

PTO GRASS COLLECTION SYSTEM

PRO 3 BAGGER

DESIGNED FOR THE
BOB-CAT PROCAT & PREDATOR PRO
G-SERIES & F-SERIES 2008-2012



OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

PECO GRASS COLLECTION SYSTEM

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Safety

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

SAFETY

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

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

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

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

Safety Alert Symbol



This Safety Alert Symbol means: "ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!"

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

Safety Signs

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



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

White letters on RED



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

Black letters on **ORANGE**

It may also be used to alert against unsafe practices.



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

Black letters on YELLOW

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 (On most products, see owners manual for specifics) 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, as PECO elects, without charge if the defect appears within 90 days from the date of installation of such part or before the expiration of the original warranty period, whichever is later.

B. SECURING WARRANTY ADJUSTMENTS.

Call PECO for Return Authorization. Damaged or broken parts other than engines or batteries, must be returned to New PECO Inc., 100 Airport Road, 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. ANY MACHINE USED FOR RENTAL PURPOSES ARE GUARANTEED FOR 45 DAYS FROM DATE OF ORIGINAL SALE ONLY.

H. REMEDIED EXCLUSIVE.

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

1. NO SERVICE CENTER WARRANTY.

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

SECTION I INTRODUCTION AND DESCRIPTION

1-1 Introduction

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

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

1-2 Description

The 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 good for picking up leaves and twigs in pre-season and post-season cleanup. 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 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

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 13-16.

G-Series Mowers

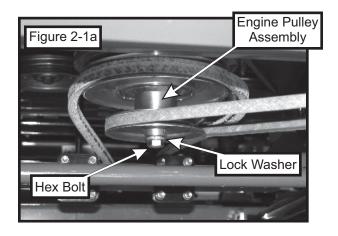
From the underside of the engine remove the bolt and bushing from the electric clutch assembly. Replace these parts with the engine pulley assembly #20 P#(A1798), 7/16" lock washer P#(K0140), and 7/16"-20 x 3-1/4" HHCS P#(K0351).

F-Series Mowers

From the underside of the engine remove the bolt and bushing from the electric clutch assembly. Replace these parts with the engine pulley assembly #2 P#(A0419), 7/16" lock washer P#(K0140), and 7/16"-20 x 3-3/4" HHCS P#(K0350).

The added pulley will power the collection system. Note that the center of the hub that is extended should be upward toward the engine (Figure 2-1a). Torque the bolt to 55 ft./lbs.

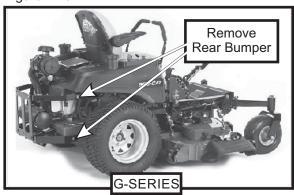
NOTE: It may be necessary to remove the drive belt from the deck pulley before removing the bushing. Refer to your Bob-Cat owner's manual.



G-SERIES

Remove the bumper from the rear frame of the mower before proceeding.

Figure 2-1a



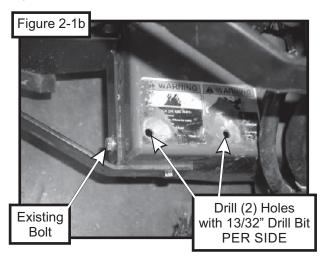
On the rear right side of the mower chassis drill two 13/32" holes. There are several ways of doing this, the best is to remove the bolt that connects the lower rear bumper to the mower's chassis (Figure 2-1b) and loosely fasten the PTO assembly P#(A0739) with the existing bolt and nut to use as a template. Use a center punch to mark the holes, then remove the PTO assembly to drill the holes. See Page 6 for more clarity.

Another way to mark the holes is to use the full scale drill template to center-punch the holes (Page 21), or by using the dimensions provided on the drill template for laying out the holes. We recommend when laying out the holes to use a square and a metal scribe.

F-SERIES

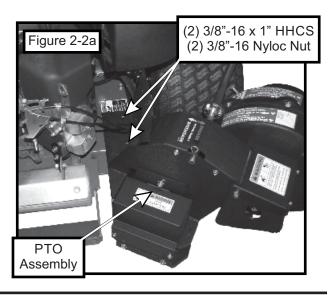
On the rear right side of the mower chassis drill two 13/32" holes. There are several ways of doing this, the best is to remove the bolt that connects the lower rear bumper to the mower's chassis and loosely fasten the PTO assembly P#(A0739) with the existing bolt and nut. Use the existing holes in PTO assembly and mark holes onto mower chassis. Use a center punch to mark the holes, then remove the PTO assembly to drill the holes. Refer to Figure 2-1b.

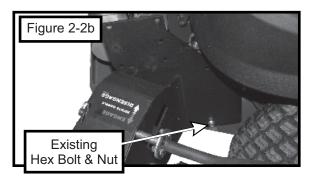
Another way to mark the holes is to use the full scale drill template to center-punch the holes or by using the dimensions provided on the drill template for laying out the holes (see page 21 for template). We recommend using a square and a metal scribe when laying out the drill pattern.



