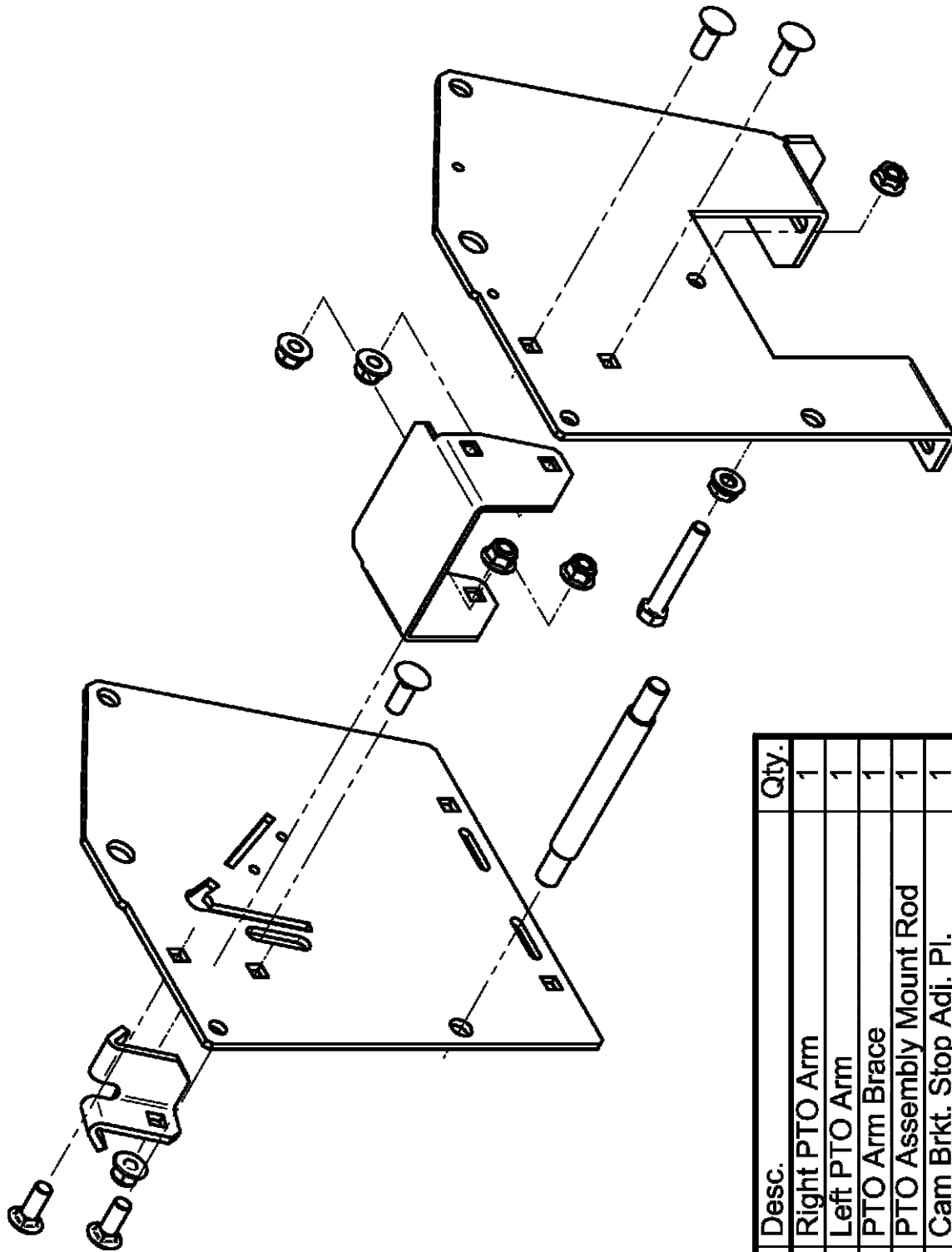
(1) A0060
70" Throttle



(1) HB0249
Hardware
Bag

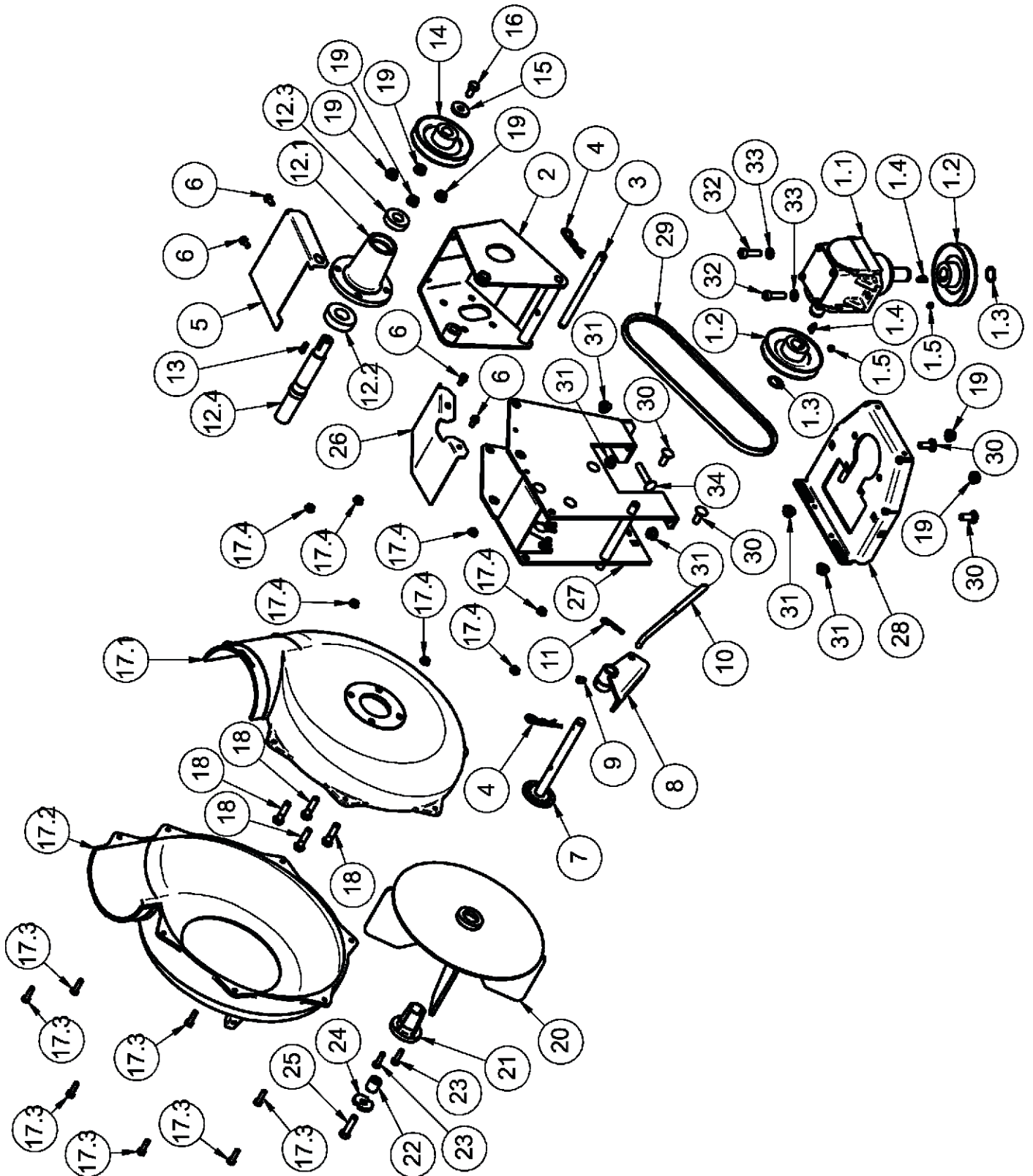


A1841_01 PTO Arm Assembly



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"-16X21/2" HHCS	1
8	K1182	Carriage Bolt 3/8"-16x1"	5
9	K2038	Ny-Flange Lock Nut 3/8"-16	5

