# DECK DRIVE PTO GRASS COLLECTION SYSTEM



MODEL #: 51031201
WALKER SUPER B 2009
PRO BAGGER III
60" DECK MOUNT PTO





# OPERATOR'S MANUAL

MANUAL PART #: Q0388

ASSEMBLY • OPERATION • MAINTENANCE

\$10.00 REV: 0

### RESIDENTIAL BAGGING SYSTEM

### TABLE OF CONTENTS

SECT	ION	PAGE	SECTION	PAGE
	Safety	3 5 5 5 6 6 7 bly 7	2-9 Belt Installation 2-10 Deck Discharge Guard Installation	tallation99 on9-1010 ollection Bags - 1112-18

### SAFETY

- 1. Read the operator's manual carefully and familiarize yourself with the proper use of your attachment. Do not allow anyone who is not acquainted with the Safety Instructions to use your attachment.
- 2. Know the controls and how to stop quickly. READ THE OPERATOR'S MANUAL!
- 3. Do not allow children to operate the mower. Do not allow adults to operate the mower or grass collection system without proper instruction.
- 4. Be especially watchful of children and pets darting into the area while operating.
- 5. Keep your eyes and mind on your unit while mowing or operating your attachment. Don't let others distract you.
- 6. Do not attempt to operate your unit or mower when not in the driver's seat.
- 7. Always stop unit when emptying the container.
- 8. Stop unit, shut off deck attachment, set parking brake, shut off mower engine and remove spark plug wire before removing clogs, removing or replacing hose, boot, blower cone, or performing any maintenance.
- 9. If a slope must be ascended, back up the slope; drive forward when descending.
- 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 and never mow slopes greater than 15 degrees.
- 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 back up the face of slopes. 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.

This signal word indicates a potentially hazardous situation which, if not

This signal word indicates a potentially hazardous situation exist which, if

White letters on RED



It may also be used to alert against unsafe practices.

not avoided, will result in minor or moderate injury.

avoided, could result in death or serious injury.

Black letters on ORANGE



It may also be used to alert against unsafe practices.

Black letters on YELLOW

### PECO LIMITED WARRANTY FOR NEW PRODUCTS

#### A. WHAT IS WARRANTED?

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 (90 days for commercial use) 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, batteries, and gearboxes must be returned to 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 for 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, batteries and, gearboxes attached to PECO products are covered under a separate warranty by the respective manufacturer.

#### D. UNAPPROVED ALTERATION OR MODIFICATION.

All obligations of PECO Inc., under this warranty, shall be terminated if products are altered or modified in ways not approved by 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 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, 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 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 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. The collection system is also good for picking up leaves and twigs in pre-season and post-season clean-up.

The deck drive assembly is mounted on the right side of the mower deck. The deck drive assebly draws grass clippings from the discharge area of the cutter deck back to the (3) 2.9 cubic foot collection bags P#(G0004) at the rear portion of the mower frame. Once the bags are full, they can be released for easy dumping.

# Section II INSTALLATION FOR USE

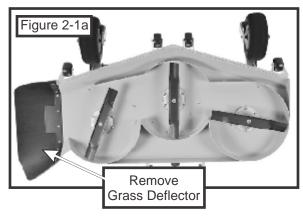
### 2-1 Preparation Of Mower

Carefully dismantle wooden the shipping crate from around the components. Cut the 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 part drawings on pages 11 thru 18.

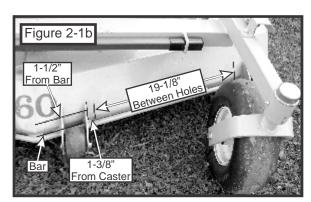
#### **Grass Deflector Removal:**

Remove the (2) 3/8"-16 x 1-1/4" HHCS, (2) 3/8" spring washer, and (2) 3/8"-16 nyloc nut that secure the grass deflector to the mower deck (Figure 2-1). Remove the grass deflector from the mower deck. Once the grass deflector is removed, follow the instructions included in your Walker owners manual, and raise the mower deck.

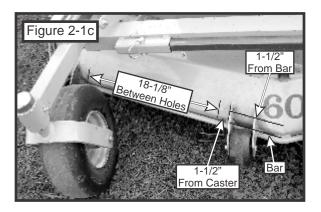


### **Deck Preparation:**

Drill (4) 5/16" holes into the front edge of the mower deck. From the front of the mower, measure 1-1/2" up from the deck bar, and 1-3/8" from the right caster and mark the deck. Measure 19-1/8" to the right of your first mark and 1-1/2" up from the deck bar and mark the deck. Refer to Figure 2-1b.

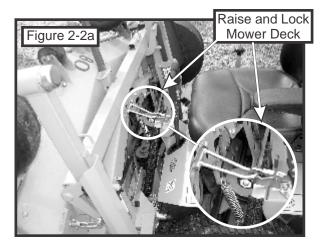


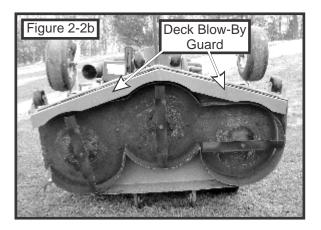
From the front of the mower, measure 1-1/2" up from the deck bar and 1-1/2" from the left caster and mark the deck. Measure 18-1/8" to the left of your third mark and 1-1/2" up from the deck bar and mark the deck. Refer to Figure 2-1c.

