



PRO 3 BAGGER

GRASS COLLECTION

SYSTEM



MODEL#: 41031301 & 41031303
FERRIS IS 3100Z SERIES MOWER



OPERATOR'S MANUAL

ASSEMBLY ● OPERATION ● MAINTENANCE

RESIDENTIAL BAGGING SYSTEM

TABLE OF CONTENTS

SECTION	PAGE	SECTION	PAGE
Safety	2	2-13 Impeller Blade Removal/Replacement	8
Safety Alert Symbols	3	2-14 Throttle Cable Installation	9
Warranty	4	2-15 Boot To Mower Deck Installation	10
I INTRODUCTION AND DESCRIPTION	5	2-16 Length Of Hose Adjustment	10
1-1 Introduction	5	2-17 Upper Hose Installation	10
1-2 Description	5	2-18 Lower Hose Installation	10
		2-19 Weight Kit Installation	10
		2-20 Installation And Removal Of Collection Bags	11
II INSTALLATION FOR USE	5	III OPERATING INSTRUCTIONS	12
2-1 Preparation Of Mower	5	3-1 General Safety	12
2-2 Lower Main Frame Leg Installation	5	3-2 Operation & Tips On Mowing	12
2-3 Lower Stiffener Installation	6	3-3 Unloading The Collection System	12
2-4 Exhaust Deflector Installation	6		
2-5 Debris Shield Installation	6	IV MAINTENANCE	12
2-6 Lower Mount Tube Assembly Installation	6	4-1 Maintenance Checklist	12
2-7 Engine Mount Arm Assembly Installation	6		
2-8 Engine/Blower/Blade Assembly Installation	7	V PARTS AND SERVICE	13
2-9 Upper Frame Assembly Installation	7	5-1 Parts And Service Information	13
2-10 Top Assembly To Upper Frame Assembly Installation	7	Exploded Views/Parts List And Pack Drawing	14-16
2-11 Inlet Installation	7	Safety Decals	17
2-12 Blower Cone Installation	8	Torque Specifications	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.



White letters on **RED**

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



Black letters on **ORANGE**

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

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

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

It may also be used to alert against unsafe practices.

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 & DESCRIPTION

1-1 Introduction

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

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

1-2 Description

The 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 clean-up.

The engine/blower/blade assembly is mounted on the right side of the unit. 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 engine/blower/blade assembly by starting the engine. Once the bags are full, they can be released for dumping.

Section II

INSTALLATION FOR USE

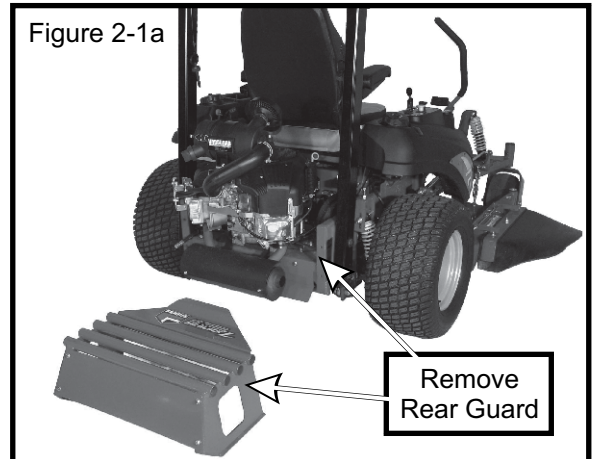
2-1 Preparation Of Mower

Carefully dismantle the wooden shipping crate from around the components. Cut retaining straps and separate the parts. Remove and sort all parts for easy identification.

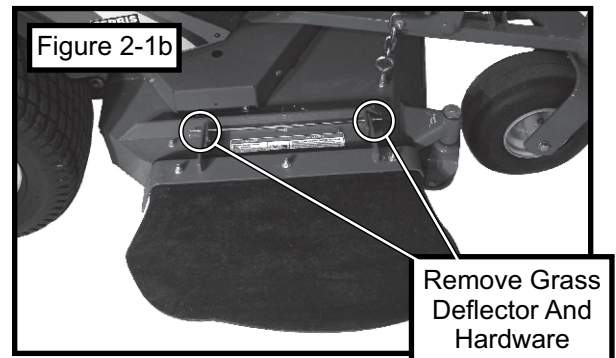
Note: Before each step of assembly, it will help to study the exploded drawings and parts list on pages 14-16.

Remove the rear guard from the mower. Remove the grass deflector and mounting hardware from the mower deck as shown in Figure 2-1a and 2-1b.

Rear Guard Removal

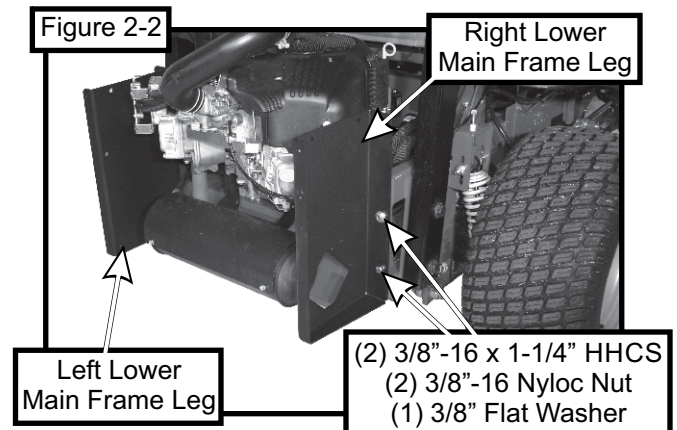


Grass Deflector Removal



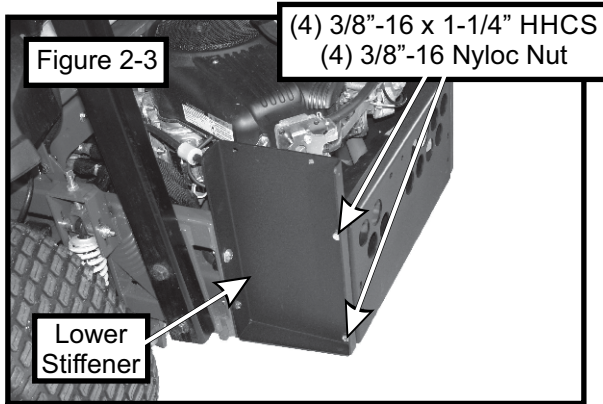
2-2 Lower Main Frame Leg Installation

Attach the left lower main frame leg P#(B0609) and the right lower main frame leg P#(B0610) to the rear frame of the mower using (2) 3/8"-16 x 1-1/4" HHCS P#(K1192), (1) 3/8" flat washer P#(K0047), and (2) 3/8"-16 nyloc nuts P#(K1216) PER LEG. Refer to Figure 2-2.