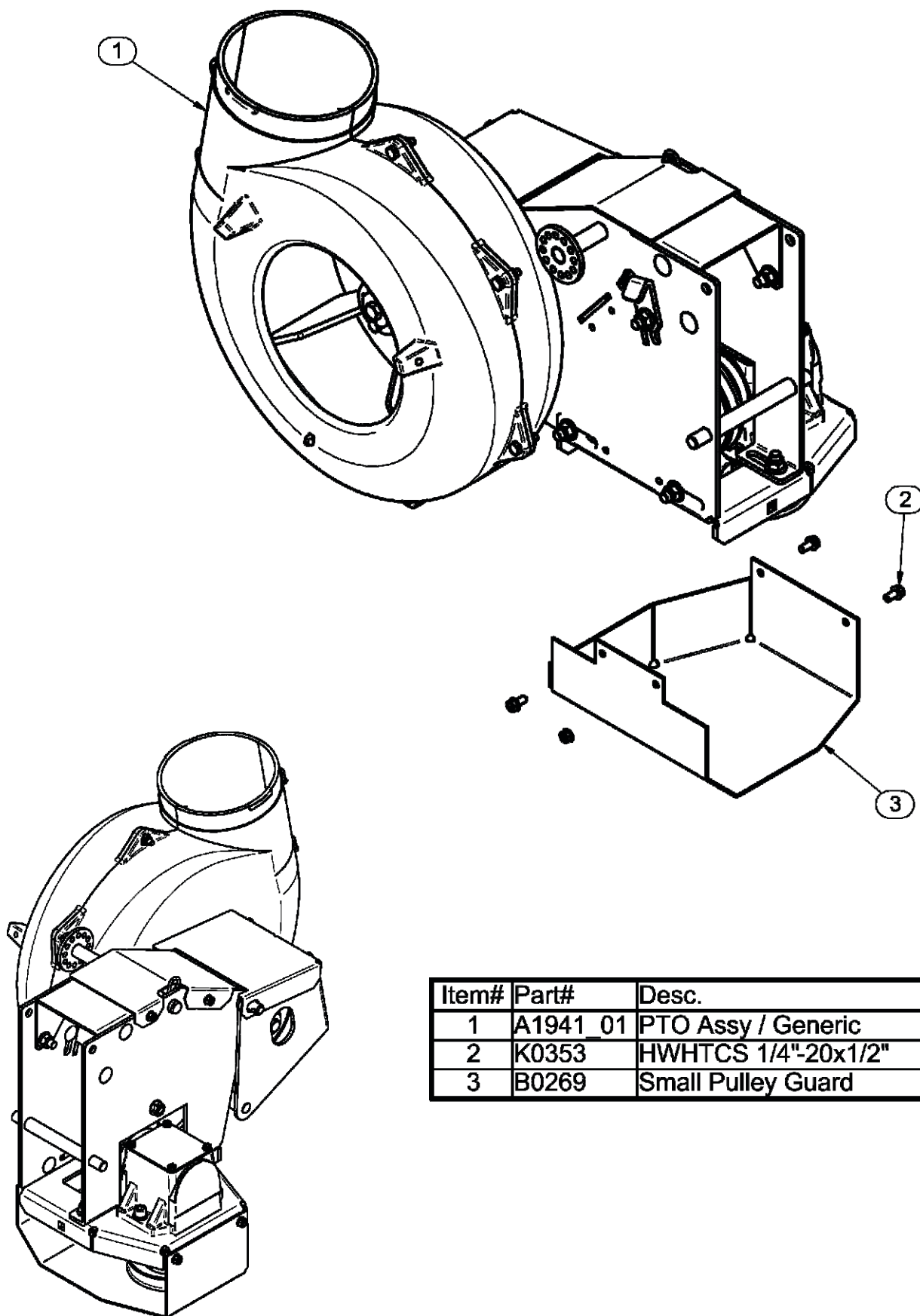
A1941_01 PTO Base Assembly Exploded Parts View