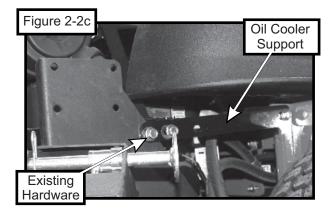
2-2 PTO Assembly Installation

With the rear bumper removed, position the PTO assembly P#(A0739) as shown in Figure 2-2a. Secure the PTO assembly to the rear frame of the mower with (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nyloc nut P#(K1216). Also use (1) existing hex bolt and nut removed from the rear bumper, as shown in Figure 2-2b.



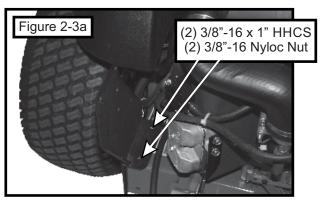


G-SERIES: Secure the oil cooler support to the PTO assembly using existing hardware from the bumper removal. It may be necessary to loosen all hardware on the oil cooler support in order to align the mounting hole on the frame leg. Once the support is secured, tighten all hardware. Refer to Figure 2-2c.

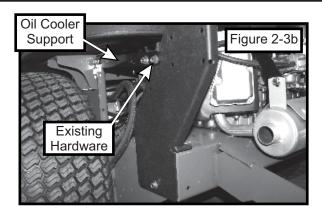


2-3 Left Lower Frame Leg Assembly Installation (<u>G-SERIES ONLY</u>)

Position the left lower frame leg assembly P#(A0681) as shown in Figure 2-3a. Secure the frame leg to the mower frame using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nyloc nut P#(K1216). Also use (1) existing hex bolt and nut removed from the rear bumper, as shown in Figure 2-3a.

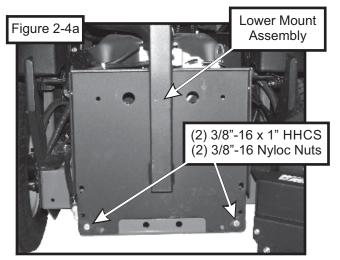


Secure the oil cooler support to the left lower frame leg using existing hardware from the bumper removal. It may be necessary to loosen all hardware on the oil cooler support in order to align the mounting hole on the frame leg. Once the support is secured to the leg, tighten all hardware. Refer to Figure 2-3b.

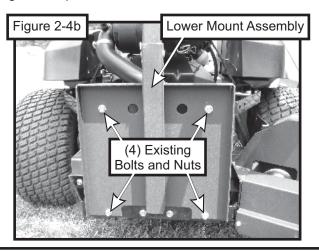


2-4 Lower Mount Assembly Installation

<u>G-SERIES:</u> Position the lower mount assembly P#(A0672) as shown in Figure 2-4a. Secure the lower mount assembly to the rear frame of the mower using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nyloc nut P#(K1216).

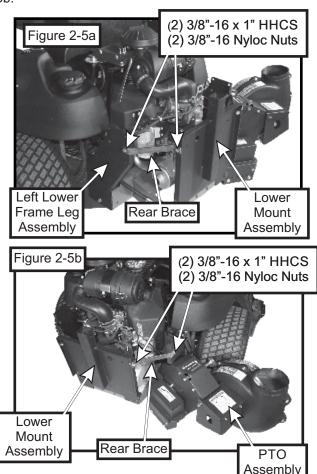


F-SERIES: To mount the lower mount assembly P#(A0672) to the rear of the mower, first remove the mower's (4) existing nuts and bolts. Once the nuts and bolts are removed place the lower mount assembly onto the rear of the mower, and secure using the (4) existing nuts and bolts that were removed from the mower (Figure 2-4b).



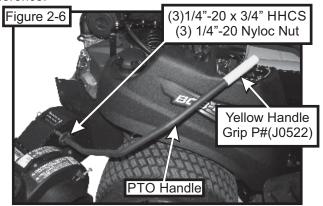
2-5 Rear Brace Installation (G-SERIES ONLY)

Secure (1) rear brace P#(B0668) to the left lower frame leg assembly and the lower mount assembly using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nyloc nuts P#(K1216) as shown in Figure 2-5a. Secure (1) rear brace P#(B0668) to the PTO assembly and to the lower mount assembly using (2) 3/8"-16 x 1" HHCS P#(K1191) and (2) 3/8"-16 nyloc nuts P#(K1216) as shown in Figure 2-5b.



2-6 PTO Handle Installation

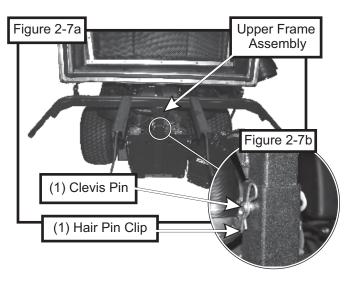
Mount the PTO handle P#(A0626) to the PTO assembly using (3) 1/4"-20 x 3/4" HHCS P#(K1222) and (3) 1/4"-20 nyloc nuts P#(K1128). Refer to Figure 2-6 for reference.