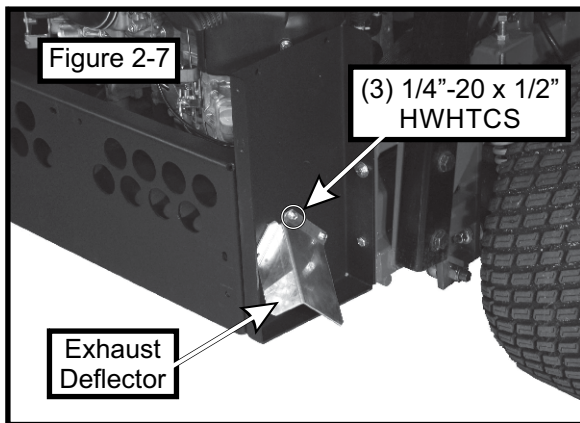
2-3 Lower Stiffener Installation

Attach the lower stiffener P#(B0611) to the left and right lower main frame legs, using (4) 3/8"-16 x 1-1/4" HHCS P#(K1192) and (4) 3/8"-16 nyloc nuts P#(K1216). Refer to Figure 2-3.



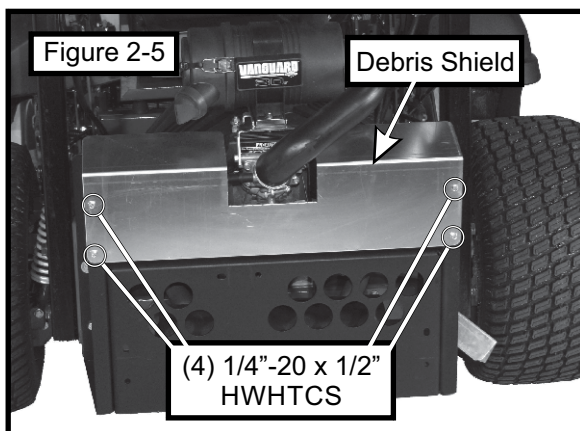
2-4 Exhaust Deflector Installation

Fasten the exhaust deflector P#(C0062) to the right lower main frame leg using (3) 1/4"-20 x 1/2" HWHTCS P#(K0353). Refer to Figure 2-4.



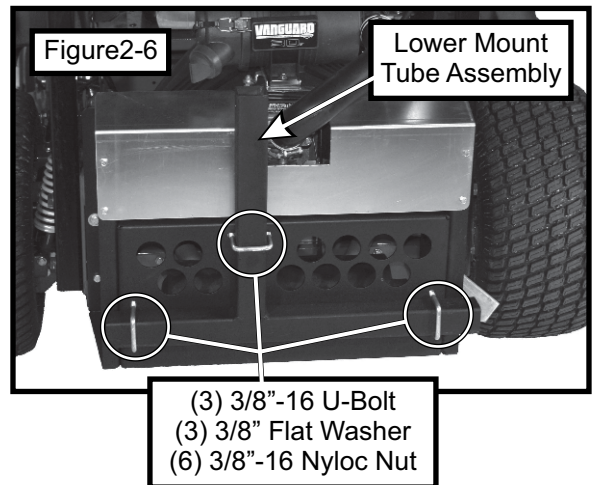
2-5 Debris Shield Installation

Fasten the debris shield P#(C0063) to the left and right lower main frame legs, using (4) 1/4"-20 x 1/2" HWHTCS P#(K0353). Refer to Figure 2-5.



2-6 Lower Mount Tube Assembly Installation

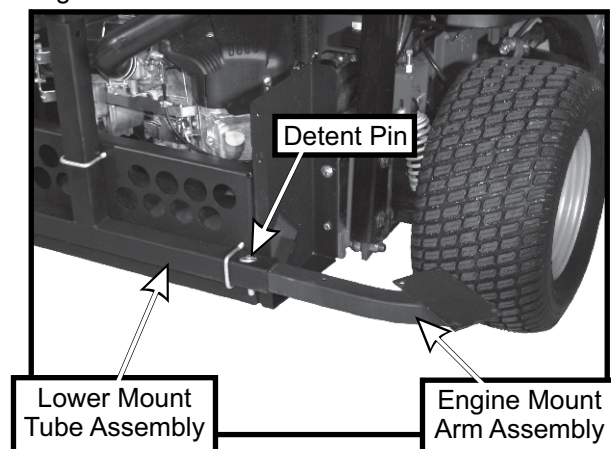
Fasten the lower mount tube assembly P#(A1400) to the lower stiffener using (3) 3/8"-16 x 2-1/4" u-bolts P#(K1119), (3) 3/8" flat washers P#(K0047), and (6) 3/8"-16 nyloc nuts P#(K1216). Use the flat washers on the slotted mounting holes located on the lower stiffener. Position the engine mount arm assembly mount hole to the right side of the mower. Refer to Figure 2-6.



2-7 Engine Mount Arm Assembly Installation

Position the engine mount arm assembly P#(A0138) as shown in Figure 2-7. Insert the engine mount arm assembly into the lower mount tube assembly, and align the mounting holes on both parts. Secure the engine mount arm assembly, using (1) detent pin P#(J0248). Refer to Figure 2-7.

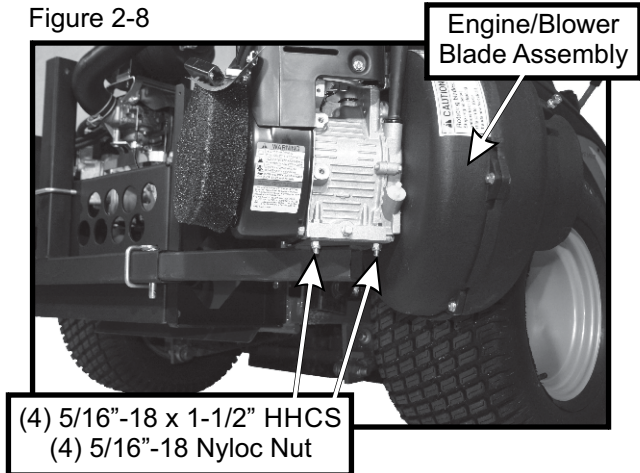
Figure 2-7



2-8 Engine Blower Blade Assembly Installation

Position the engine/blower/blade assembly on top of the engine mount arm assembly and secure using (4) 5/16"-18 x 1-1/2" HHCS P#(K1157) and (4) 5/16"-18 nyloc nuts P#(K1180). Refer to Figure 2-8.