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

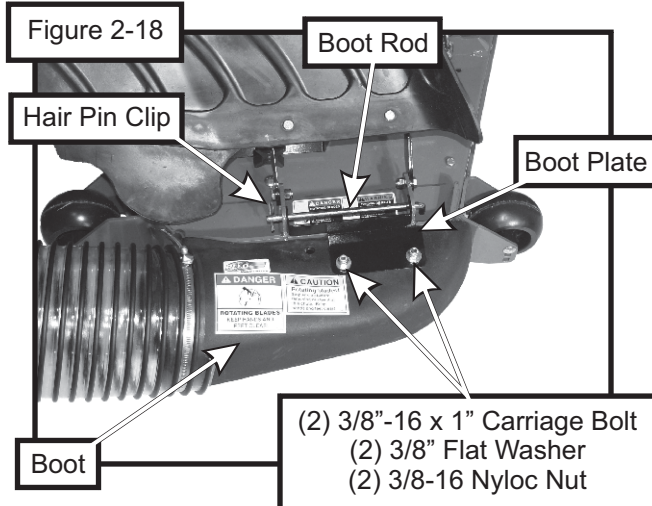
A0623 PTO Assembly w/ Small Pulley Guard Exploded Parts View



Item#	Part#	Desc.	Qty.
1	A1941 01	PTO Assy / Generic	1
2	K0353	HWHTCS 1/4"-20x1/2"	4
3	B0269	Small Pulley Guard	1

2-18 Boot to Mower Deck Installation

Secure the boot plate P#(B0673) to the mower deck using (1) boot rod P#(B0288) and (1) hair pin clip P#(K0099). Secure the boot P#(E1030) to the boot plate using (2) 3/8"-16 x 1" carriage bolt P#(K1182), (2) 3/8" flat washer P#(K0047), and (2) 3/8"-16 nyloc nut P#(K1216). Insert the carriage bolt from the inside of the boot so that the threads are on the outside. This will prevent grass clippings from collecting on the threads. Refer to Figure 2-18.

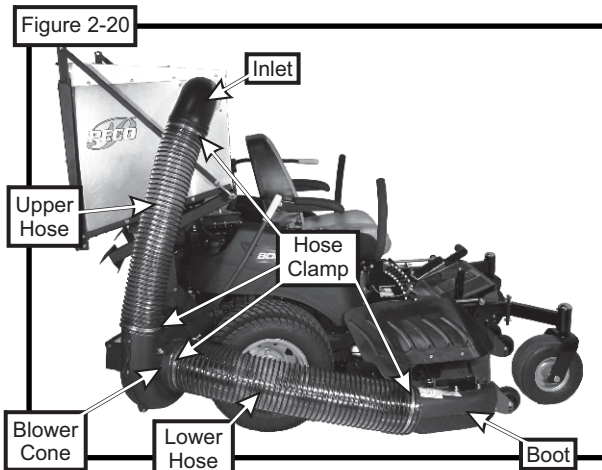


2-19 Length Of Hose Adjustment

The hoses in steps (2-20) and (2-21) must be cut to fit your machine. Do not cut the hoses until you have tried to fit them on your machine. Remember that the hoses have to be long enough to adjust for the blower assembly's movement as well as allow for enough clamping surface between the inlet, blower assembly and the deck boot.

2-20 Upper Hose Installation

Slide a 2"-10" hose clamp P#(J1000) over both ends of the upper hose. Then slide one end of the 6" upper 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" upper hose onto the outlet of the blower assembly (Figure 2-20). Tighten the hose clamps.



2-21 Lower Hose To Blower Cone Installation

Slide a 2"-10" upper hose clamp P#(J1000) over both ends of the 8" lower hose. Then proceed to slide the 8" lower hose onto the blower cone. Tighten the hose clamp (Figure 2-20).

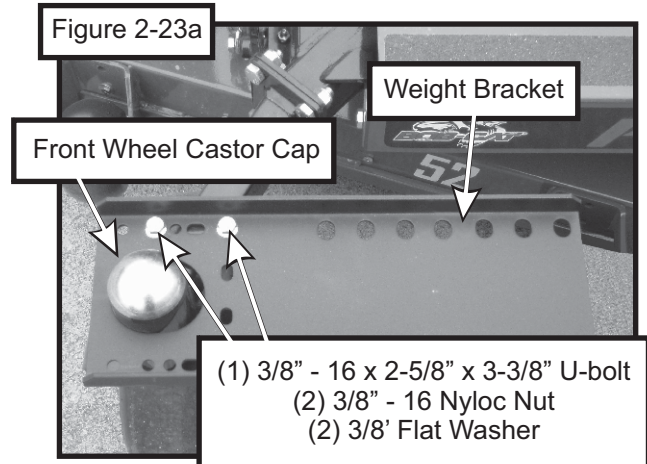
2-22 Lower Hose To Boot Installation

Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the 2"-10" hose clamp P#(J1000) to secure the hose to the boot.