2-7 Upper Frame Assembly Installation

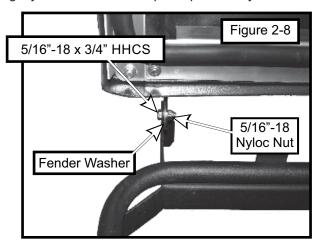
NOTE: During this step, it is suggested that two people install the upper frame to the lower mount tube.

Using (2) people to lift the upper frame P#(A0585), lift the upper frame above the lower mount assembly P#(A0672) making sure the frame is pointing away from the mower (Figure 2-7a). Slide the upper frame tube into the lower mount assembly aligning the mounting hole. Insert (1) $\frac{1}{2}$ " x 2-1/2" clevis pin P#(K0133) through the hole and fasten with (1) $\frac{5}{32}$ " x 2-5/8" hair pin clip P#(K0088) as shown in Figure 2-7b.



2-8 Top Assembly To Upper Frame Assembly Installation

Align the pivot brackets of the top assembly P#(A0551) to the pivot point on either side of the upper frame assembly. Place (1) P#(K0041) fender washer between each pivot point (Figure 2-8) and fasten each side by using (1) P#(K1153) 5/16"-18 x 3/4" HHCS and (1) P#(K1180) 5/16"-18 nyloc nut. When fastening leave nut slightly loose so that the top can pivot freely.

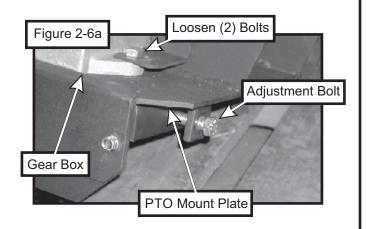


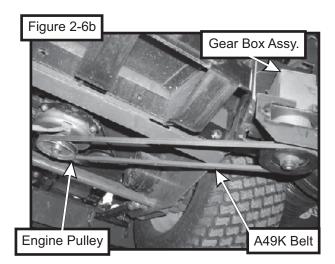
2-9 Belt Installation/Removal and Adjustment

Loosen the (2) bolts that secure the gear box assembly P#(A0739) to the PTO mount plate (Figure 2-9a). Loosen the adjustment bolt P#(K0348) until the gear box assembly is at it's far left adjustment, (the gear box is moved towards the mower's engine pulley). Connect the A49K kevlar chord belt P#(M0243) from the engine pulley to the lower gear box pulley (Figure 2-9b).

To tension the drive belt, turn the adjustment bolt clockwise until there is 1" of deflection, with 10-11 lbs. of pressure between the engine pulley and the gear box pulley.

Once the correct tension of the belt is achieved, tighten the (2) bolts that secure the gear box assembly.

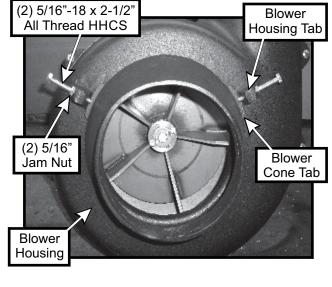




2-10 Blower Cone Installation

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 2-10 for reference.

Figure 2-10



2-11 Impeller Blade Removal/Replacement

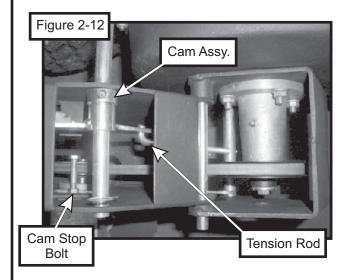
To Remove: First remove the 3/8"-16 x 1-1/2" HHCS P#(K1211) (#1), taper lock bushing washer P#(K0278) (#3) and spacer bushing P#(S3242) (#4) from the taperlock bushing (#5). See Figure 2-11. Next remove the (2) 1/4"-20 x 1" HHCS P#(K1225) (#2) and place them into the threaded holes of the taper-lock bushing P#(S4302) (#5). Gradually thread each bolt evenly into the taper-lock bushing, forcing the blade to break-away from the taper-lock bushing. If the impeller will not move, carefully hit the base of the impeller, between each vein, with a hammer, then try again.

To Replace: Place impeller blade over the engine shaft. Slide the taper-lock bushing (#5) on to the engine shaft and into the impeller blade, aligning the non-threaded holes of the taper-lock bushing to the threaded holes of the impeller blade. Fasten by using (2) 1/4"-20 x 1" HHCS (#2), (1) spacer bushing (#4) (1) taper lock bushing washer (#3), and (1) 3/8"-16 x 1-1/2" HHCS (#1). Torque to the proper specifications in the torque chart on the back of this manual. Next, rotate the impeller blade to ensure that the blade is clear of contact on all sides of the blower housing.