Figure 2-8

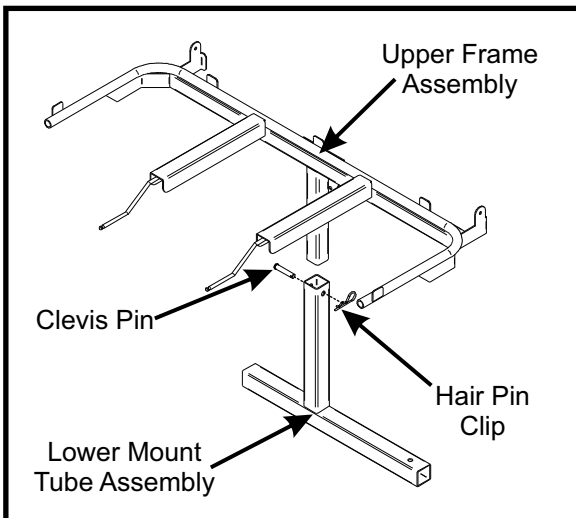


2-9 Upper Frame Assembly Installation

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

Lift the top assembly A0585 into position over the lower mount tube assembly. Slide the top assembly into the lower mount tube assembly, and secure with (1) 1/2"-2-1/2" clevis pin P#(K0133) and (1) hair pin clip P#(K0088). Refer to Figure 2-9.

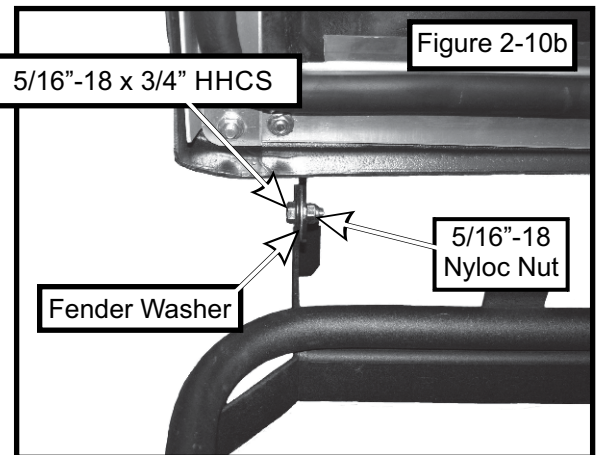
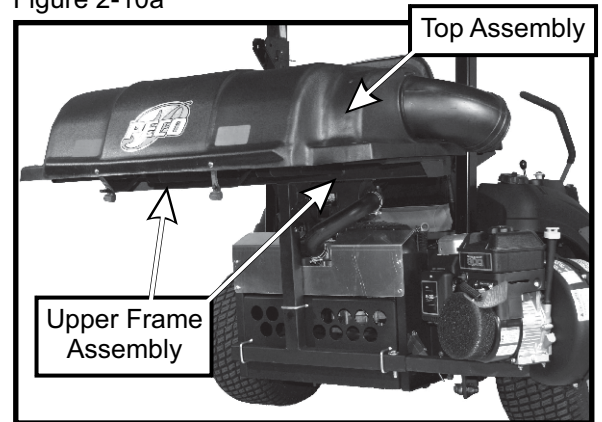
Figure 2-9



2-10 Top Assembly To Upper Frame Assembly Installation

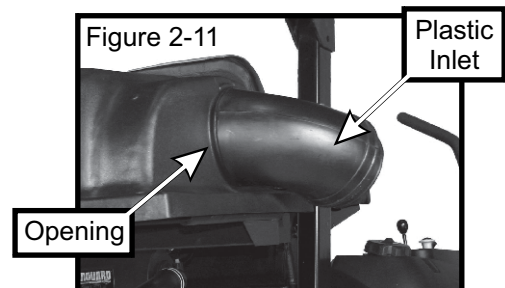
Align the pivot brackets of the top assembly P#(A0551) to the pivot point on either side of the upper frame assembly. Place (1) P#(K0041) fender washer between each pivot point and fasten each side by using (1) P#(K1153) 5/16"-18 x 3/4" HHCS and (1) P#(K1180) 5/16"-18 nyloc nut. When fastening leave nut slightly loose so that the top can pivot freely. See Figure 2-10.

Figure 2-10a



2-11 Inlet Installation

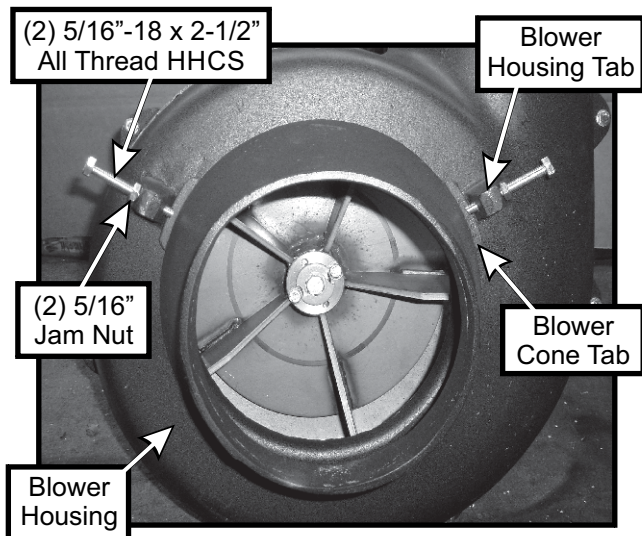
Slide the 6" plastic inlet P#(V1054) through the opening in the top assembly, and lock the inlet into place. The inlet should pivot freely about the opening in the top assembly. Refer to Figure 2-11.



2-12 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 2-12 for reference.

Figure 2-12



2-13 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 taper-lock bushing (#5). See Figure 2-13. Next remove the (2) 1/4"-20 x 1" HHCS (#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.

Figure 2-13



2-14 Throttle Cable Installation

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 nyloc nuts P#(K1216) (Figure 2-14a). 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 2-14b).

NOTE: If mower is not equipped with a ROPS Intall the throttle cable kit to the top frame assembly P#(A0585) using the same steps as above. Make sure to locate the throttle cable kit were it can be easily accessed from the operator's seat.

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

Route cable over upper hose as shown in Figure 2-14c.