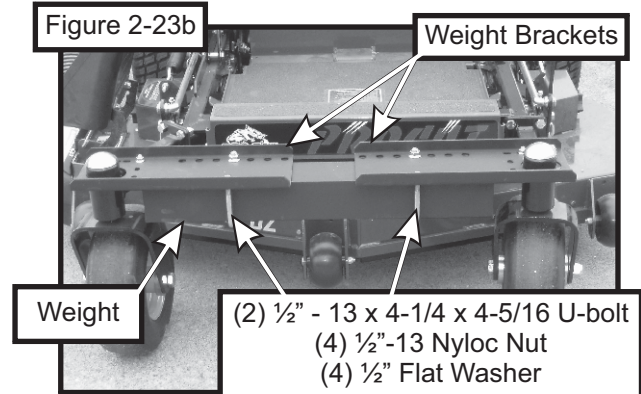
NOTE: Before tightening the hose clamp, rotate the lower hose counter clockwise approximately 1" and then tighten the clamp. This will hold the bottom edge of the boot tight to the mower deck.

2-23 Front Weight Assembly

NOTE: A floor jack should be used to help position weights onto the brackets. When installing the weights you should have another person to help position the weights. Align the weight bracket holes over the front wheel castor cap (Figure 2-23a). Secure brackets with (1) 3/8"-16 x 2-5/8" x 3-3/8" U-bolt P#(K1460), (2) 3/8" flat washers P#(K0047) and (2) 3/8"-16 nyloc nuts P#(K1216) per side. The U-bolt is inserted from the bottom. Repeat steps for weight bracket on opposite side.



Position the weight P#(B0026) under the weight brackets and secure with (1) 1/2"-13 x 4-1/4" x 4-5/16" U-bolt P#(K0331), (2) 1/2" flat washers P#(K0055) and (2) 1/2"-13 nyloc nuts P#(K1247) per side (Figure 2-23b).



2-25 Throttle Cable Installation

NOTE: Engine Driven Models Only

To install the throttle cable kit to the ROPS (roll over protection system), place the 3/8" U-Bolt P#(K0136) onto the ROPS with the threads facing the front of the mower. Next slide on the throttle mount plate assembly P#(A0666) with the rivets also facing toward the front of the mower. Tighten the throttle mount plate assembly securely to the ROPS using (2) 3/8"16 nylon flange lock nuts P#(K2038) (Figure 2-25a). With the throttle cable facing toward the engine/blower/blade assembly, place the throttle base plate over the rivets, Slide the throttle cable kit to the right, moving the smaller end of the slot over the rivets. When positioned correctly, the throttle spring plate will snap into place (Figure 2-25b).

To remove the throttle cable kit, lift the throttle spring plate and slide the throttle kit to the left.

Route cable over the upper hose as shown in Figure 2-25c.