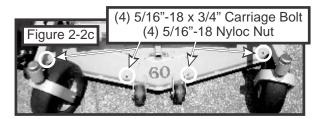


### 2-2 Deck Blow-By Guard Installation

Raise and lock the mower deck (Figure 2-2a). Position the blow-by guard P#(C0018) on the front inside edge of the mower deck as shown in Figure 2-2b, and fasten the guard to the mower deck using (4) 5/16"-18 x 3/4" carriage bolt P#(K1142) and (4) 5/16"-18 nyloc nut P#(K1180) as shown in Figure 2-2c.

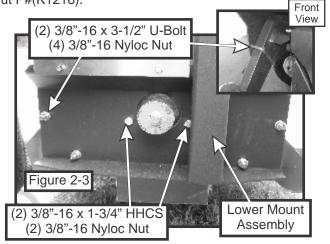






### 2-3 Lower Mount Assembly Installation

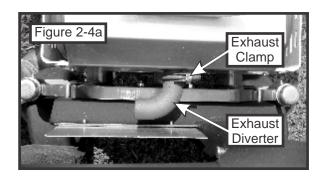
Fasten the lower mount assembly P#(A1083) to the rear frame of the mower, using (2) 3/8"-16 x 1-3/4" HHCS P#(K1194) with (2) 3/8"-16 nyloc nut P#(K1216) and (2) 3/8"-16 x 3-1/2" U-bolt P#(K0407) with (4) 3/8"-16 nyloc nut P#(K1216).

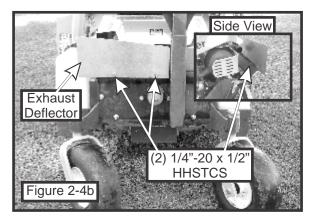


### 2-4 Exhaust Deflector Installation

**Note:** Cut 2-1/2" off the existing exhaust pipe before installing the deflector/diverter.

Insert the exhaust diverter P#(J0250) onto the exhaust pipe and secure with (1) exhaust clamp P#(X1046) as shown in Figure 2-4a. Fasten the exhaust deflector P#(C0027) to the lower mount assembly using (2) 1/4"-20 x 1/2" HHSTCS P#(K0353) as shown in Figure 2-4b.

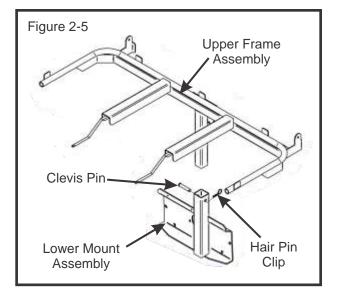




## 2-5 Upper Frame Assembly Installation

**Note:** It is recommended that someone assist you during the upper frame assembly installation.

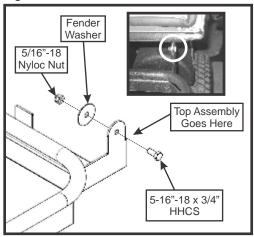
Insert the upper frame assembly P#(A0585) into the mounting tube on the lower frame assembly P#(A1083). Align the holes on both mounting tubes and secure the upper frame assembly with (1) clevis pin P#(K0133) and (1) hair pin clip P#(K0088). Refer to Figure 2-5 for reference.



# 2-6 Top Assembly To Upper Frame Assembly Installation

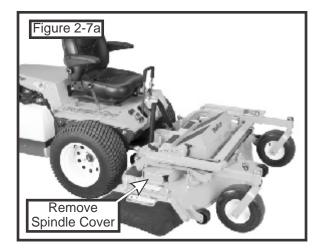
Align the pivot brackets of the top assembly P#(A0551) to the pivot point on either side of the upper frame assembly. Place (1) fender washer P#(K0041) between each pivot point (Figure 2-6) and fasten each side by using (1) 5/16"-18 x 3/4" HHCS P#(K1153) and (1) 5/16"-18 nyloc nut P#(K1180). When fastening, leave nut slightly loose so that the top can pivot freely.

Figure 2-6

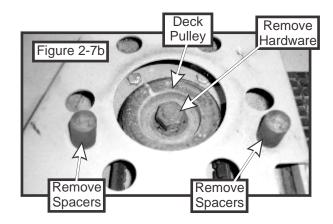


### 2-7 Deck Pulley Installation

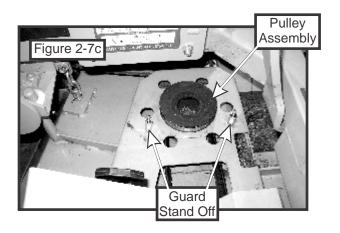
Remove the existing spindle cover and knobs for the deck pulley shown in Figure 2-7a.



Remove the deck pulley hardware and the spindle cover spacers as shown in Figure 2-7b.



