

ENGINE DRIVEN - GRASS COLLECTION SYSTEM

TAD.

2014

Gravely Pro Turn Series

- 60" DECKS



ASSEMBLY • OPERATION • MAINTENANCE

MANUAL PART#: 00491 REV: 0

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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 guickly. 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.
- **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 ALERT SYMBOLS

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 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 & 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.

1-2 Description

The grass collection system is designed for turf maintenance where there is a need to collect the grass clippings as the mower cuts the turf. It is also used for picking up leaves and in pre-season and post-season clean-up. The 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 12 cubic foot aluminum box at the rear portion of the mower frame. The operator can engage the blower by starting the external engine. Once the container is full, the operator can easily push and raise the dump handle, opening the rear door on the container and pivoting the box to the ground. Once empty, the operator can easily lower and pull the dump handle, pivoting the box back into position and closing the door.

Section II - Installation For Use

2-1 Preparation Of Mower

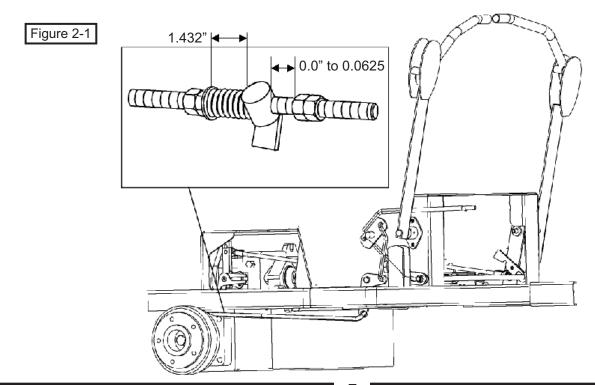
Carefully dismantle wooden shipping crate from around the components. Cut retaining straps and separate the parts. The collection system will have various parts located inside. Remove and sort all parts for easy identification.

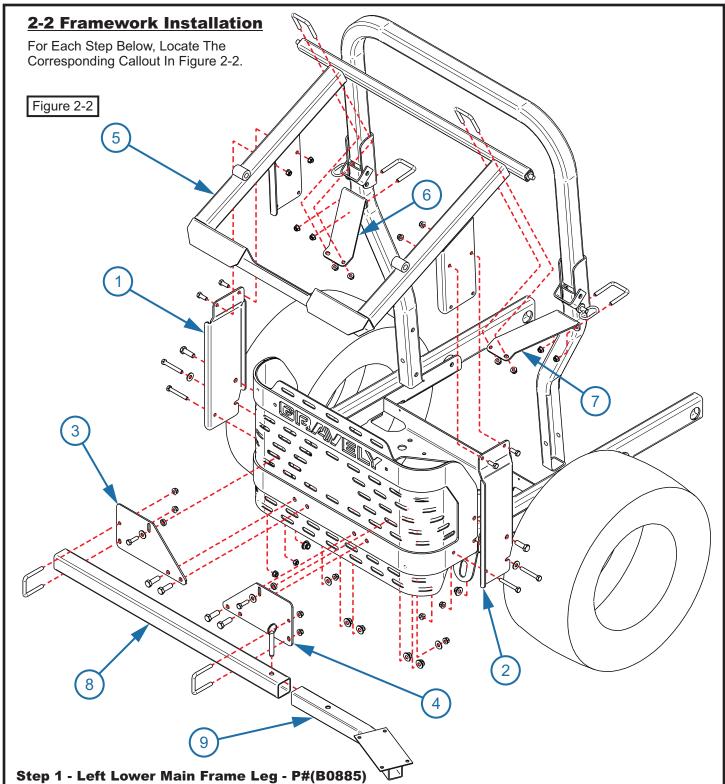
NOTE: Before each step of assembly it will help to study the Exploded Parts View Section (See Table Of Contents on Page 2).

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

Parking Brake Setting

For the added weight of the collection system, the parking brake must be re-adjusted. To do this, first Remove the rear wheels from the mower. Once removed, reset the spring and the stop gap per the dimensions in the diagram (Figure 2-1). Replace the wheels when completed and torque each bolt to 51-72 ft //bs





Position Frame Leg to Left Side of mower. Align holes in Frame Leg to existing rear bumper to determine bolts for removal. Pro-Turn 200 Series (PT 200) will require (2) bolts removed and Pro-Turn 400 Series (PT 400) will require (3) removed. Once removed, fasten lower portion of Frame Leg to rear bumper, as shown, using hardware listed;

PT 200 & 400 Series

Front Lower Bolt - (1) P#(K0047) 3/8" Flat Washer, (1) P#(K1021) 3/8"-16 x 2-3/4" HHCS & (1) P#(K2038) 3/8" Nylon Flange Locknut.