Figure 2-25a

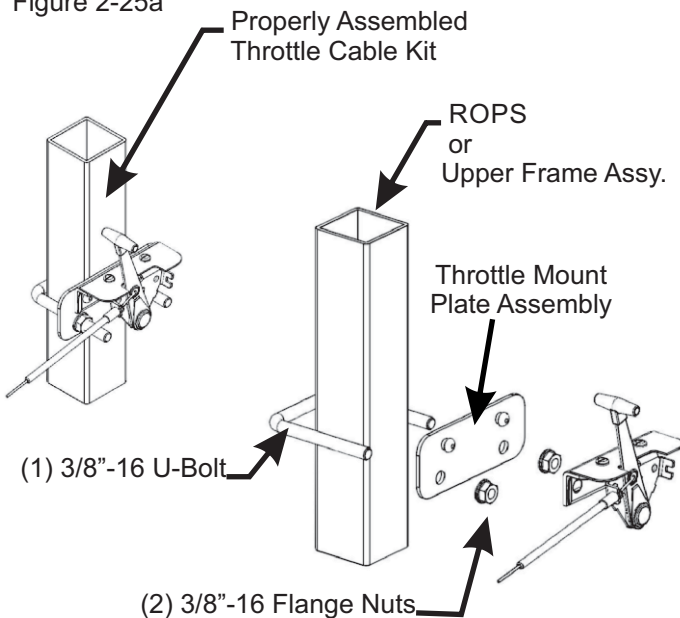


Figure 2-25b

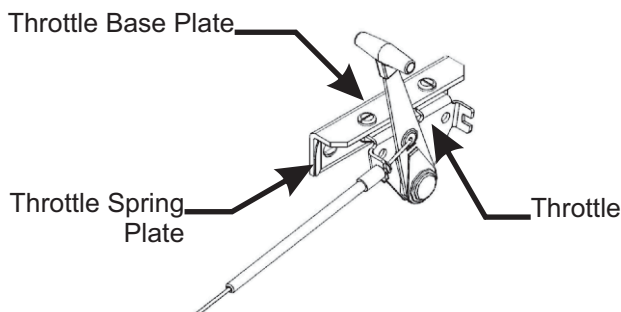
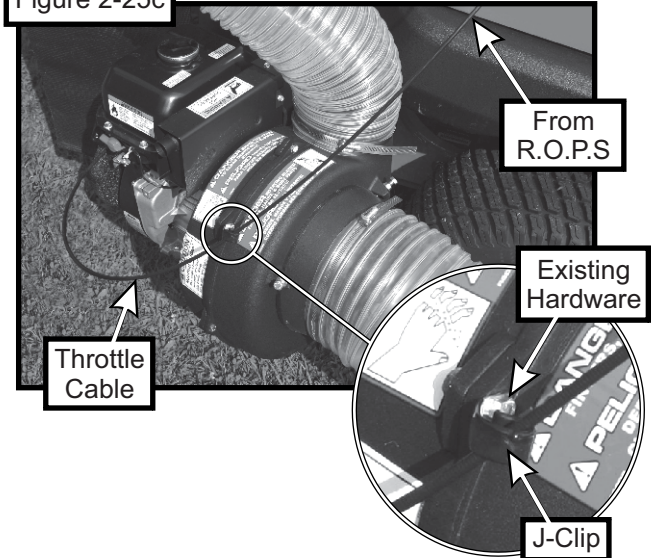


Figure 2-25c

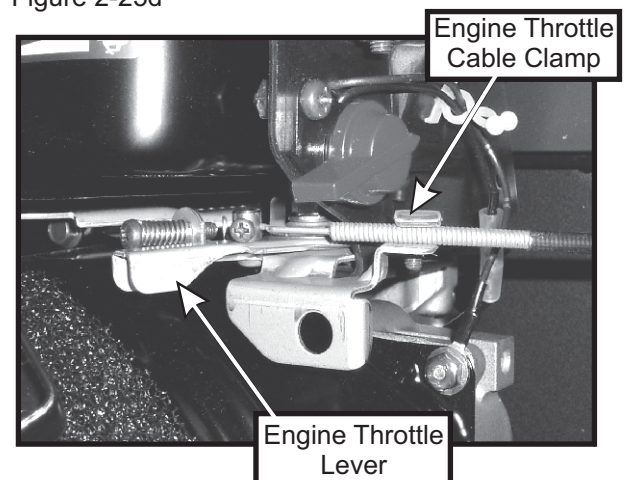


Secure the throttle cable to the blower housing assembly using (1) J-Clip P#(K1455). Use the existing hardware from the blower housing to secure the J-Clip, as shown in Figure 2-25c.

To fasten the throttle cable end to the engine, place the throttle control lever into the "stop" position. Rotate the engine throttle lever to the "stop" position. Thread the wire end of the throttle cable into the engine throttle lever eyelet and tighten the screw. Fasten the throttle cable sleeve to the clamp on the engine throttle (Figure 2-25d). Rotate the throttle control lever into the "fast" position to check for proper installation.

NOTE: Cable sleeve may need to be cut, depending on the engine type. Once throttle cable is attached, lift the plastic top assembly and make sure that the throttle cable does not interfere with the movement of the plastic top.