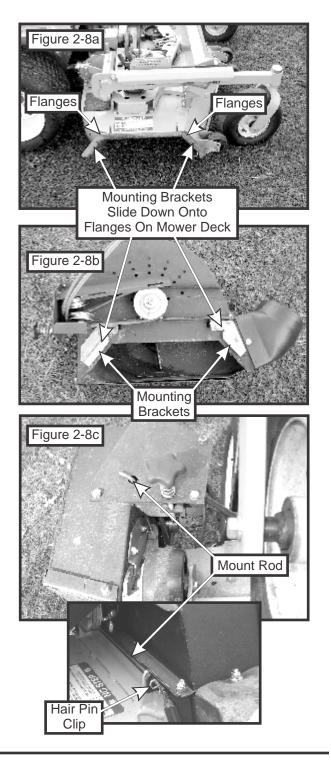
Place the pulley assembly included in your hardware bag P#(A1084) on top of the existing deck pulley, and fasten using the existing hardware removed from the deck pulley.



### 2-8 Deck Drive Assembly Installation

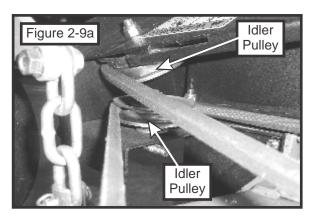
The deck drive assembly P#(A1096) will mount to the flanges on the discharge side of the mower deck where the grass deflector was removed in Section 2-1. The mounting brackets on the deck drive assembly slide down onto the flanges on the mower deck and the deck drive assembly is secured with (1) mount rod P#(B0547) and (1) hair pin clip P#(K0099).

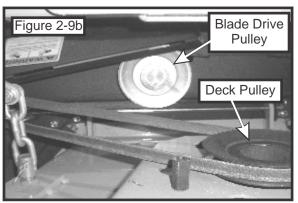
Refer to the Figures 2-8a thru 2-8c for reference.



### 2-9 Belt Installation

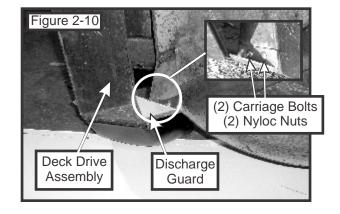
Wrap (1) A65K belt P#(M0258) around the two idler pulleys, the blade drive pulley and the deck pulley P#(A1084) installed in Section 2-8. Refer to Figures 2-9a and 2-9b.





### 2-10 Deck Discharge Guard Installation

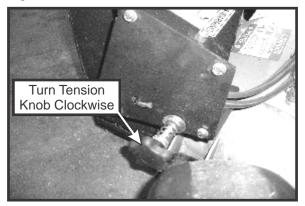
Raise and lock the mower deck. Mount discharge guard P#(C0030) to lower bottom left side of the deck's discharge outlet. See Figure 2-10. Place guard flush with corner and bottom edge of the deck drive system. Mark holes for drilling. Drill (2) 1/4" holes. Attach discharge guard using (2) 1/4"-20 x 5/8" carriage bolts P#(K1010) and (2) 1/4"-20 nyloc nuts P#(K1128).

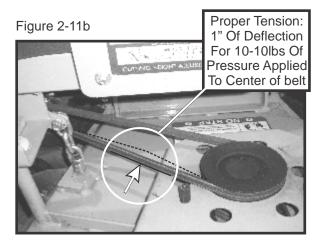


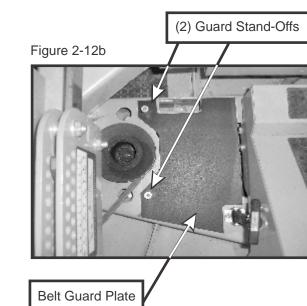
### 2-11 Belt Tension Adjustment

To tension the drive belt, turn the tension adjustment knob clockwise until there is 1" of deflection with 10-11lbs of pressure between the deck pulley assembly and the deck drive idler pulley. Refer to Figure 2-11a and 2-11b.

Figure 2-11a







**Existing Holes** 

Mower Deck

Figure 2-12a

Pulley Assembly

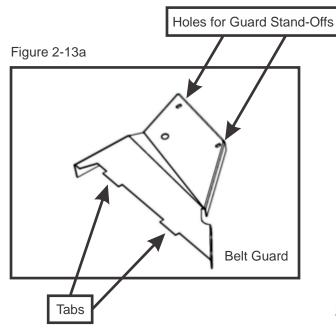
### 2-12 Belt Guard Plate Installation

Placet the belt guard plate P#(B8156) onto the mower deck holes where spacers were previously removed. See Section 2-7 for reference. Secure deck guard plate with (2) guard stand-offs P#(B0563). Refer to Figures 2-12a and 2-12b.

### 2-13 Belt Guard Installation

The belt guard P#(B0555) is used to cover the belt from the mower deck to the PTO deck drive. To mount the belt guard, place the end with the tabs towards the deck mount unit and insert into slots provided on deck drive. Align the holes in the other end with the guard stand-offs. (Figure 2-13a). Insert tabs into slots on deck drive and secure other end with (2) guard stand-offs P#(B0563) inserted into the existing guard stand-offs securing the belt guard plate P#(B0563). Refer to Figure 2-13b. The belt guard properly secured should look like Figures 2-13c and 2-13d.