Figure 2-11a

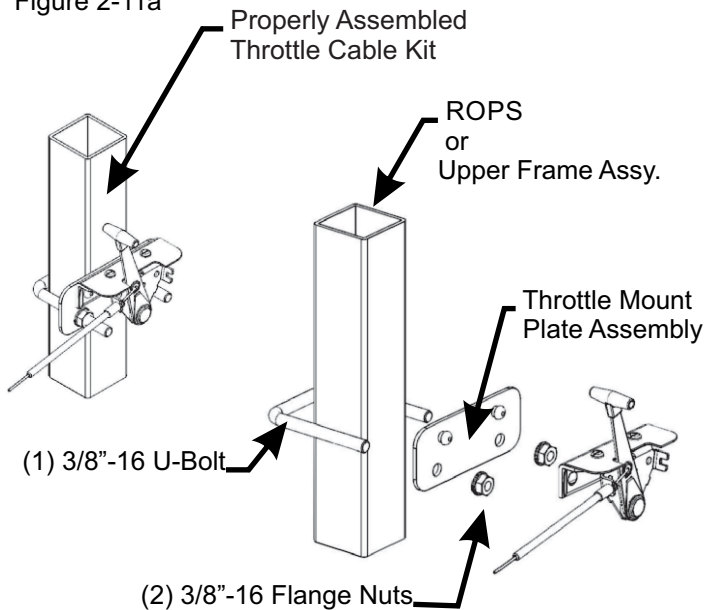


Figure 2-11b

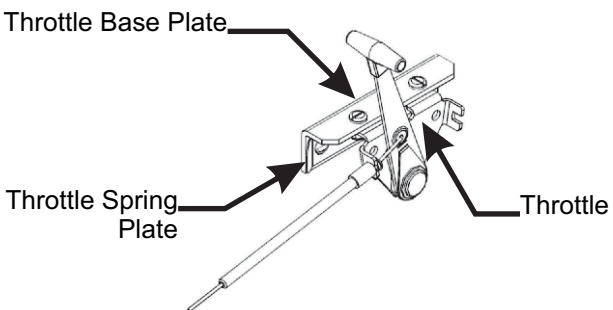
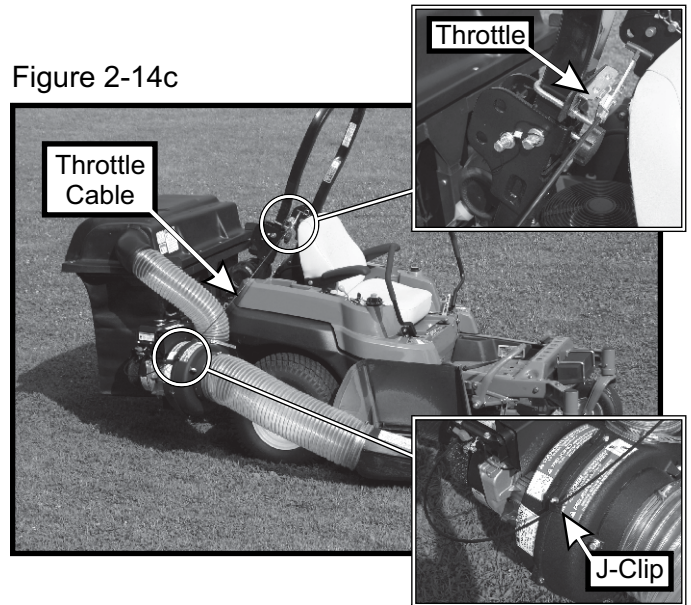


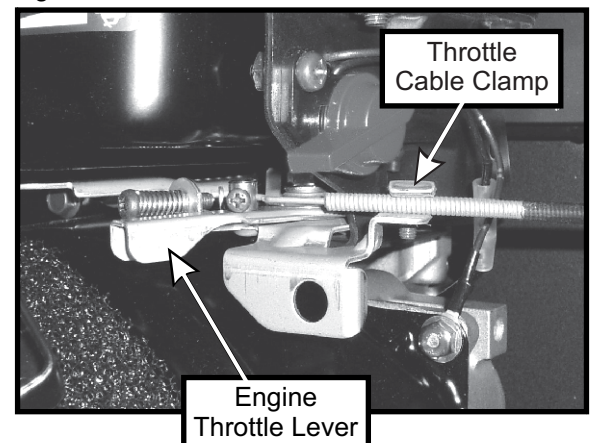
Figure 2-14c



Attach J-Clip P#(K1455) onto blower housing using the existing bolt located on blower housing. 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. Thread the cable through the j-clip and then fasten the throttle cable sleeve to the clamp on the engine throttle (Figure 2-14d). 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, pull the box handle to dump the box and be sure the cable does not alter the movement of the box.

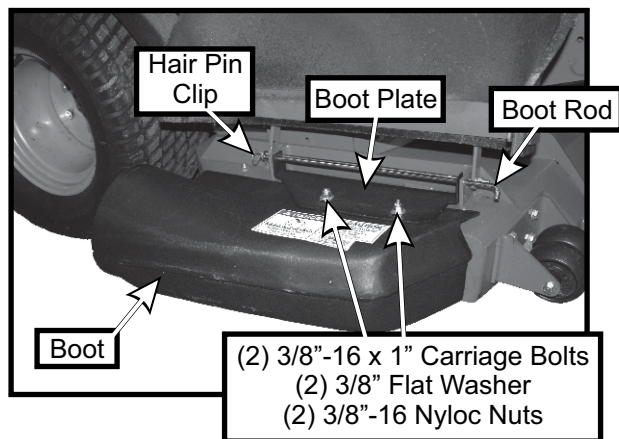
Figure 2-14d



2-15 Boot To Mower Deck Installation

Attach the boot plate P#(B0612) to the aluminum boot P#(E2502), using (2) 3/8"-16 x 1" carriage bolts P#(K1182), (2) 3/8" flat washer P#(K0047), and (2) 3/8"-16 nyloc nuts P#(K1216). Insert the bolts from inside the boot, so that the threads are on the outside of the boot. This will prevent grass clippings from collecting on the bolt threads. Align the holes in the boot plate with the holes in the grass deflector mounting bracket located on the mower deck, and secure the boot plate to the mower deck using (1) boot rod P#(B0348), and (1) hair pin clip P#(K0099). Refer to Figure 2-15.

Figure 2-15



2-16 Length of Hose Adjustment

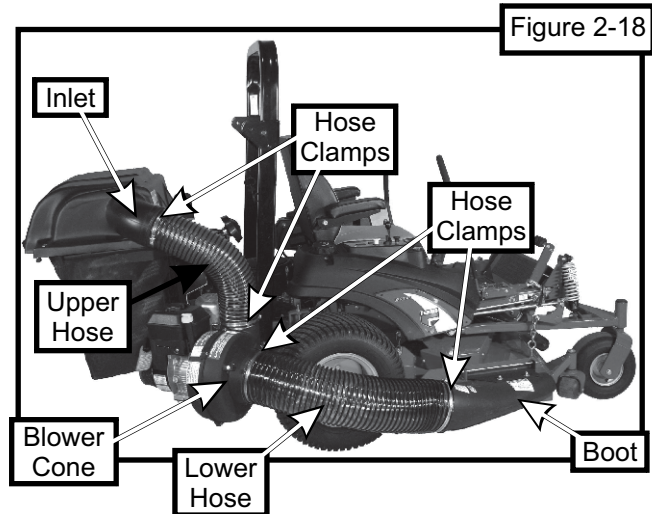
The hoses in steps 2-17 and 2-18 must be cut to fit your mower. Follow steps 2-17 and 2-18, however, do not cut the hoses until you have tried to fit them on your mower. The hoses have to be long enough to allow for clamping surface between the inlet, blower assembly, and boot.