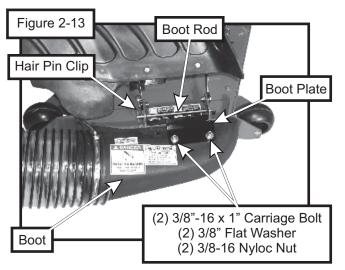
2-12 Cam Assembly Adjustment

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#(K0099) from the belt tension rod P#(K0326) and pull the "L" end of the rod out of it's hole in the cam assembly. The tension rod may then be screwed out to tighten the belt or screwed in to loosen the belt. Replace the "L" end into the top hole in the cam and replace the hair pin clip. Adjust the cam stop bolt P#(K1159) to allow the cam to rotate slightly over center when the blower is engaged (Figure 2-12). **NOTE:** If there is an issue with clearance between the lower hose and rear tire, adjust the tension rod as necessary.



2-13 Boot to Mower Deck Installation

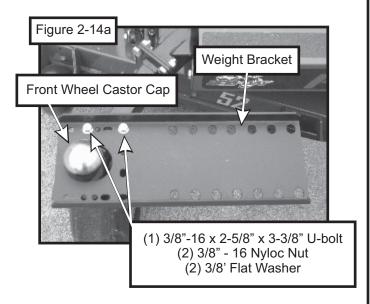
Secure the boot plate P#(B0673) to the mower deck using (1) boot rod P#(B0288) and (1) hair pin clip P#(K0099). Secure the boot P#(E1030) to the boot plate using (2) $3/8"-16 \times 1"$ carriage bolt P#(K1182), (2) 3/8" flat washer P#(K0047), and (2) 3/8"-16 nyloc nut P#(K1216). Insert the carriage bolt 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 2-13.



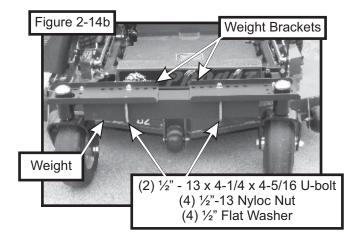
2-14 Front Weight Assembly

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 2-14a). 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#(B2220) under the weight brackets P#(B0026) 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 2-14b).



2-15 Length Of Hose Adjustment

The hoses in steps (2-16) and (2-17) 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.

2-16 Upper Hose Installation

Slide a 6" hose clamp P#(J0060) 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 2-16). Tighten the hose clamps.

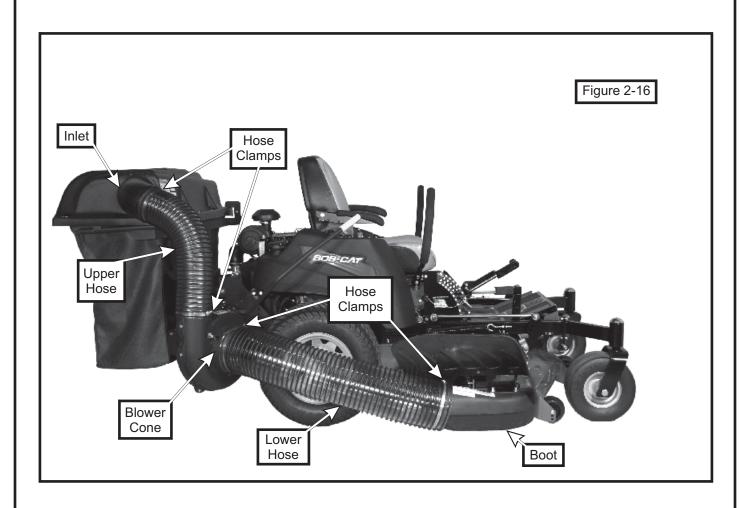
2-17 Lower Hose To Blower Cone Installation

Slide a 8" upper hose clamp P#(J0080) 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 2-16).

2-18 Lower Hose To Boot Installation

Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the 8" hose clamp P#(J0080) 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 (Figure 2-16). This will hold the bottom edge of the boot tight to the mower deck.



2-19 Installation/Removal Of Collection Bags

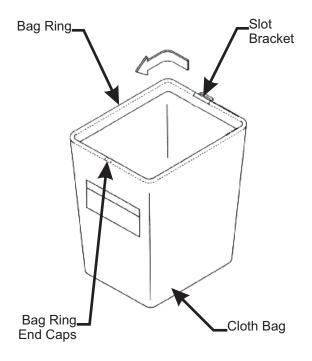
To install the bag onto the bag ring, first make sure the bag ring end caps are fastened to the bag ring. Place the seam openings of the bag onto the bag ring openings and turn the bag until the slot bracket in the bag ring is protruding from the opening in the bag (Figure 2-19a). Do this for each of three bags.