### 2-13 Belt Guard Installation Cont...



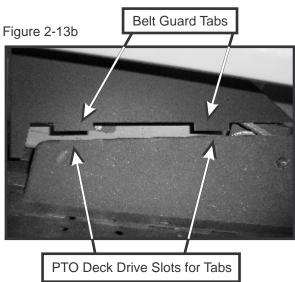
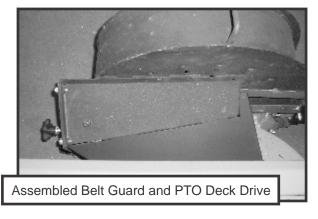
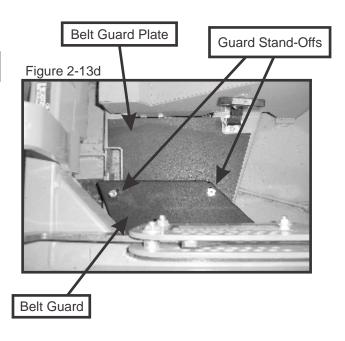


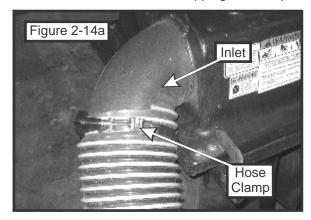
Figure 2-13c



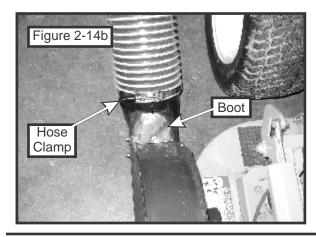


### 2-14 Hose Installation

Slide one end of the hose P#(F0005) onto the inlet P#(V1054). Secure the hose to the inlet with (1) hose clamp P#(J1001) as shown in Figure 2-14a. Be sure to leave at least 1" of the hose overlapping the clamp.



Slide the opposite end of the hose onto the deck drive assembly boot P#(V1164) and secure with (1) hose clamp P#(J1001) as shown in Figure 2-14b. Be sure to leave at least 1" of the hose overlapping the clamp.



# 2-15 Installation/Removal Of Collection Bags

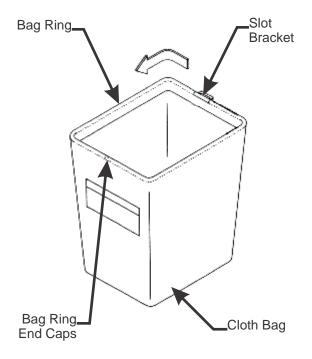
To install the bag onto the bag ring, first make sure the bag ring end caps are fastened to the bag ring. Place the seam openings of the bag onto the bag ring openings and turn the bag until the slot bracket in the bag ring is protruding from the opening in the bag (Figure 2-15a). Do this for each of 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 2-15b).

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 2-15c). 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 2-15d).