2-17 Upper Hose Installation

Slide a hose clamp P#(J0060) over both ends of the upper hose. Then slide one end of the 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 upper hose onto the outlet of the blower assembly. See Figure 2-17 for details. Tighten the hose clamps.

2-18 Lower Hose Installation

Slide a lower hose clamp P#(J0080) onto both ends of the lower hose. Slide one end of the lower hose onto the blower cone, with 2" of the hose overlapping the cone, and tighten the clamp. Slide the other end of the lower hose over the boot, with 2" of the hose overlapping the boot, and tighten the clamp. Refer to Figure 2-18 for reference.



2-19 Weight Kit Installation

Fasten the (2) weight brackets P#(B0383) to the mower frame, using (4) 3/8"-16 x 3-1/2" HHCS P#(K1200), (4) 3/8" flat washer P#(K0047), and (4) 3/8"-16 nyloc nuts P#(K1216). Use the flat washers on the slotted mount holes in the weight bracket. After the weight brackets are securely fastened to the mower frame, lift the weight P#(B2220) into position, and secure the weight using (2) 1/2"-13 x 4-5/16" u-bolts P#(K0331), (4) 1/2" flat washers P#(K0055), and (4) 1/2"-13 nyloc nuts P#(K1247). Refer to Figures 2-19a and 2-19b.

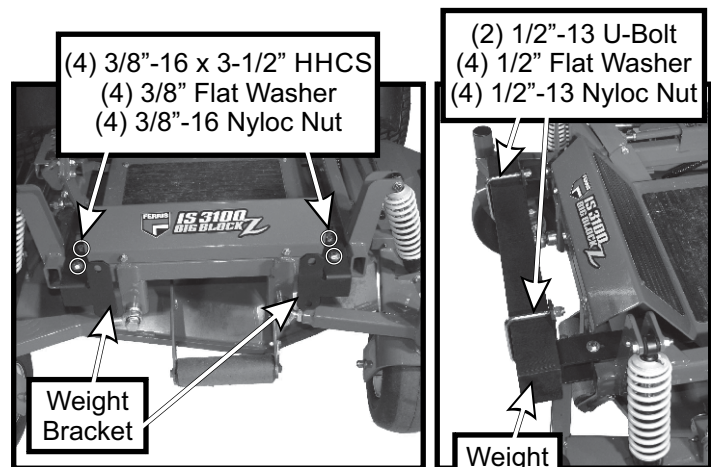


Figure 2-19a

Figure 2-19b

2-20 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 2-20a). 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 2-20b).

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 2-20c). 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 2-20d).

Figure 2-20a

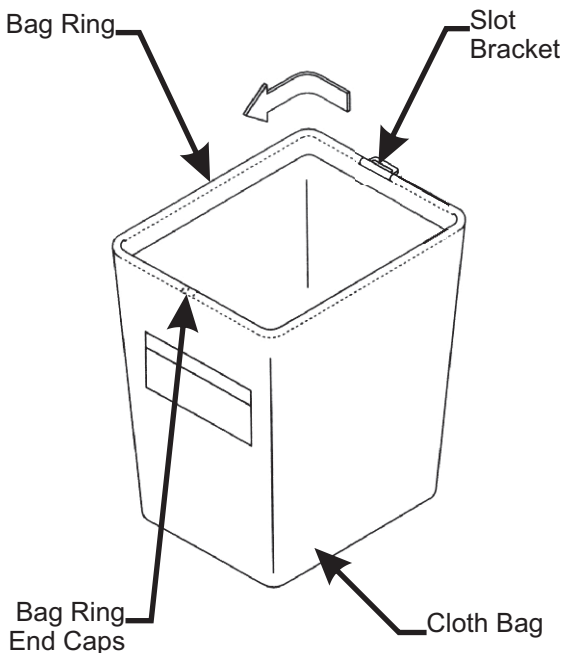


Figure 2-20b

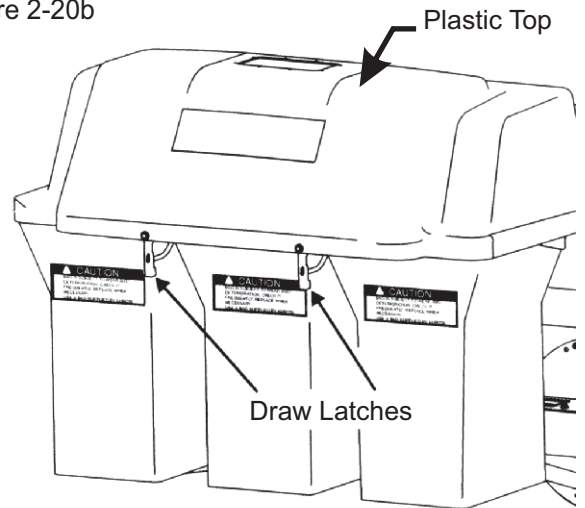


Figure 2-20c

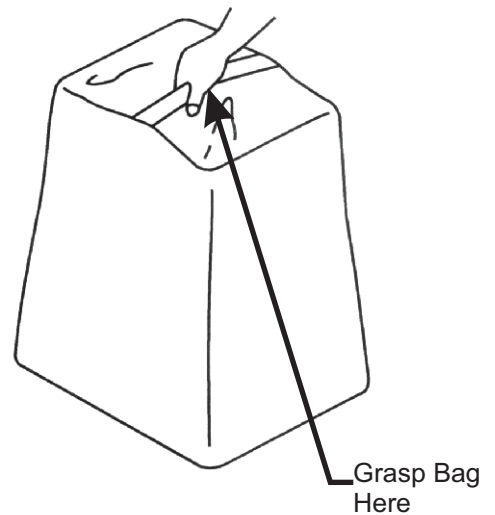
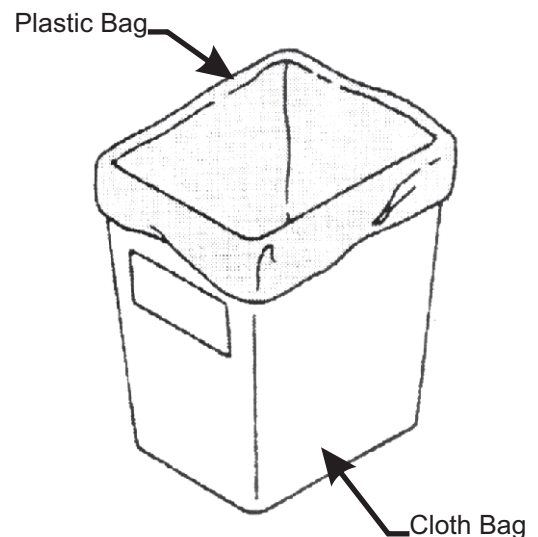


Figure 2-20d



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 & Tips On Mowing

- A. Perform BEFORE EACH USE maintenance list in paragraph 4-1.
- 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 blower, engage the parking brake and turn the mower off. Check the upper hose, lower hose, top screen and boot for clogs.