Install the completed assemblies onto the support frame and close the plastic top. Fasten both draw latches to hold the plastic top closed (Figure 2-19b).

To empty the bag, remove the bag and bag ring by lifting and sliding rearward. Grasp the loop on the bottom of the bag, turn it upside down and empty the collected debris (Figure 2-19c). Repeat for the other bags. Reinstall all bags, line with plastic bags if desired, close the plastic top and reattach the draw latches.

Plastic lawn and leaf bags, 33 gallon size, may be used inside the cloth bags. Be sure to leave enough plastic bag hanging over the frame so the plastic bags can be twist tied before emptying (Figure 2-19d).

Figure 2-19a



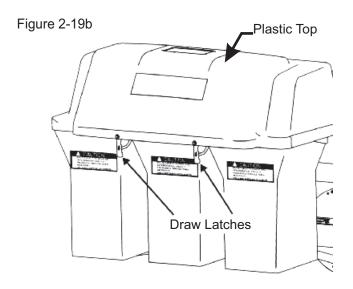


Figure 2-19c

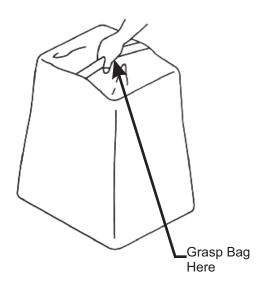
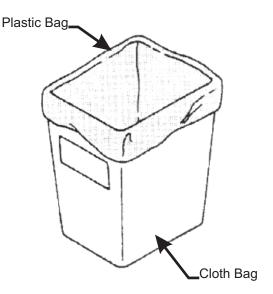


Figure 2-19d



MODEL#: 23031508

MOWER NAME: BOB-CAT

MOWER MODEL: Procat & Predator Pro F & G Series

MOWER DECK SIZE Procat: 48" / 52" / 61" DECKS

MOWER DECK SIZE Predator Pro: 61" DECK

VAC NAME: 15 CUBIC FOOT PRO 3 BAGGER

PTO DRIVEN

ASSEMBLY

(3)

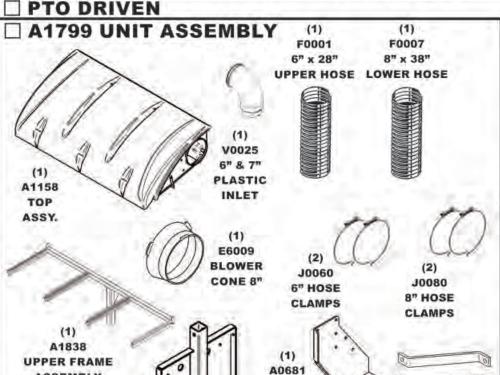
B0227

BAG RING



FOR YEAR: 2012 - 2008

REVISED: 1/02/2012



LT. LWR.

FRAME LEG

ASSY.

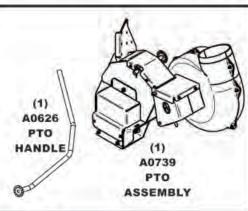


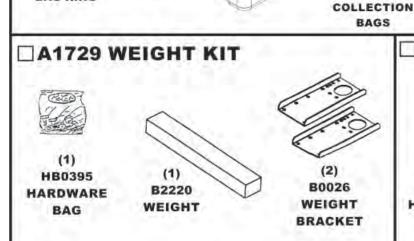




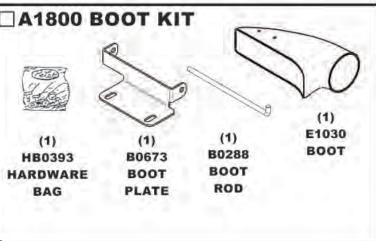


(2)