Figure 2-15a



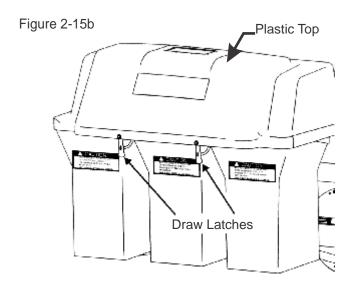


Figure 2-15c

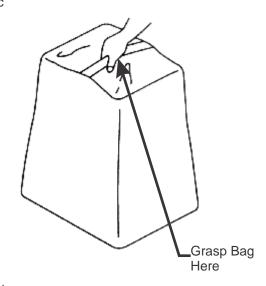
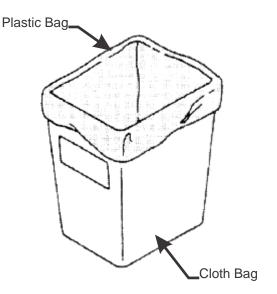
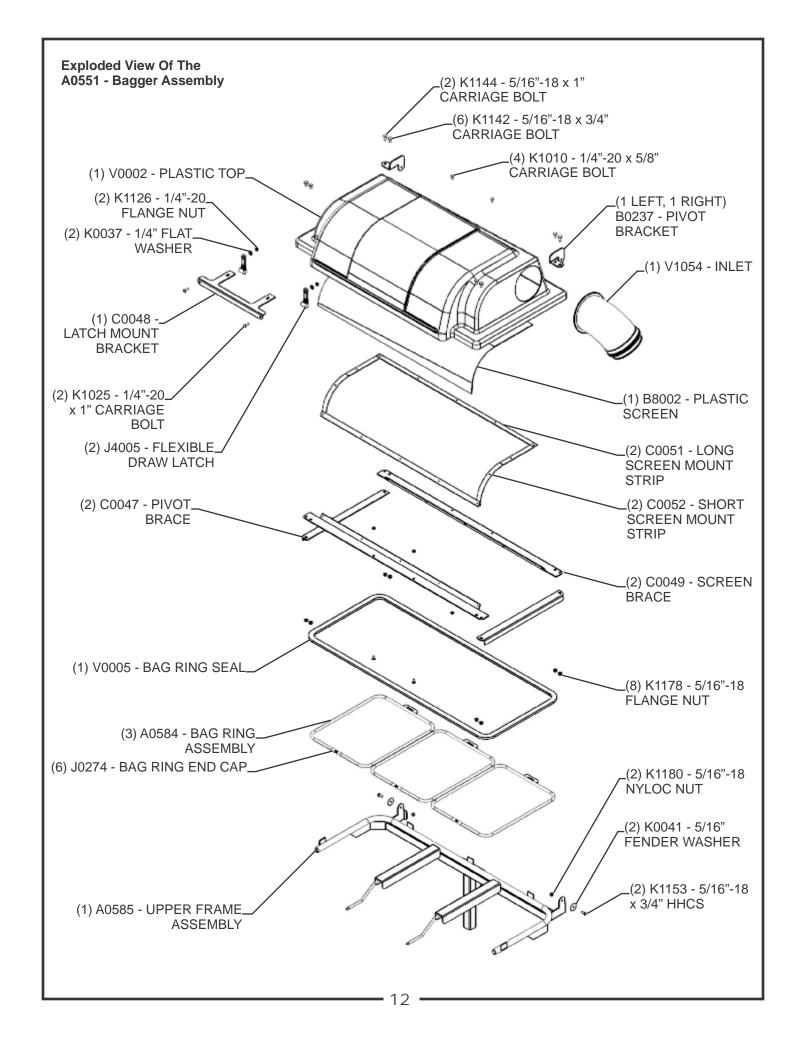
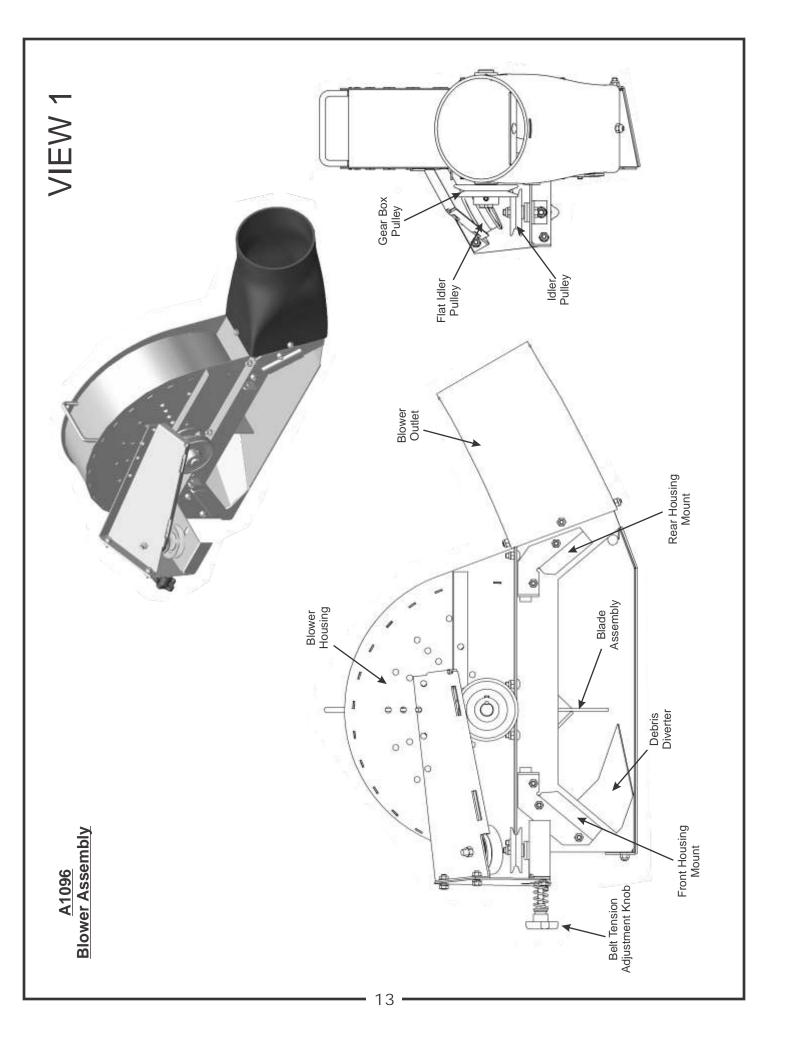
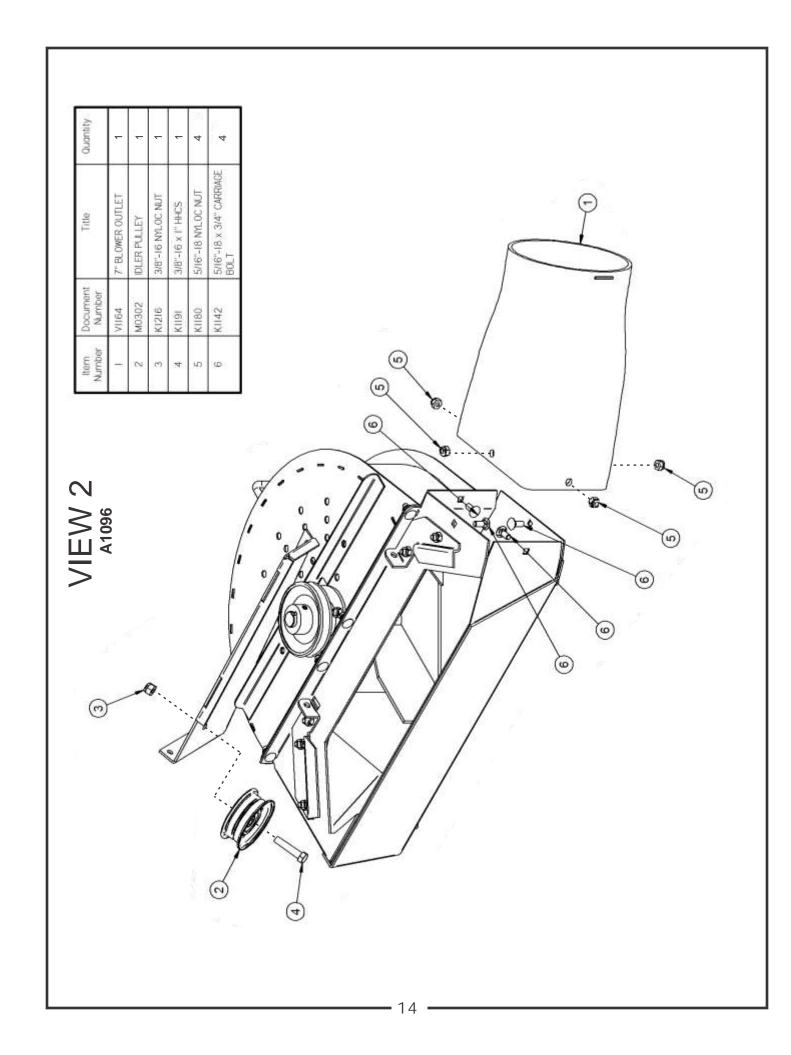