Figure 2-25d



SECTION III OPERATING INSTRUCTIONS

General Safety

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

Operation And Tips On Mowing

PTO MODELS

- A. Perform BEFORE EACH USE the maintenance list in the next section.
- 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 blower engaged, you can proceed to operate the control levers of the mower.

ENGINE DRIVEN MODELS

- A. Perform BEFORE EACH USE the maintenance list in the next section.
- B. Start the engine/blower/blade assembly.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. Proceed to operate the control levers of the mower.

NOTE: If the collection system does not appear to be collecting the grass clippings, disengage the deck and PTO assembly, then, engage the parking brake and turn the mower off. Check upper and lower hoses for any clogs. To obtain the maximum effectiveness from your collection system, the tips listed below should be followed:

- * Watch your speed- Normal conditions will allow a speed of up to approximately 4 mph, but thick, heavy damp conditions will require reduced ground speed.
- * Mow with sharp blades- A sharp blade cuts cleaner.
- * Wet grass and leaves will decrease effectiveness and will increase horsepower requirements.
- * Mow at higher cutting heights- Remove and mulch no more than 2" of grass length with each mowing. (Experts recommend not cutting off more than 1/3 of the grass blade length at any given time.)
- * Mow twice, at different height settings, (high, then low), if grass is extra tall.
- * Remember that horsepower requirements will vary with the mowing conditions such as type and height of turf grass, moisture content, amount of leaves, whether the terrain is flat or hilly, etc.

Disengagement Of The PTO Assembly

PTO MODELS

- A. To disengage the PTO assembly, move Bagger PTO switch to the off position.

WARNING: The PTO assembly blades will continue to spin. DO NOT TOUCH the PTO assembly, pulleys, or the belt until the tractor is turned off. DO NOT adjust the belt tension until the mower is turned off. Refer to the Belt Installation section of the manual.

ENGINE DRIVEN MODELS

- B. (Briggs & Stratton 900 Series) To stop the engine, throttle the engine to the stop position.
- C. (6.5HP Briggs & Stratton Vanguard) To stop the engine, move the fuel lever to the OFF position.

Unloading The Collection System

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

- A. Stop the forward movement of the mower.
- B. Disengage the mower deck.
- C. Disengage the PTO assembly.
- D. Engage the parking brake.
- E. Once the parking brake has been engaged, then and only then, walk behind the mower and check the collection bags by first unhooking the rubber strap with S-hook that secures the plastic top, then lift the plastic hood. Load in bags should not exceed the height of the installed bag.
- F. To remove the bags from the frame, slide bags out and turn bags over to deposit clippings.
- G. Slide empty bags back onto the frame and secure plastic top with the rubber strap with S-hook.

NOTE: Do not allow collection bags to become over-filled as potential damage may occur to your equipment. Also, be sure to clean the hood screen as needed.

SECTION IV MAINTENANCE

Maintenance Checklist

Before each use:

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

3. Make sure all shields are in place and in good condition. Repair or replace any missing or damaged shields.
4. Perform lubrication per instructions.
5. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
6. **PTO MODELS ONLY:** With the engine off, engage the blower assembly. Check the belt tension and inspect the pulley belt for cracks or tears.
7. Check for wear or deterioration of the upper or lower hoses. If there are any portions of the hose that have been torn or worn through, replace immediately.

After Each Use:

1. Clean all debris from machine especially from the container, underneath the belt shields, and safety decals. Replace any missing or illegible decals.
2. Inspect the unit for worn or damaged components. Repair or replace before the next use. Any replacement component installed during repair shall include the component's current safety decal specified by the manufacturers to be affixed to the component.
3. Under normal usage, the bag material is subject to deterioration and wear and should therefore be frequently checked for necessary replacement. Any replacement bag should be checked to ensure compliance with the original manufacturer's recommendations or specifications.
4. Check belt for proper tension.

4-2 Lubrication

Gearbox:

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

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

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

Blower Assembly:

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

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

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

SECTION V - PARTS & SERVICE

5-1 Parts And Service Information

Collection system owners should record the name and telephone number of their Service Center. Your Service Center will be happy to supply replacement parts, accessories, and do any service or repairs to your collection system. If for any reason your Service Center is unable to service your collection system or supply replacement parts, contact New PECO, Inc. and include the following information on the chart below.