Rear Lower Bolt - (1) P#(K1021) 3/8"-16 x 2-3/4" HHCS & (1) P#(K2038) 3/8" Nylon Flange Locknut.

PT 400 Series

Front Bolt - (1) P#(K1232) 1/2"-13 x 1-1/4" HHCS & (1) P#(K2012) 1/2"-13 Nylon Flange Locknut.

Step 2 - Right Lower Main Frame Leg - P#(B0886)

Position Frame Leg to Right Side of mower. Align holes in Frame Leg to existing rear bumper to determine bolts for removal. Pro-Turn 200 Series (PT 200) will require (2) bolts removed and Pro-Turn 400 Series (PT 400) will require (3) removed. Once removed, fasten lower portion of Frame Leg to rear bumper, as shown, using hardware listed;

PT 200 & 400 Series

Front Lower Bolt - (1) P#(K0047) 3/8" Flat Washer, (1) P#(K1021) 3/8"-16 x 2-3/4" HHCS & (1) P#(K2038) 3/8"-16 Nylon Flange Locknut.

Rear Lower Bolt - (1) P#(K1021) 3/8"-16 x 2-3/4" HHCS & (1) P#(K2038) 3/8"-16 Nylon Flange Locknut.

PT 400 Series

Front Bolt - (1) P#(K1232) 1/2"-13 x 1-1/4" HHCS & (1) P#(K2012) 1/2"-13 Nylon Flange Locknut.

Step 3 & 4 - Mount Brackets - P#(B0892)

Position each Mount Bracket as shown. Align holes in each Bracket to rear bumper. Fasten using hardware listed;

PT 200 & 400 Series

Lower Bolts (Per Bracket) - (2) P#(K1232) 1/2"-13 x 1-1/4" HHCS & (2) P#(K2012) 1/2"-13 Nylon Flange Locknuts.

Upper Bolt (Per Bracket) - (2) P#(K0047) 3/8" Flat Washers, (1) P#(K1192) 3/8"-16 x 1-1/4" HHCS & (1) P#(K2038) 3/8"-16 Nylon Flange Locknut.

PT 400 Series

Upper Bolt (Per Bracket) - Add (1) P#(S3287) Spacer between Mount Bracket & rear bumper.

Step 5 - Main Frame Assembly - P#(A0680)

Position Main Frame as shown. Align top holes in each Frame Leg, from Step 1 & 2, to Top Main Frame holes. Fasten using hardware listed;

Hardware (Per Side) - (2) P#(K1191) 3/8"-16 x 1" HHCS & (2) P#(K2038) 3/8"-16 Nylon Flange Locknuts.

Step 6 - Left Main Frame Support - P#(B0888)

Position Frame Support as shown. Align front bend to mower's ROPS, bend pointing down, and opposite end to bottom side of Main Frame from Step 5. Fasten using hardware listed;

Hardware - (2) P#(K1119) 3/8" U-Bolts & (4) P#(K2038) 3/8"-16 Nylon Flange Locknuts.

Step 7 - Right Main Frame Support - P#(B0889)

Position Frame Support as shown. Align front bend to mower's ROPS, bend pointing down, and opposite end to bottom side of Main Frame from Step 5. Fasten using hardware listed;

Hardware - (2) P#(K1119) 3/8"-16 U-Bolts & (4) P#(K2038) 3/8"-16 Nylon Flange Locknuts.

Step 8 - Outer Engine Mount Tube - P#(B3727)

Position Mount Tube as shown with detent pin hole to right side of mower. Fasten using hardware listed;

Hardware - (2) P#(K1119) 3/8"-16 U-Bolts & (4) P#(K2038) 3/8"-16 Nylon Flange Locknuts.

Step 9 - Engine Mount Arm Assembly - P#(A0942)

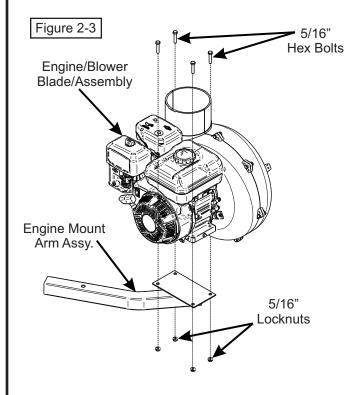
Position Mount Arm as shown. Slide Mount Arm into Mount Tube from Step 8 and align detent pin holes. Fasten using hardware listed;

Hardware - (1) P#(J0248) Detent Pin.