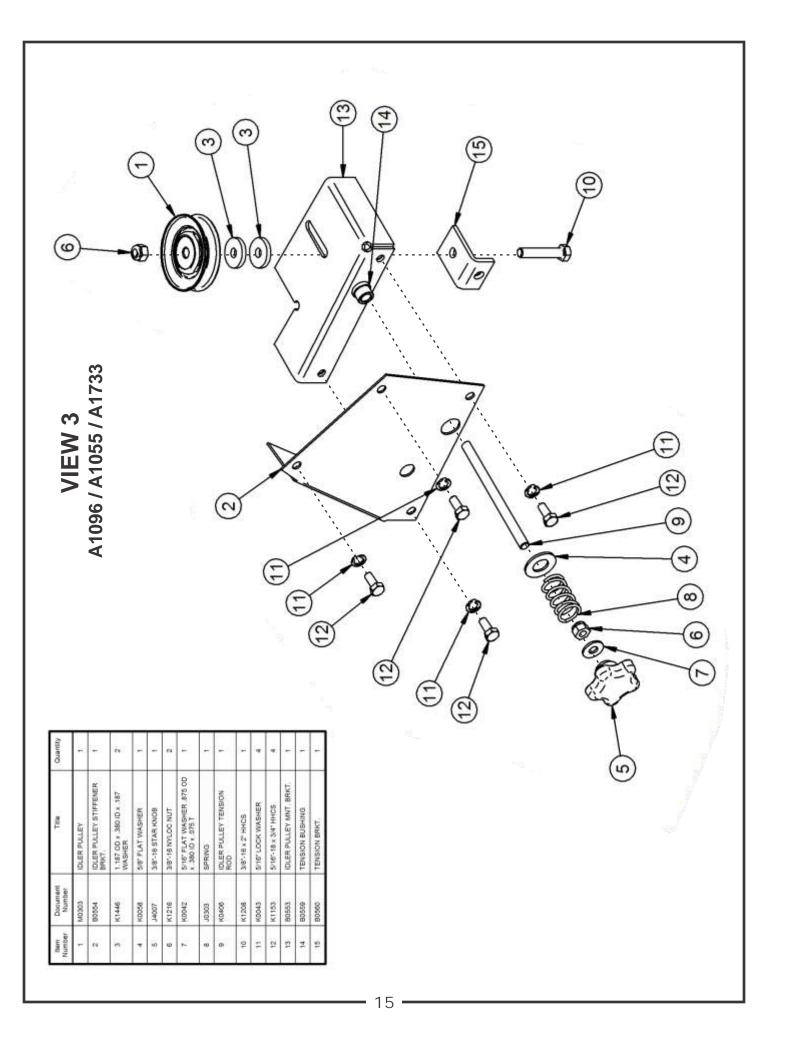
Figure 2-15d



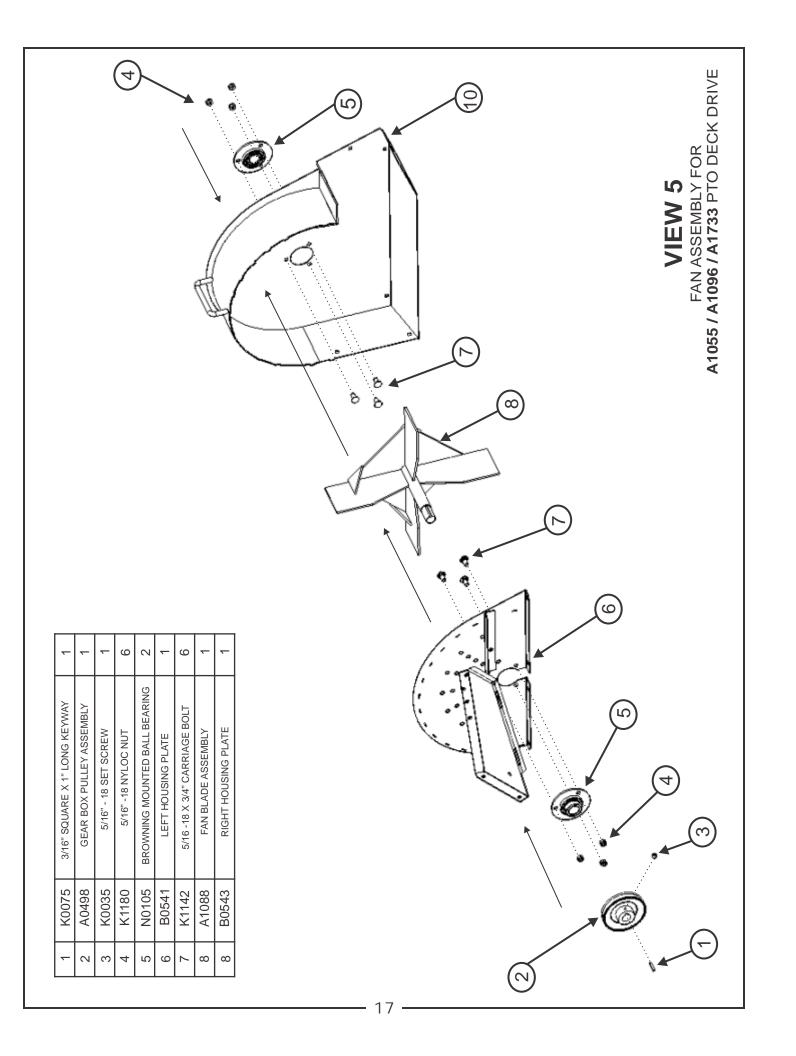








A1096 4 (5) (4) VIEW 4 (5)(3)9 (2) 12 12 12 (6) IDLER PULLEY STIFFENER BRKT. DISCHARGE MOUNT PLATE ASSY 5/16" - 18 X 3/4" CARRIAGE BOLT TENSION BRACKET ASSY. 5/16" LOCK WASHER 5/16" - 18 X 3/4" HHCS 5/16" - 18 NYLOC NUT HOUSING ASSEMBLY FRONT HSG. MNT. REAR HSG. MNT. **WEAR PLATE** B0550 B0554 K0043 K1153 A1086 B0551 B0556 K1142 K1180 A1085 A1087 10 7 က 9 ∞ 2 တ 16



#### MODEL#: 51031201 MOWER NAME: WALKER MOWER MODEL: SUPER BEE MOWER DECK SIZE: 60" DECK VAC NAME: PRO 3 BAGGER FOR YEAR: 2010 DECK DRIVEN PTO **REVISED**: MANUAL Q0388 ☐ A1095 UNIT ASSEMBLY F0005 M0258 A65K KEVLAR 7" x 65" YELLOW HOSE **BELT** V1054 A0551 HB0380 J1001 INLET TOP HARDWARE 9" HOSE **ASSEMBLY** BAG CLAMP WITH KNOB (1) A1083 A1084 LWR. MOUNT (1) PTO **ASSEMBLY** C0026 **DECK PULLEY GRASS DEFLECTOR** (1) C0027 (1) **EXHAUST** A0585 **DEFLECTOR** UPPER FRAME **ASSEMBLY** (1)(1) C0030 B8156 **DISCHARGE** B0555 **BELT GUARD GUARD BELT GUARD** PLATE **PLATE** (3) A0584 A1096 DECK DRIVE ASSEMBLY **BAG RING** ASSEMBLY (1) B0547 HOUSING MOUNT ROD V1164 (3)(1) G0004 C0018 2.9 CU. FT. **DECK GUARD** (1) COLLECTION (1)A1096 W/V1164 C0016

DECK GUARD

PTO DECK DRIVE

**ASSEMBLY** WITH BOOT

**BAGS** 

# 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. The PTO system will engage when mower deck is engaged. Proceed to operate the control levers of the mower as normal.

NOTE: If the collection system does not appear to be collecting the grass clippings, disengage the deck and PTO assembly (Section 3-3), 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.

### 3-3 Disengagement Of The PTO Assembly

A. To disengage the PTO assembly, disengage the mowers blade.



### 3-4 Impeller Blade Removal/Replacement

BEFORE INSTALLING/REMOVING/REPLACING THE IMPELLER BLADES, BE SURE THE MOWER IS TURNED OFF, THE PTO DECK DRIVE ASSEMBLY IS DISENGAGED AND THE NEGATIVE CABLE IS REMOVED FROM THE BATTERY. FAILURE TO DO SO MAY RESULT IN SEVERE INJURY OR DEATH.