To obtain the maximum effectiveness from your collection system the tips listed below should be followed:

- * Watch your speed- Normal conditions will allow a speed of up to approximately 5 mph, but thick, heavy damp conditions will require reduced ground speed.
- * Mow with sharp blades- A sharp blade cuts cleaner.
- * Wet grass and leaves will decrease effectiveness and will increase horsepower requirements.
- * Mow at higher cutting heights- Remove and mulch no more than 2" of grass length with each mowing. (Experts recommend not cutting off more than 1/3 of the grass blade length at any given time.)
- * Mow twice, at different height settings, (high, then low), if grass is extra tall.
- * Remember that horsepower requirements will vary with the mowing conditions such as type and height of turf grass, moisture content, amount of leaves, whether the terrain is flat or sloped, etc.

3-3 Unloading The Collection System

- A. Stop the forward movement of the mower.
- B. Disengage the mower deck.
- C. Using the throttle cable slow the engine down to idle.
- 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 17 to re-attach bags back to the bagger.

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

4-1 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. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
5. 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, and off of safety decals. Replace any missing or illegible decals.
2. Clean all debris from the box screen.
3. Inspect unit for worn or damaged components. Repair or replace before the next use. Any replacement component installed during repair shall include the components current safety decal specified by the manufacturers to be affixed to the component.

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.

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

PECO	
OUTDOOR POWER EQUIPMENT	
Model Number	<input style="width: 95%;" type="text"/>
Serial Number	<input style="width: 95%;" type="text"/>
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 Name: _____

Dealer's/Distributor's: _____ **State:** _____ **Zip:** _____

Phone Number: _____

Address: PECO Inc.

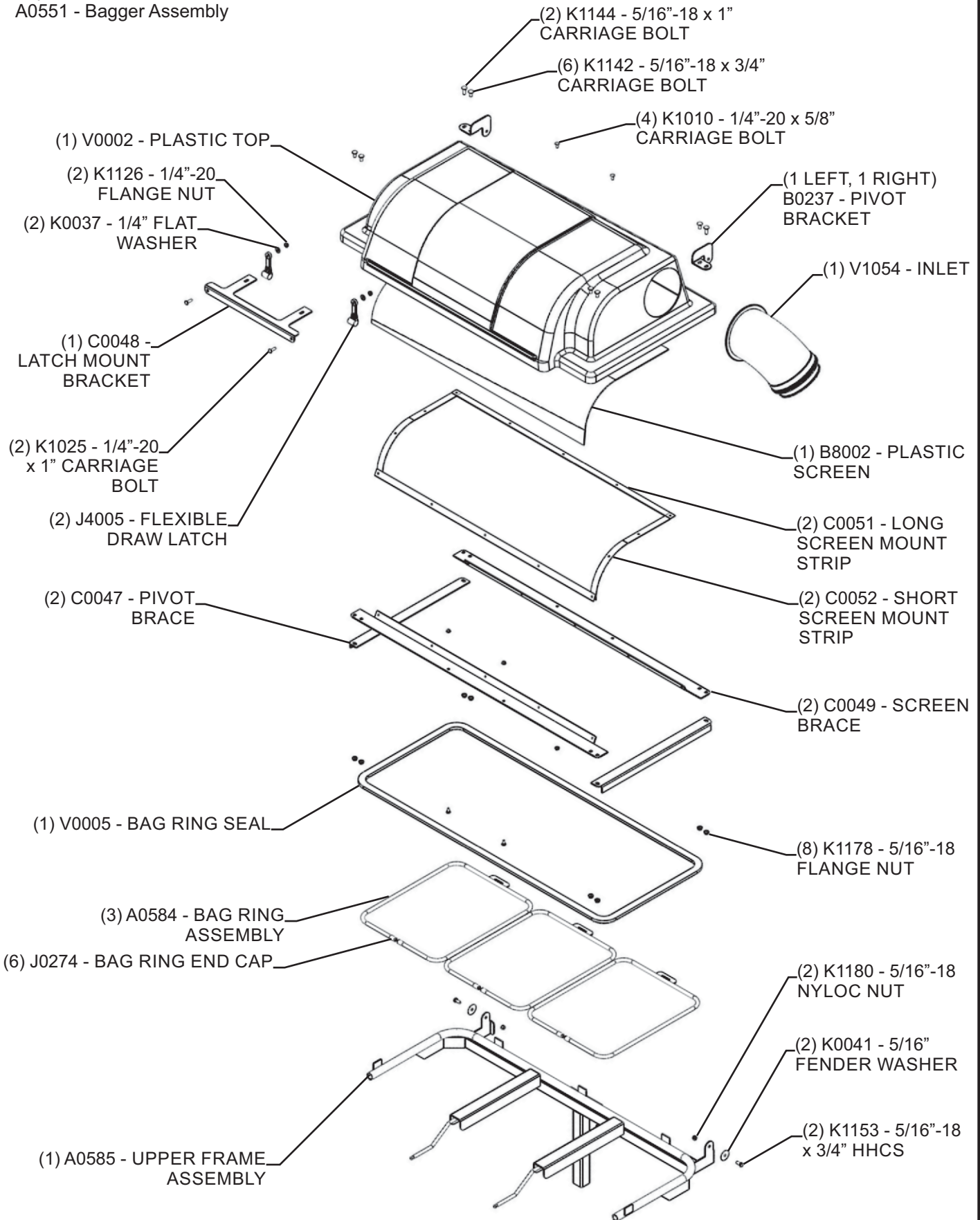
10 Walden Drive

Arden, NC 28704

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

Email: peco@lawnvac.com

Exploded View Of The
A0551 - Bagger Assembly



MODEL#: 41031301

MOWER NAME: FERRIS

MOWER MODEL: IS 3100Z

MOWER DECK SIZE: 61"

VAC NAME: 13 CUBIC FOOT PRO BAGGER

ENG: 900 SER. BR (9.00 GROSS TORQUE / 205 cc)