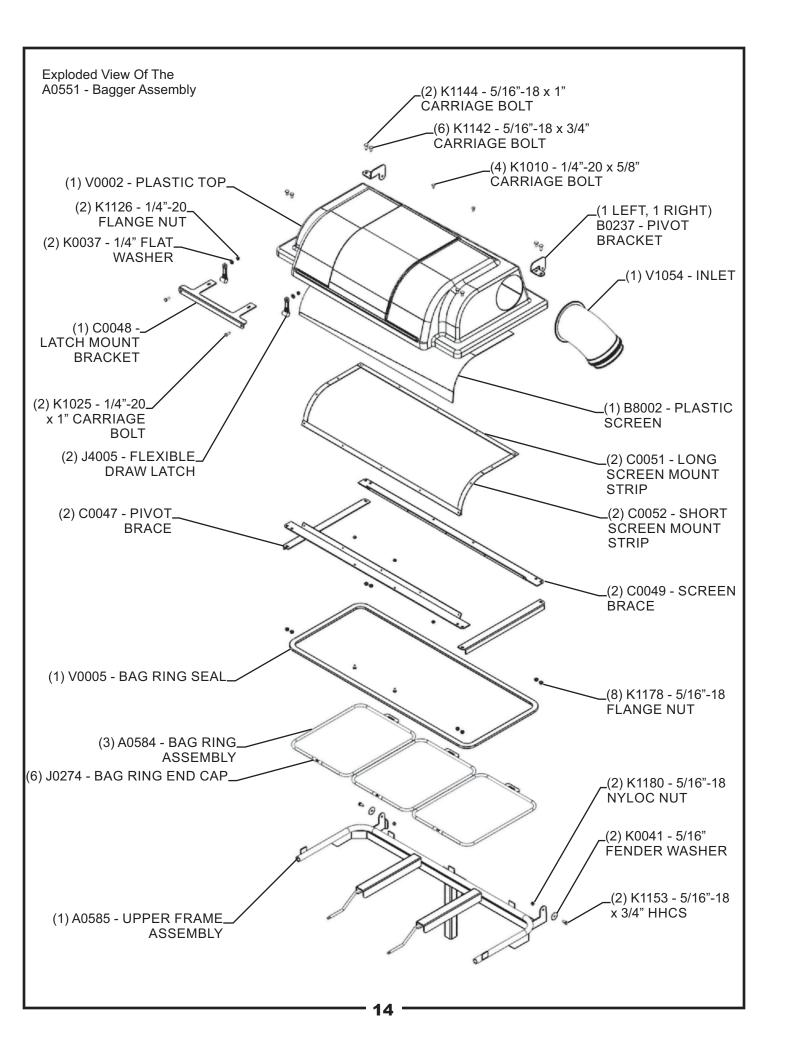
A0672 LWR. MOUNT ASSY.

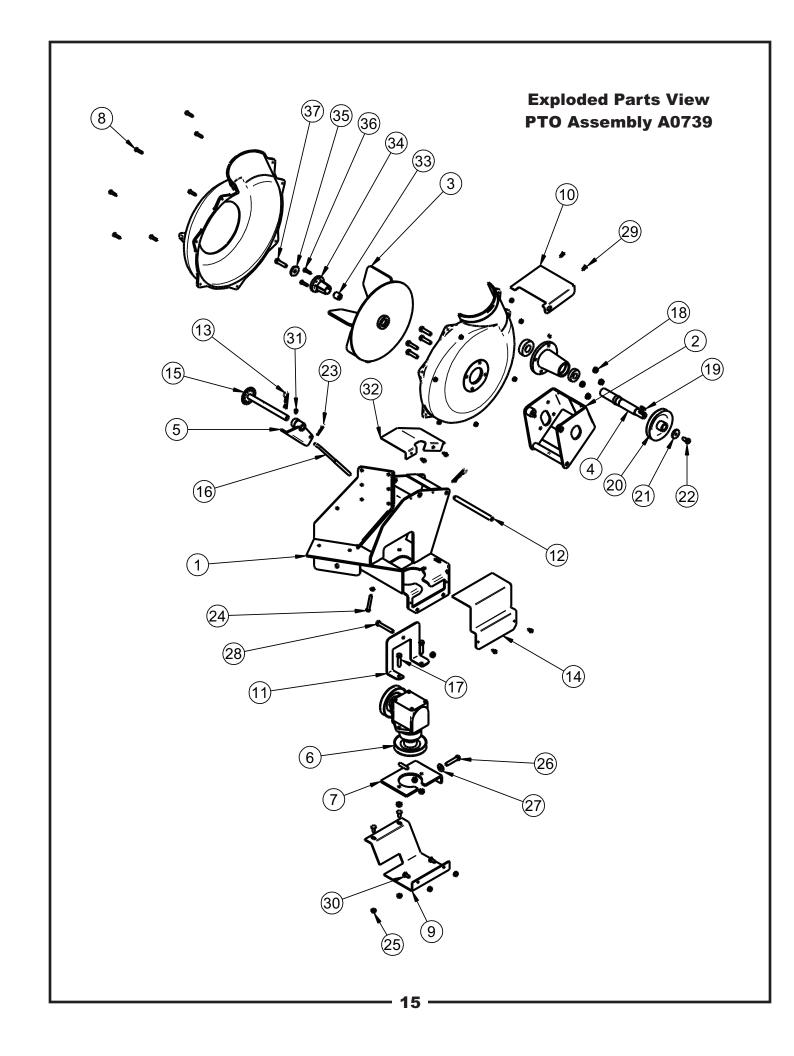


(3)