WARNING: The PTO deck drive assembly blades will continue to spin. DO NOT TOUCH the PTO deck drive assembly, pulleys, or the belts until the tractor is turned off and all parts have stopped moving. DO NOT adjust the belt tension until the mower is turned off.

### 3-5 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 overfilled as potential damage may occur to your equipment. Also, be sure to clean the hood screen as needed.

# SECTION IV MAINTENANCE

### SECTION V PARTS AND SERVICE

### 4-1 Maintenance Checklist

- 1. 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.

### 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.

THE SERIAL NUMBER PLATE IS LOCATED ON THE DECK DRIVE ASSEMBLY P#(A1096)

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.

THE SERIAL NUMBER PLATE
IS LOCATED ON THE **TOP OF THE BAG 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.

Unit Model Number:					
Unit Engine Size:					
Unit Serial Number:					
Date of purchase:	_//_				
Dealer/Distributor Nar	ne: _				<del></del>
Dealer's/Distributor's:			_ State	2:	Zip:
Phone Number:					
Dealer's/Distributor's: State: Zip: Phone Number: Address: PECO Inc.					

P.O. Box 1197

Arden, NC 28704

Phone #: (828) 684-1234 or Toll Free: (800) 438-5823

Email: peco@lawnvac.com

### SAFETY DECALS

To promote safe operation, PECO Inc. 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.



#R1090



#R1065



# R4008



# R1069



#R1051



# R4015



#R1054



#R1057(2)



#R1052



#R4027(2)





# R2007



#R2008

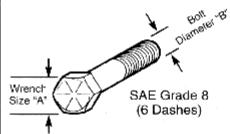
### **TORQUE SPECIFICATIONS**

### **AMERICAN**

**Bolt Head Markings** 

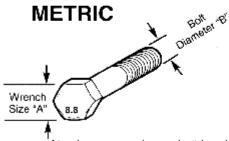






Recommended Torque in Foot Pounds (Newton Meters).\*

WRENCH SIZE (IN.) "A"	BOLT DIAMETER (IN.) "B" AND THREAD SIZE	SAE GRADE 2	SAE GRADE 5	SAE GRADE B
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/B - 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)

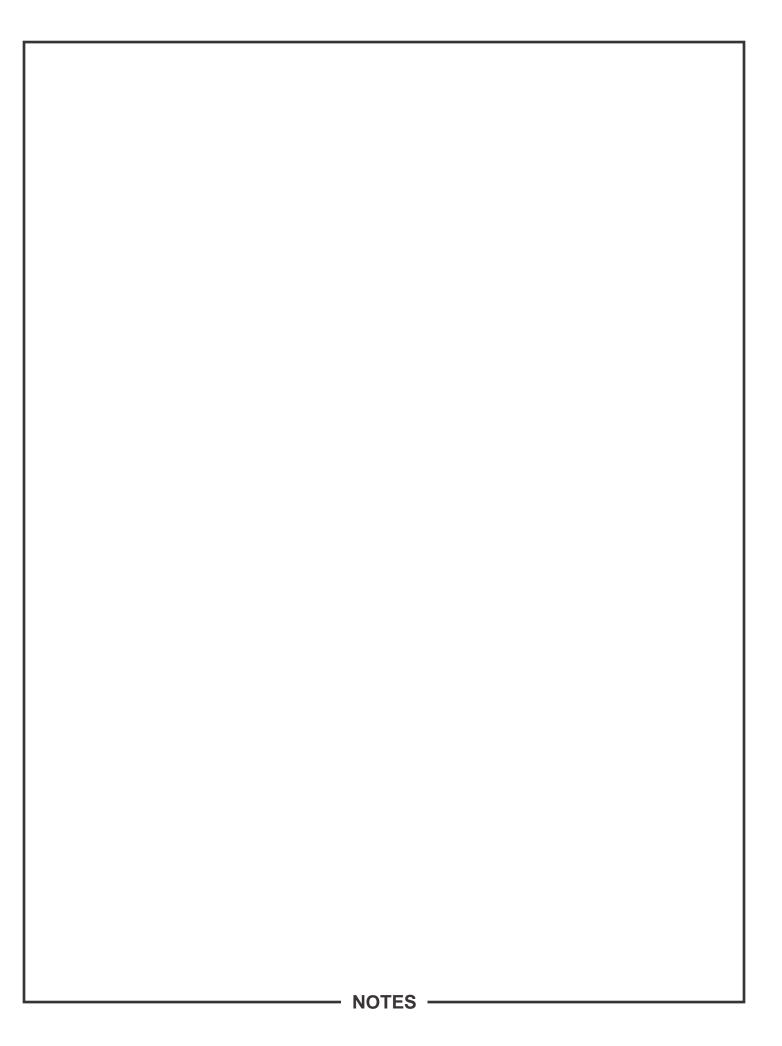


Numbers appearing on bolt heads indicate ASTM class.

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

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)	157 (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)





P.O. BOX 1197 ARDEN, NORTH CAROLINA 28704

(800) 438-5823 OR (828) 684-1234 FAX: (828) 684-0858

EMAIL: peco@lawnvac.com WEBSITE: www.lawnvac.com