MANUAL: Q0407



FOR YEAR: 2010

REVISED: 5/10/2012

A1783 UNIT ASSEMBLY



(1)
**A0551
TOP
ASSEMBLY**



(1)
**V1054
6" PLASTIC
INLET**



(2)
**J0060
6" HOSE
CLAMPS**



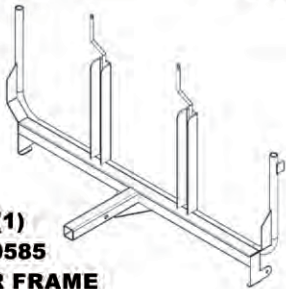
(2)
**J0080
8" HOSE
CLAMPS**



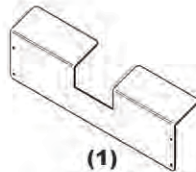
(1)
**F0001
8" x 36"
LOWER
HOSE**



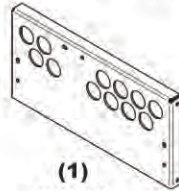
(1)
**F0001
6" x 28"
UPPER
HOSE**



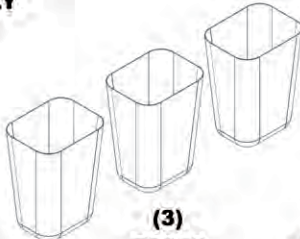
(1)
**A0585
UPPER FRAME
ASSEMBLY**



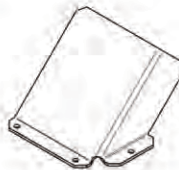
(1)
**C0063
DEBRIS
SHIELD**



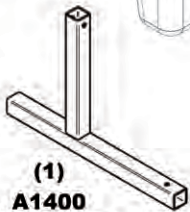
(1)
**B0611
LOWER
STIFFENER**



(3)
**G0002
3.3 CU. FT.
COLLECTION
BAGS**



(1)
**C0062
EXHAUST
DEFLECTOR**



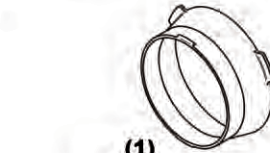
(1)
**A1400
LWR. MNT.
TUBE ASSY.**



(1)
**B0610
RT. LWR. MAIN
FRAME LEG**



(1)
**B0609
LT. LWR. MAIN
FRAME LEG**



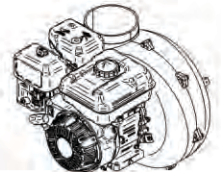
(1)
**E6009
8" BLOWER
CONE**



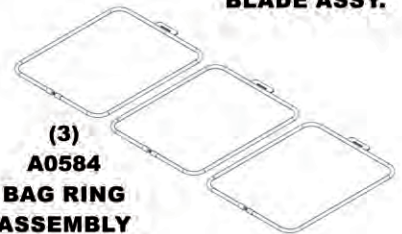
(1)
**HB0420
HARDWARE
BAG**



(1)
**A0138
ENGINE MNT.
ARM ASSY.**



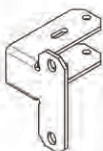
(1)
**ENGINE/
BLOWER/
BLADE ASSY.**



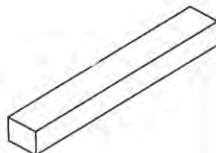
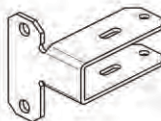
(3)
**A0584
BAG RING
ASSEMBLY**

A1784 - WEIGHT KIT

(1)
**HB0421
HARDWARE
BAG**



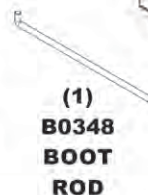
(2)
**B0383
WEIGHT
BRACKET**



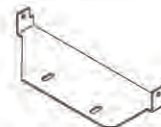
(1)
**B2220
WEIGHT**

A1785 - BOOT KIT

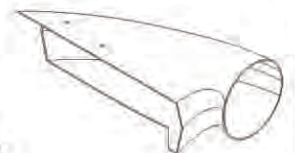
(1)
**HB0422
HARDWARE
BAG**



(1)
**B0348
BOOT
ROD**



(1)
**B0612
BOOT
PLATE**



(1)
**E2502
BOOT**

MODEL#: 41031303

MOWER NAME: FERRIS

MOWER MODEL: IS 3100Z

MOWER DECK SIZE: 61"

VAC NAME: 13 CUBIC FOOT PRO BAGGER

6.5 BRIGGS AND STRATTON VANGUARD

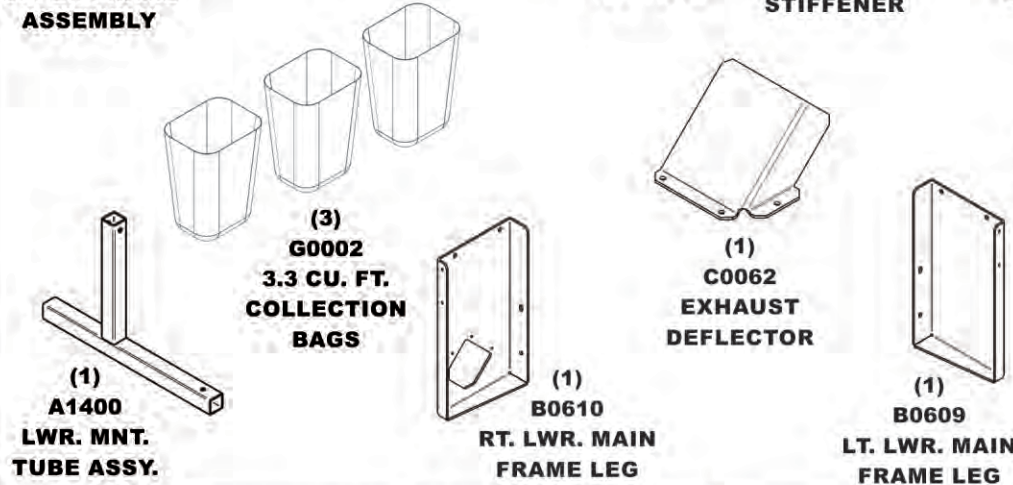
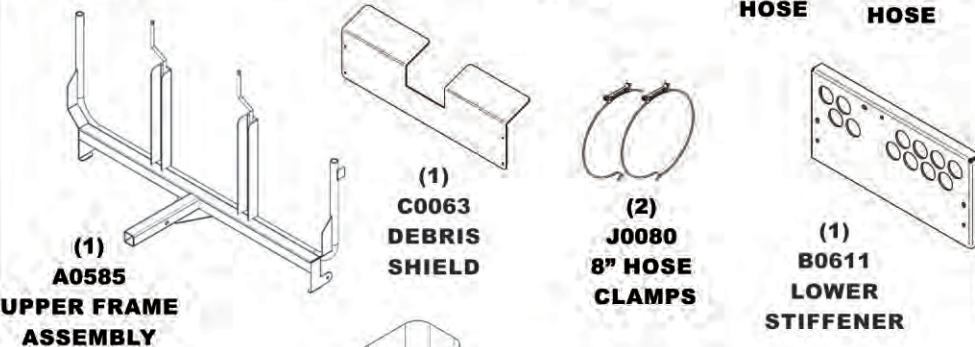
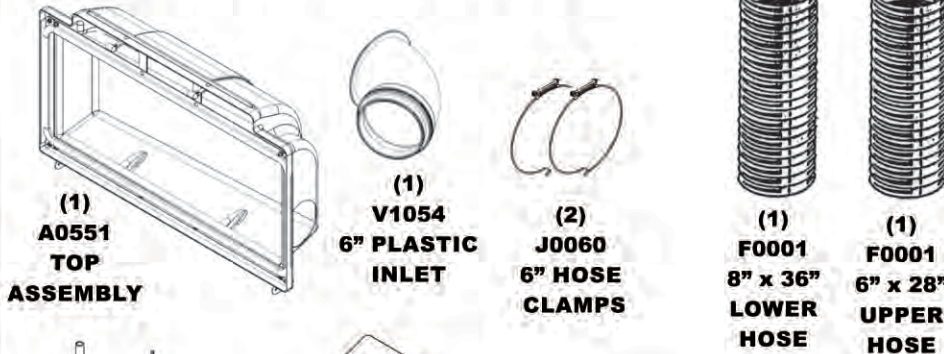
MANUAL: Q0407