G0003

4 CU. FT.





Item	Document	Title	Quantity
Number	Number		
1	A0737	PTO FRAME ASSY.	1
2	A0144	BLOWER MOUNT BRACKET ASSEMBLY	1
3	A0645	SMALL 4-BLADE IMPELLER	1
4	A0306	PTO SHAFT ASSEMBLY	1
5	A0422	CAM BRACKET ASSEMBLY	1
6	A0429	GEAR BOX ASSEMBLY	1
7	A0436	BELT TENSION BRACKET ASSEMBLY	1
8	E4004A	BLOWER HSG. ASSY.	1
9	B0162	SKID PLATE	1
10	B0121	BLOWER BELT GUARD	1
11	B0076	BELT GUIDE BRACKET	1
12	B1755	BLOWER PIVOT ROD	1
13	K0086	.125 OD x 2.50 HAIR PIN CLIP	2
14	B0075	PULLEY GUARD	1
15	A0604	PTO HANDLE MOUNT ASSY	1
16	K0326	BELT TENSION ROD 3/8"-16	1
17	K1193	3/8"-16 x 1-1/2" HHCS	6
18	K1215	3/8"-16 FLANGE NUT	9
19	J0254	3/16" SQ. x 3/4" LONG KEYWAY	1
20	M0228	BLOWER PULLEY	1
21	K1446	1.187 OD x .380 ID x .187 WASHER	1
22	K1190	3/8"-16 x 3/4" HHCS	1
23	K0130	.091 OD x 1.625 L HAIR PIN CLIP	1
24	K1159	5/16"-18 x 2" ALL THREAD HHCS	1
25	K1178	5/16"-18 FLANGE NUT	5
26	K0348	3/8"-16 x 2" ALL THREAD HHCS	1
27	K0047	3/8" FLAT WASHER 1.00 OD x .446 ID x .075 T	1
28	K1197	3/8"-16 X 2 1/2" HHCS	1
29	K0353	1/4"-20 x 1/2" HHSTS	6
30	K1142	5/16"-18 x 3/4" CARRIAGE BOLT	4
31	K0356	3/8"-16 TAPERED SET SCREW	1
32	B0270	PTO ARM GUARD	1
33	S3242	PLATED BUSHING	1
34	S4302	TAPER-LOCK BUSHING	1
35	K0278	TAPER-LOCK BUSHING WASHER	1
36	K1225	1/4"-20 X 1" HHCS GRADE 8	2
37	K1211	3/8"-16 x 1-1/2" HHCS GRADE 8	1

SECTION III 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 blower 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 blower, then, engage the parking brake and turn the mower off. Proceed to section 3-3, and review the section 2-9 and 2-12, in this manual.

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 Blower

A. To disengage the blower, rotate the engagement handle towards the mower.

WARNING: The blower will continue to spin. DO NOT TOUCH the blower, pulleys, or the belt until the tractor is turned off. DO NOT adjust the belt tension until the mower is turned off. Refer to section 2-9 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 lifting the plastic hood. Load in bags should not exceed the height of the installed bag.
- F. To release bags from frame, lift bag ring from tab on bagger frame, slide bag out and turn bags over to deposit clippings.
- G. Follow steps on page 12 to re-attach bags back to the bagger.

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

SECTION IV MAINTENANCE

4-1 Maintenance Checklist

Before each use:

- Check blades and spindles to be sure that no foreign objects, such as wire or steel strapping bands, are wrapped around them.
- 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.
- 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 with genuine PECO parts.

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.
- 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. Check belt for proper tension.

THE SERIAL NUMBER PLATE IS LOCATED ON THE TOP ASSEMBLY P#(A0551)

PECO OUTDOOR POWER EQUIPMENT Model Number Serial Number Arden, North Carolina 28704

WRITE THE MODEL AND SERIAL NUMBER IN THE BOX ABOVE FOR FUTURE

REFERENCE.

4-2 Lubrication

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

- 1. On initial use: Grease the fitting on the blower shaft.
- 2. Every 25 hours of use: Re-grease the grease fitting.
- 3. Every 200 hours of use: Check oil levels in gear box. Oil in gear box should cover the gears. If not, fill using an EP90 weight oil. 6oz. will fill the gear box from empty.

SECTION V PARTS AND SERVICE

5-1 Parts And Service Information

PECO 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 PECO and include the following information on the chart below.

Unit Model Number: Unit Engine Size: Unit Serial Number:					
Unit Serial Number: Date of purchase://					
Dealer/Distributor Name:					
Dealer's/Distributor's:	State:	Zip:			
Phone Number:					
Address: P	ECO Inc.				
10 Walden Drive					
Arden, NC 28704					
Phone #: (828) 684-1234	4 or Toll Free: (800)	438-5823			
Email: pec	o@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.

IMPORTANT

Hoses are subject to normal wear and deterioration. Check hoses frequently and if they become defective, install new hoses.

For best collection results, trim hoses so there are no more than 2 inches excess hose with mower deck lowered.