DOCUMENT THE FOLLOWING INFORMATION FOR FUTURE REFERENCE

Unit Model Number: _____

Unit Engine Size: _____

Unit Serial Number: _____

Date of purchase: ____ / ____ / ____

Dealer/Distributor Name: _____

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

Phone Number: _____

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

SAFETY DECALS

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



R2008



R2007



Part #: R1049
Operation



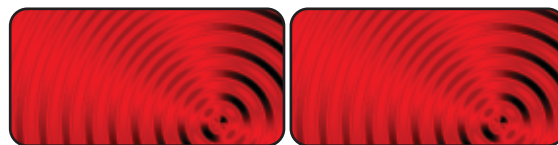
Part #: R1069
Warning - Turn Off Blower



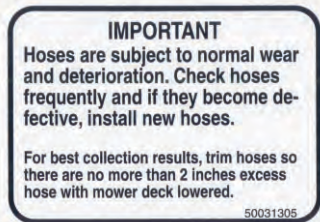
Part #: R1053
Caution - Keep Hands
And Body Clear



Part #: R1055
Dump Grass



Part #: R1057
Red Reflector Label



Part #: R1054
Important - Hose Wear



Part # R0024
Danger - Keep Hands
Clear



Part# R0022
Designed & Built
In The USA



Part #:R4008
Caution - Rotating Blades!



Part # R0025
Danger - Rotating
Blades



Part #: R1051
Warning - Hearing Protection



Part #:R1083
Engage/Disengage



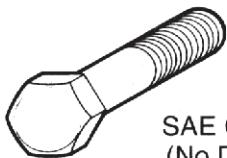
Part #: R1070
PECO Logo

TORQUE SPECIFICATIONS

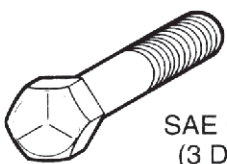
Proper torque for American fasteners used on equipment.
Recommended Torque in Foot Pounds (Newton Meters).*

AMERICAN

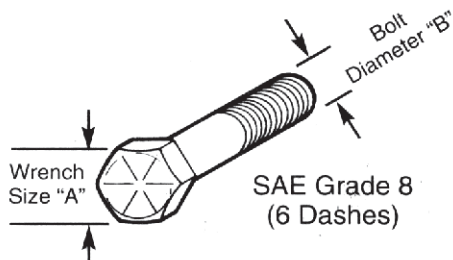
Bolt Head Markings



SAE Grade 2
(No Dashes)



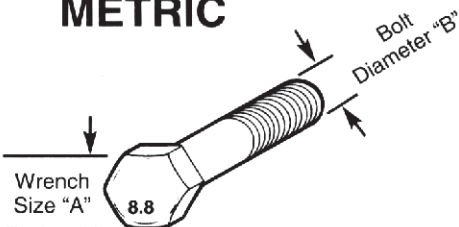
SAE Grade 5
(3 Dashes)



SAE Grade 8
(6 Dashes)

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

METRIC



Numbers appearing on bolt heads indicate ASTM class.

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

WRENCH SIZE (mm) "A"	BOLT DIA. (mm) "B"	ASTM 4.6	ASTM 8.8	ASTM 9.8	ASTM 10.9
8	5	1.8 (2.4)		5.1 (6.9)	6.5 (8.8)
10	6	3 (4)		8.7 (12)	11.1 (15)
13	8	7.3 (10)		21.1 (29)	27 (37)
16	10	14.5 (20)		42 (57)	53 (72)
18	12	25 (34)	74 (100)	73 (99)	93 (126)
21	14	40 (54)	118 (160)	116 (157)	148 (201)
24	16	62 (84)	167 (226)	181 (245)	230 (312)
30	20	122 (165)	325 (440)		449 (608)
33	22		443 (600)		611 (828)
36	24	211 (286)	563 (763)		778 (1054)
41	27		821 (1112)		1138 (1542)
46	30	418 (566)	1119 (1516)		1547 (2096)

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

NOTES



**10 WALDEN DRIVE
ARDEN, NORTH CAROLINA 28704
(800) 438-5823 OR (828) 684-1234 FAX: (828) 684-0858
EMAIL: peco@lawnvac.com
WEBSITE: www.lawnvac.com**