2-3 Engine/Blower/Blade Assembly Installation

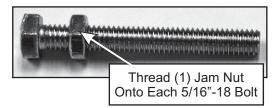
Place the engine blower blade assembly on top of the engine mount arm. Secure the assembly using (4) 5/16"-18 x 1-1/2" HHCS P#(K1157) and (4) 5/16"-18 nylon flange lock nuts P#(K2516). Refer to Figure 2-3. Adjust the position of the blower assembly by sliding the engine mount tubes left or right. There should be a minimum of 1" clearance between the blower housing and the rear tire. Tighten all hardware once positioned.



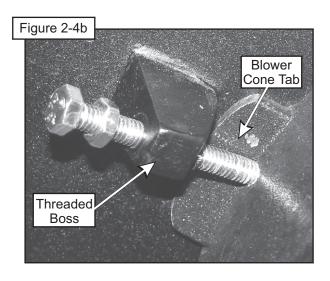
2-4 Blower Cone Installation

Thread (1) 5/16"-18 jam nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125) as shown in Figure 2-4a.

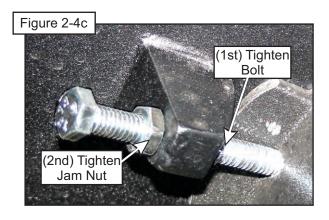
Figure 2-4a



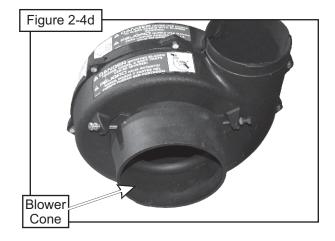
Now partially thread (1) bolt into each of the two threaded bosses located on the blower housing. Place blower cone so the two tabs line up with the bolts and tighten completely as shown in Figure 2-4b.



Once the (2) bolts are tight, tighten the jam nuts against the threaded boss as shown in Figure 2-4c.

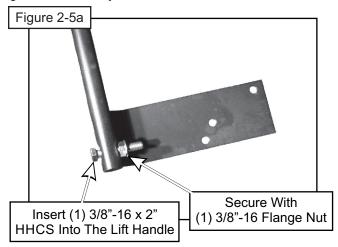


Refer to Figure 2-4d for proper blower cone installation reference.

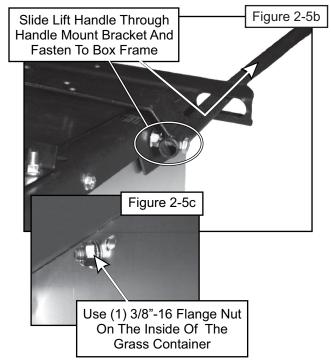


2-5 Lift Handle Installation

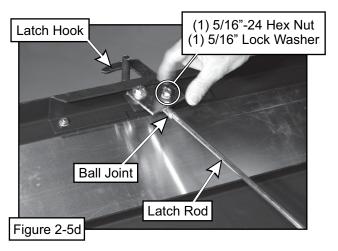
NOTE: Before continuing the lift handle installation, have someone assist you in turning the grass container upside down. Insert (1) 3/8"-16 x 2" HHCS P#(K1208) into the lift handle P#(A0897), and secure with (1) 3/8"-16 flange nut P#(K1215). Thread the flange nut onto the bolt upside down, as shown in Figure 2-5a. Do not tighten the nut fully at this time.



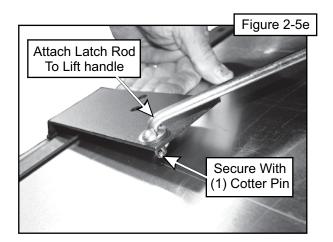
Slide the lift handle through the slot on the handle mount bracket. Insert the lift handle into the box frame as shown in Figure 2-5b, and secure using (1) 3/8"-16 flange nut P#(K1215) on the inside of the container as shown in Figure 2-5c. Now test the movement of the handle. It should have full-range of movement in the slot. If the handle does not have full-range of movement, adjust the 3/8"-16 flange nut from step 2-5a. Once achieved, tighten the fasteners.