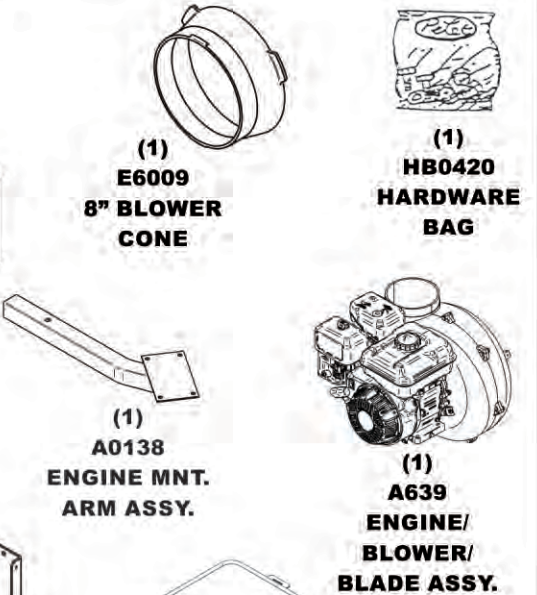
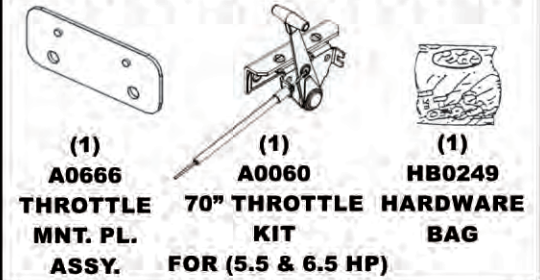
FOR YEAR: 2010

REVISED: 12/20/11

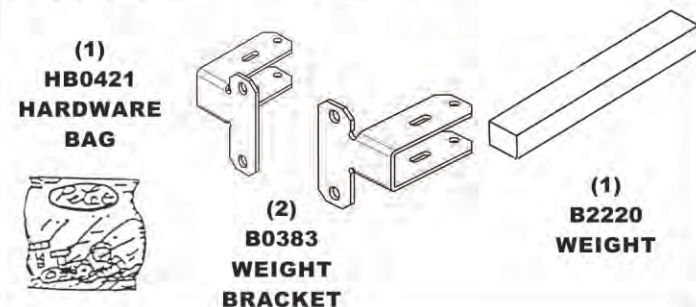
A1783 UNIT ASSEMBLY



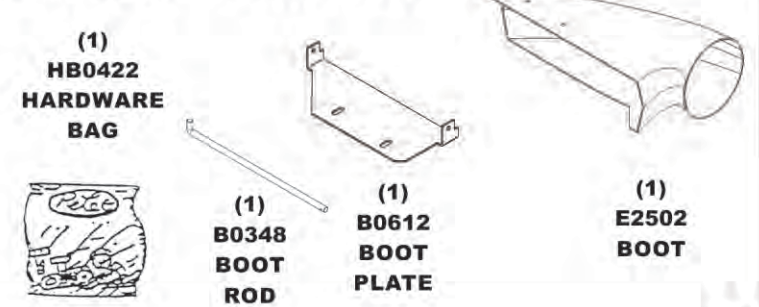
A0620 THROTTLE KIT



A1784 - WEIGHT KIT



A1785 - BOOT KIT



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.



Part #: R4027



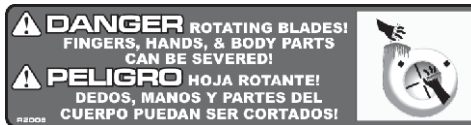
Part #: R1069



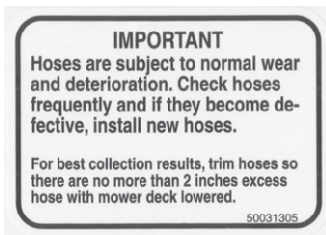
Part #: R1057



Part #: R2007



Part #: R2008



Part #: R1054



Part #:R4015



Part #: R1065



Part #:R4008



Part #:R1051

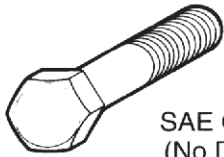


Part #: R1090

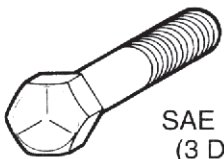
TORQUE SPECIFICATIONS

AMERICAN Bolt Head Markings

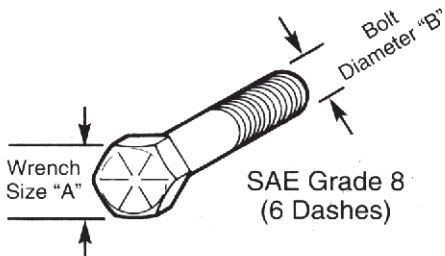
Recommended Torque in Foot Pounds (Newton Meters).*



SAE Grade 2
(No Dashes)



SAE Grade 5
(3 Dashes)

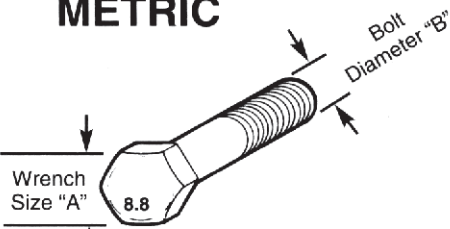


SAE Grade 8
(6 Dashes)

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

Recommended torque in foot pounds (newton Meters).*



Numbers appearing on bolt heads indicate ASTM class.

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**