Part #: R1054 Important Label



Part #: R4015
Danger: Rotating Blade Lable



Part #: R1069 Warning: Turn Off Blower Label



Part #:R1083 Enage/Disengage Label



Part #: R1057 Red Reflector Label



Part #: R1065 Made In America Label



Rotating blades! Stop engine before

removing or cleaning this chute. Keep hands and feet clear!

Part #: R4008 Caution: Rotating Blades Label



Part #: R4028
Danger Keep Hands & Clothes Clear Label



Part #: R1051 Warning: Hearing Protection Label



Part #: R1052 Small Warning: Turn Off Blower Label



Part #: R4037 Warning: Hot Surface Label



Part #: R1090 Pro Bagger Logo Label

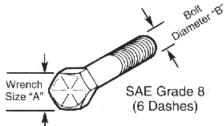
TORQUE SPECIFICATIONS

AMERICAN

Bolt Head Markings

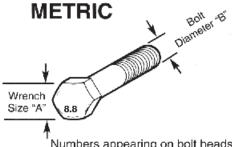






Proper toque for American fasteners used on Peco equipment. Recommended Torque in Foot Pounds (Newton Meters).*

WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE 8
7/16	1/4 - 20 UNC	6 (7)	8 (11)	12 (16)
7/16	1/4 - 28 UNF	6 (8)	10 (13)	14 (18)
1/2	5/16 - 18 UNC	11 (15)	17 (23)	25 (33)
1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)
9/16	3/8 - 16 UNC	20 (27)	31 (42)	44 (60)
9/16	3/8 - 24 UNF	23 (31)	35 (47)	49 (66)
5/8	7/16 - 14 UNC	32 (43)	49 (66)	70 (95)
5/8	. 7/16 - 20 UNF	36 (49)	55 (75)	78 (106)
3/4	1/2 - 13 UNC	49 (66)	76 (103)	106 (144)
3/4	1/2 - 20 UNF	55 (75)	85 (115)	120 (163)
7/8	9/16 - 12 UNC	70 (95)	109 (148)	153 (207)
7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)
15/16	5/8 - 11 UNC	97 (131)	150 (203)	212 (287)
15/16	5/8 - 18 UNF	110 (149)	170 (230)	240 (325)
1-1/8	3/4 - 10 UNC	144 (195)	266 (360)	376 (509)
1-1/8	3/4 - 16 UNF	192 (260)	297 (402)	420 (569)
1-5/16	7/8 - 9 UNC	166 (225)	430 (583)	606 (821)
1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)
1-1/2	1 - 8 ŲNC	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)



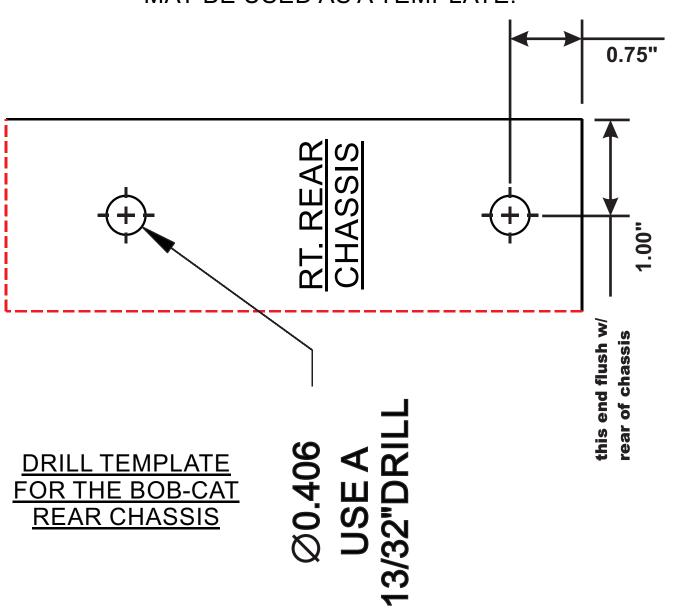
Numbers appearing on bolt heads indicate ASTM class.

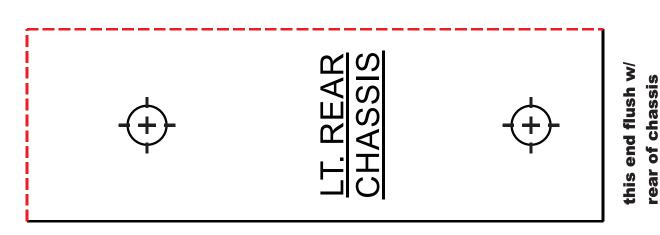
*Use 75% of the specified torque value for plated fasteners. Use 85% of the specified torque values for lubricated fasteners.

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

WRENCH SIZE	BOLT DIA.	ASTM	ASTM	ASTM	ASTM
(mm) "A"	(mm) "B"	4.6	8.8	9.8	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)

DRAWING IS FULL SCALE. MAY BE USED AS A TEMPLATE.







10 WALDEN DRIVE ARDEN, NORTH CAROLINA 28704

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