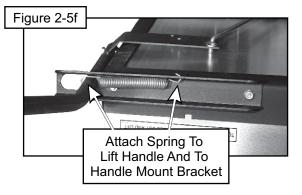


Fasten the ball joint P#(K1442) to the end of the latch rod P#(A0620). Tighten the ball joint to approximately half way down the threads on the latch rod. Attach the ball joint to the latch hook as shown in Figure 2-5d, using (1) 5/16"-24 hex nut P#(K1444) and (1) 5/16" lock washer P#(K0043).



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

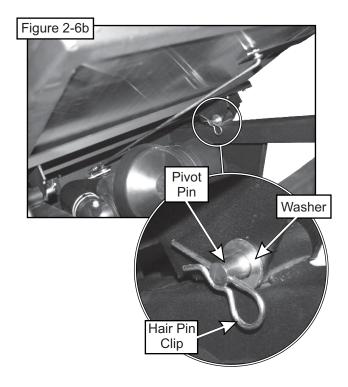




2-6 Aluminum Grass Container Installation

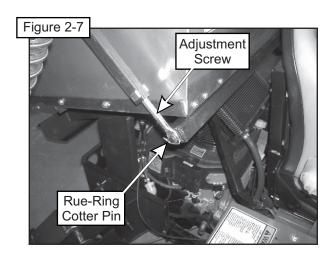
NOTE: It is recommended that (3) people assist in mounting the container. With three people available, two can lower the container onto the frame while the third person inserts the pivot pins P#(K0172) through the holes. Insert the pins from the outside to the inside. Secure with (1) 5/8" washer P#(K0058)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





2-7 Dump Mechanism Adjustment

The linkage may be adjusted in two places, at the adjusting screw P#(K1435) and the latch assembly items. See page 17 for visual clarification. To change the door closure tightness, thread the adjusting screw (Figure 2-7) in or out. To adjust the latch, change the length of the latch rod by threading the latch adjusting ball joint in or out. The latch hook pivot should be in the middle of the slot in the latch hook pivot plate. Slide the pivot back or forth and then re-tighten.



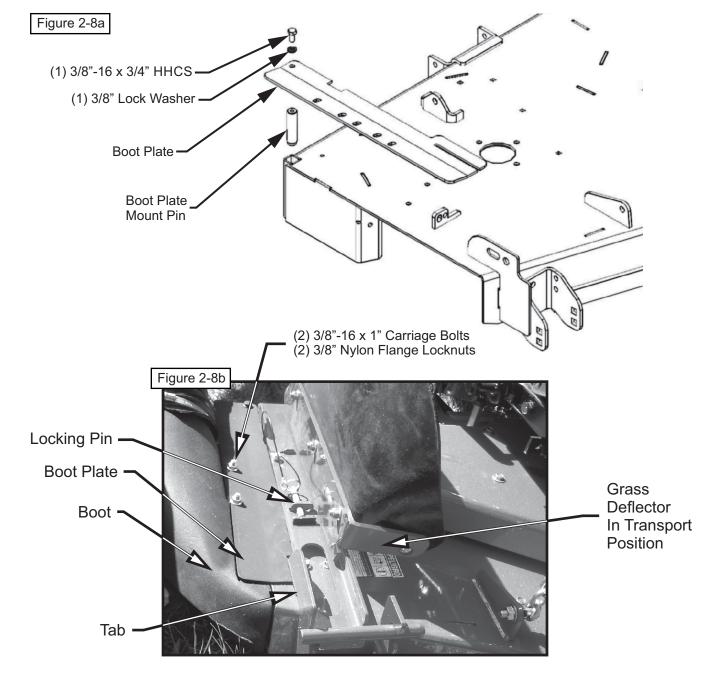
2-8 Boot Installation

First, remove the deflector shield by pulling out the locking pin and lifting the shield out of deck mount tube.

Place the deflector shield in the transport position on top of the boot plate. Replace the locking pin. Adjust the boot to fit securely against the discharge opening and tighten the (2) 3/8"-16 nylon flange locknuts. See figure 2-8b for clarity.

NOTE: When bolting the boot and boot plate together, the head of the bolt is placed from the inside of the boot. This will prevent grass from collecting on the bolts.

NOTE: The mower's deflector shield has been removed in the following photo for clarity. Always have the deflector shield mounted when mowing.



2-10 Length Of Hose Adjustment

The hoses in steps 2-11, 2-12 & 2-13 must be cut to fit your machine. Follow steps 2-11, 2-12 & 2-13. Do not cut the hoses until you have tried to fit them on your machine. Remember that the hoses need to be long enough to allow for the opening and closing of the collection system and also allowing ample clamping surface between each component.

2-11 Upper Hose Installation

Slide a pre-assembled hose clamp P#(J1000) onto both ends of the 6" upper hose (Figure 2-13). Slide one end of the 6" hose onto the plastic inlet P#(V1054). Make sure there is about a two-inch overlap between the hose end and the hose ring. Proceed to slide the opposite end of the 6" hose onto the outlet of the blower assembly. See (Figure 2-13) for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

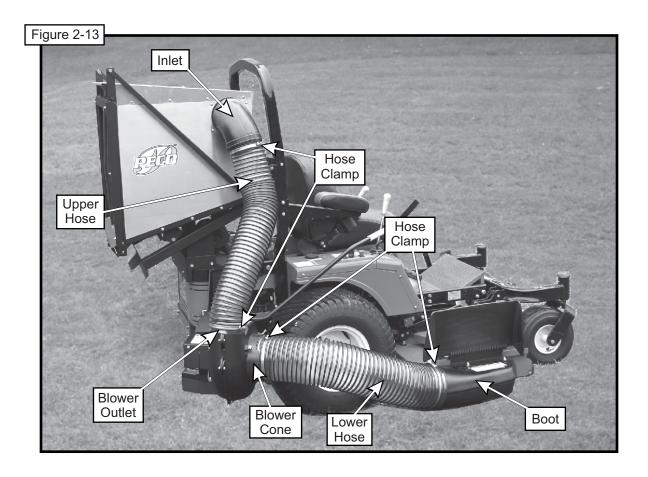
2-12 Lower Hose To Blower Cone Installation

Slide a hose clamp P#(J1000) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. Refer to Figure 2-13.

2-13 Lower Hose To Boot Installation

Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the lower hose clamp to secure the hose to the boot (Figure 2-13). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to aid in retaining boot to mower deck.

NOTE: For maximum collection system performance, adjust the hose lengths to achieve the smoothest transition between components. Avoid any sharp bends in the upper and lower hoses.



2-14 Throttle Cable Installation

To install the throttle cable kit to the box assembly, align the large end of the slot in the throttle base plate (Figure 2-14a) with the rivets located on the front of the box assembly frame (Figure 2-14b). 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 2-14c).

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

Route cable under upper hose as shown in Figure 2-14d.

Figure 2 -14a

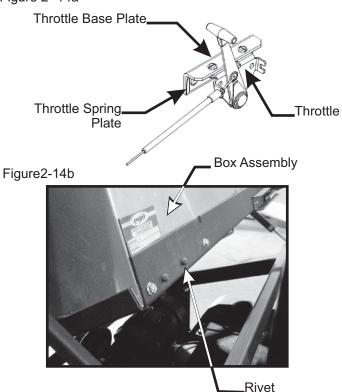


Figure 2-14c Box Assembly

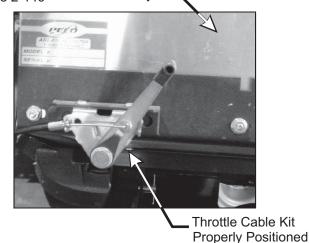
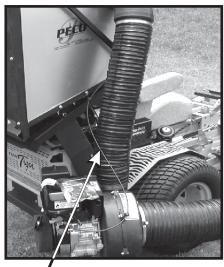


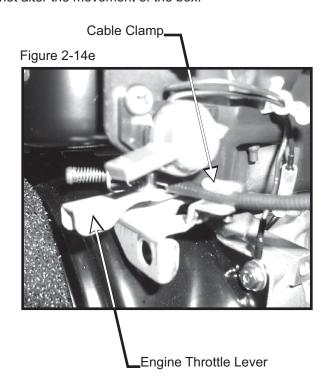
Figure 2-14d



Throttle Cable

To fasten the throttle cable end to the engine, place the throttle control lever into the "stop" position. Rotate the engine throttle lever to the "stop" position. Thread the wire end of the throttle cable into the engine throttle lever eyelet and tighten the screw. Fasten the throttle cable sleeve to the clamp on the engine throttle (Figure 2-14e). 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.



2-15 Impeller Blade Removal/Replacement

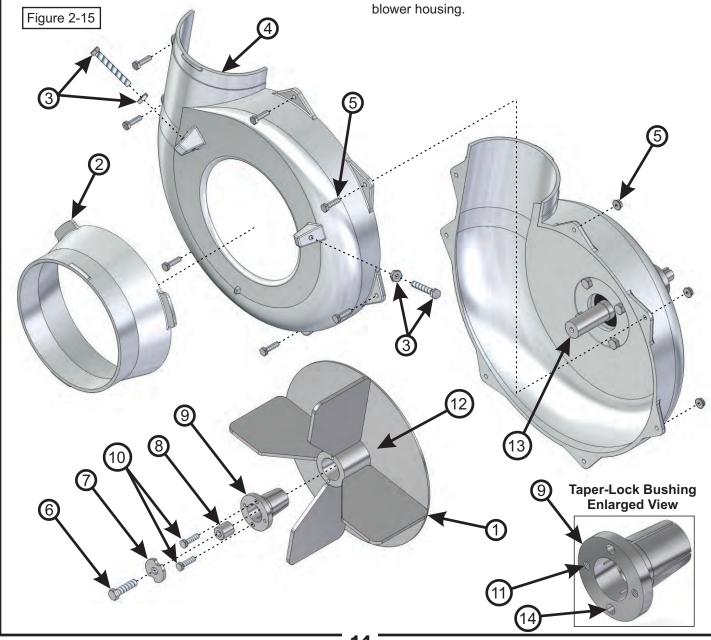
To gain impeller blade **(#1)** access, first remove the blower cone **(#2)** from the blower housing, located on the PTO assembly P#(A1821), by removing two blower cone bolts and nuts **(#3)**. Next, remove the blower housing front **(#4)** by removing seven bolts and nuts **(#5)** around the outer housing edge. Refer to Figure 2-15.

To Remove: First, remove one 3/8"-16 x 1-1/2" HHCS P#(K1211) (#6), one taper-lock bushing washer P#(K0278) (#7) and one spacer bushing P#(S3242) (#8) from the taper-lock bushing (#9). See Figure 2-15. Next, remove two 1/4"-20 x 1" HHCS (#10) and place them into the threaded holes (#11) of the taper-lock bushing P#(S4302). Last, gradually thread each bolt evenly into the taper-lock bushing, forcing the blade to break-away from the taper-lock bushing.

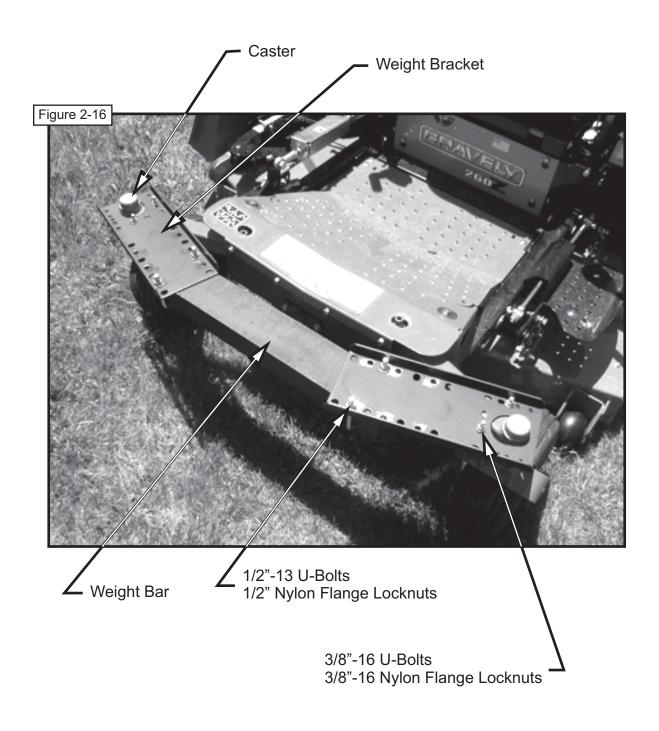
Tips on removing impeller blade;

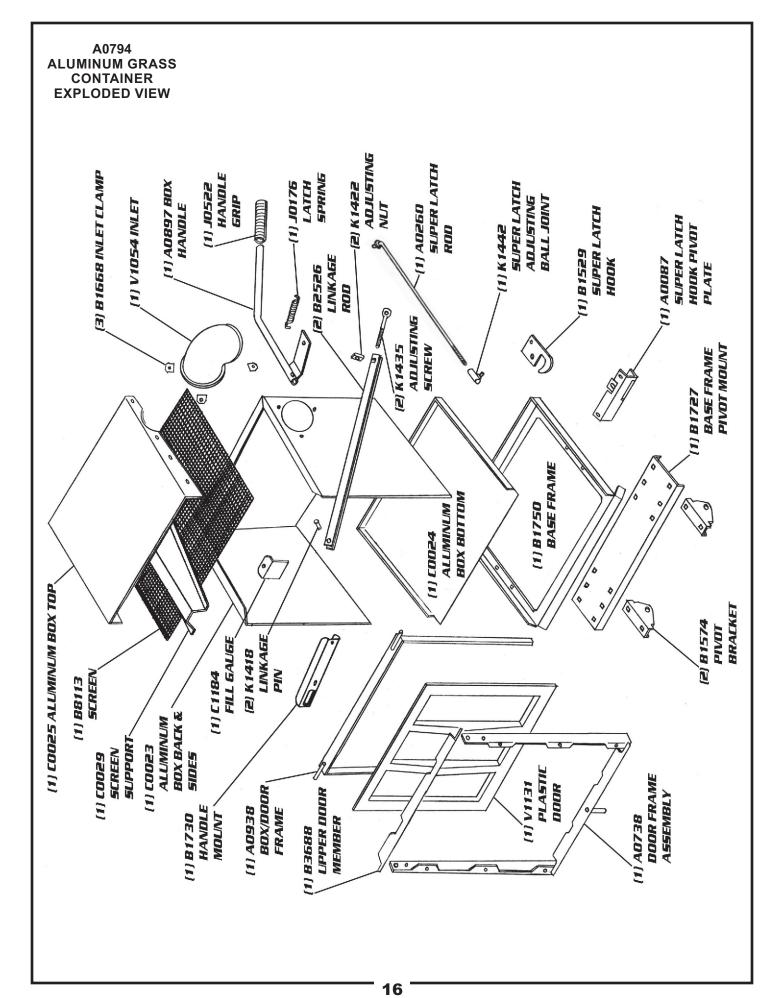
- 1 Try carefully hitting the base of the impeller blade **(#1)**, between each vein **(#12)**, with a rubber mallet to loosen the taper-lock bushing hold.
- 2 Spray break-free lubricant into the surrounding areas of the taper-lock bushing (#9) and repeat Tip 1.

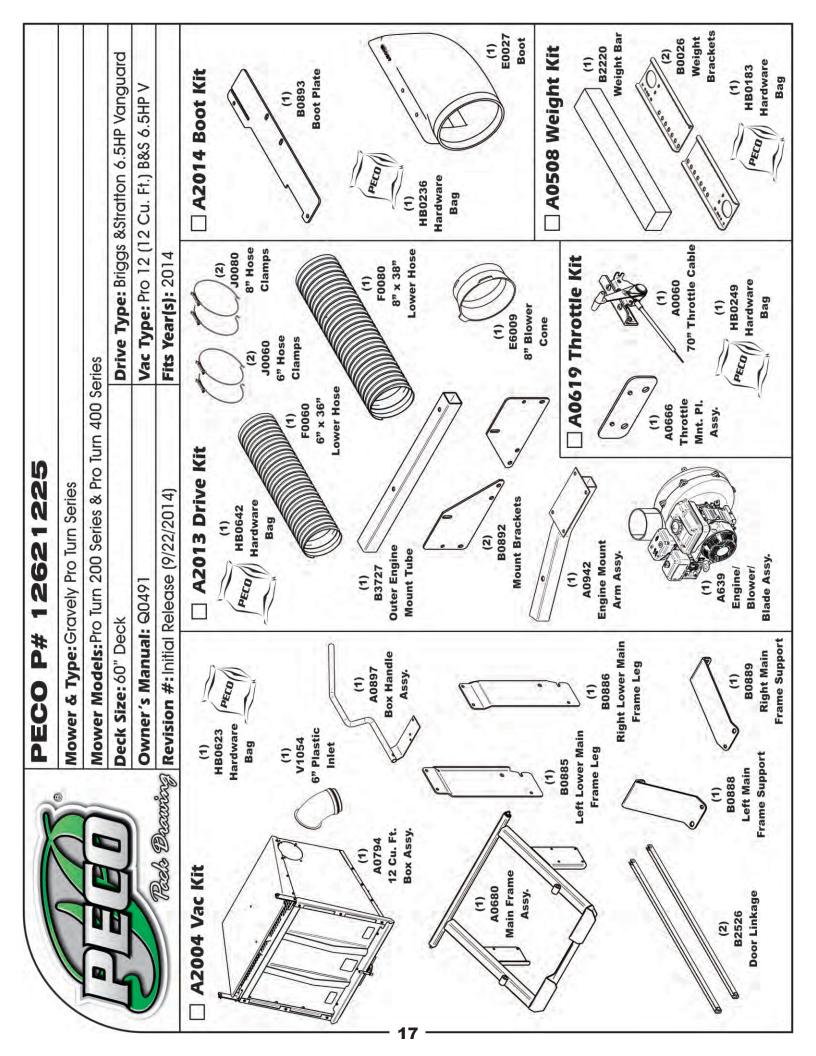
To Replace: First, place the impeller blade (#1) over the drive shaft (#13). Next, slide the taper-lock bushing (#9) on to the drive shaft and into the impeller blade, aligning the **non-threaded** holes (#14) of the taper-lock bushing to the threaded holes of the impeller blade. Then, fasten by using two 1/4"-20 x 1" HHCS (#10), one spacer bushing (#8) one taper lock bushing washer (#7), and one 3/8"-16 x 1-1/2" HHCS (#6). Torque all bolts to the specifications located in the chart towards the back of this manual. Last, rotate the impeller blade to ensure that the blade is clear of contact on all sides of the blower housing.



2-16 Weight Kit Installation







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 MowingPTO MODELS

- 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.

ENGINE DRIVEN MODELS

- 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 hilly, etc.

3-3 Disengagement Of The BlowerPTO MODELS

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. (See Table Of Contents on Page 2).

ENGINE DRIVEN MODELS

- B. (5.5HP Briggs & Stratton) To stop the engine, throttle the engine to the stop position.
- C. (6.5HP Briggs & Stratton Vanguard) To stop the engine, move the fuel lever to the OFF position.

3-4 Unloading The Collection System

NOTE: Press the tab, located behind the operator's left side, downward to feel if the collection system is full. If the container is full there will be resistance when depressing the tab.

- A. Stop the forward movement of the mower.
- B. Disengage the mower deck.
- C. Disengage the blower or turn the external engine off.
- D. Verify that the dump area is clear.
- E. Push the dump handle, on the left of the operator, away from the unit. While holding the handle pushed away, move the handle upward. The container door will swing upward and the container will rotate downward. The container will release its contents.
- F. Once the contents of the container have fallen out, the container is ready to move back into its normal operating position. With the handle in the 'away' position, pull the handle downward until it stops. Move the handle towards the center of the mower. This motion will allow the latch to lock back into collection position.

NOTE: If you do not hold the handle away from the mower as you pull the handle downward, the latch will not lock and the container can unexpectedly release the contents collected.

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. Perform lubrication per paragraph 4-2.
- 5. Listen for abnormal sounds, which might indicate loose parts, damaged bearings, or other damage. Correct any deficiency before continuing operation.
- 6. PTO MODELS ONLY: With the engine off, engage the blower assembly. Check the belt tension and inspect the pulley belt for cracks or tears.
- 7. Check for wear or deterioration of the upper or lower hoses. If there are any portions of the hose that have been torn or worn through, replace 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.
- 2. Inspect the unit for worn or damaged components. Repair or replace before the next use. Any replacement component installed during repair shall include the component's current safety decal specified by the manufacturers to be affixed to the component.
- 3. PTO MODELS ONLY: Check belt for proper tension.

4-2 Lubrication For PTO Models

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 necessary, 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.

THE SERIAL NUMBER PLATE IS LOCATED ON THE BOX ASSEMBLY P#(A0794)

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 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

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.



PELIGRO HOJA ROTANTE! DEDOS, MANOS Y PARTES DEL CUERPO PUEDAN SER CORTADOS!





#R2008









Part #: R1053

Part #: R1049

Part #: R1069

TO DUMP GRASS: PUSH HANDLE OUT AND LIFT

Part #: R1055





Part #: R1057 Red Reflector Label

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



Part #:R4015





Part #: R4027



Part #: R1052





Part #:R1051



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

Part #:R4008



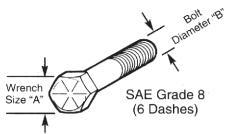
TORQUE SPECIFICATIONS

AMERICAN

Bolt Head Markings

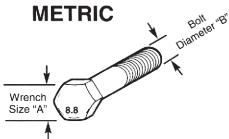






Recommended Torque in Foot Pounds (Newton Meters).*

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

Recommended torque in foot pounds (newton Meters).*

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

NOTES	



10 WALDEN DRIVE ARDEN, NORTH CAROLINA 28704

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