



**PTO
GRASS COLLECTION
SYSTEM**

DESIGNED FOR:

**MODEL 39621223 - 28
GREAT DANE CHARIOT SERIES MOWER**



GREAT DANE

"We Wrote The Book On Productivity"

OPERATOR'S MANUAL

ASSEMBLY ● OPERATION ● MAINTENANCE

PTO GRASS COLLECTION SYSTEM

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Safety

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

SAFETY

WARNING! NEVER operate the unit 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 **UP** and **DOWN** the face of slopes and **NEVER** across the face. **NEVER** attempt to mow excessively steep slopes, and use caution when turning on any slope.

Safety Alert Symbol



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

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

Safety Signs

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



White letters on **RED**

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



Black letters on **ORANGE**

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

It may also be used to alert against unsafe practices.



Black letters on **YELLOW**

This signal word indicates a potentially hazardous situation 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 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 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 and batteries 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.

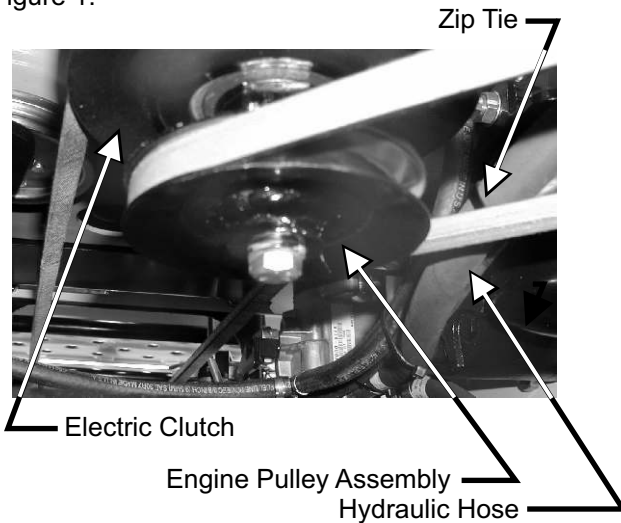
NOTE: All references made to right, left, front, rear, top or bottom are as viewed from the normal operator's position on the mower.

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. It is also good for picking up leaves and twigs in pre-season and post-season clean-up.

The blower, mounted on the right side of the unit, uses a belt and gearbox system from the engine PTO shaft. Drive train protection comes through belt slippage. The blower draws grass clippings from the discharge area of the cutter deck up to the aluminum container mounted over the rear portion of the mower frame. The operator can engage the blower with a push of the over-center linkage on the right side of the unit. Once the container is full of clippings, the operator can easily push and raise the lift handle, releasing the container's rear door and the container will pivot towards the ground.

Figure 1.



Section II

INSTALLATION FOR USE

2-1 Preparation Of Mower

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

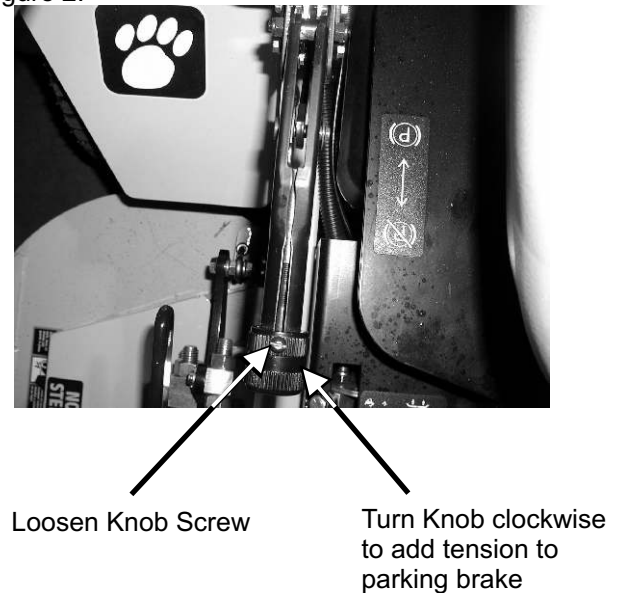
NOTE: Before each step of assembly it will help to study the exploded drawings on pages 8,9,10 and 11.

From the underside of the mower engine remove the bolt and bushing from the electric clutch assembly. Replace these parts with the engine pulley assembly, 7/16" lock washer, and 7/16"-20 HHCS. The added pulley will power the collection system. Note that the center of the hub that is extended should be upward toward the engine (Figure 1). Torque the bolt to 55 ft./lbs. Once pulley is secure, tie hydraulic hose (Figure 1) away from the pulley with (2) provided zip ties to prevent pulley from making contact with the hose.

Parking Brake Setting

For the added weight of the collection system, the parking brake must be re-adjusted (if applicable). To do this (Figure 2), first disengage the parking brake by placing it in the down position. Second, loosen the knob screw. Then to add more resistance to the parking brake, turn the knob clockwise 2 turns aligning knob screw up with slot in parking brake handle, then tighten the knob screw.

Figure 2.

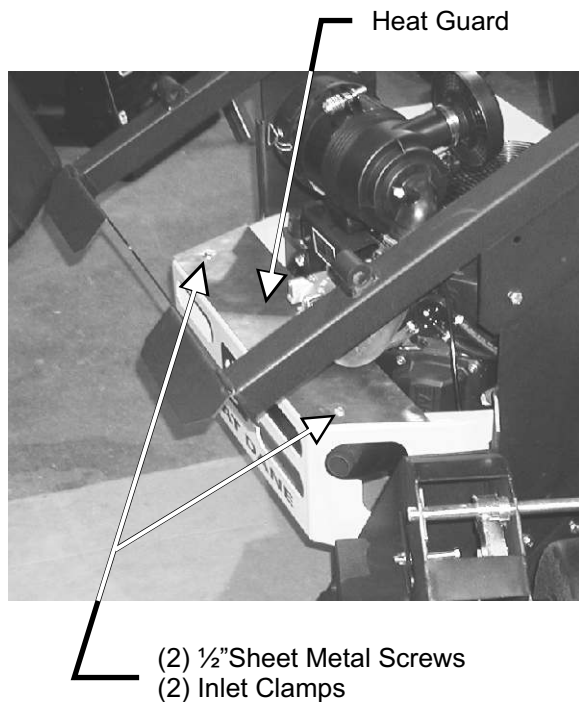


Heat Guard Installation

Note: Heat Guard only to be used with Kohler engines.

To install, place heat guard onto the top of the rear bumper of the mower. Fasten the heat guard by using (2) inlet clamps P#(B1668) underneath the heat guard and (2) 1/2" long sheet metal screws P#(K1096). Position the heat guard as shown in (Figure 3.). Tighten screws allowing the inlet clamps to grab the underside of the top of the rear bumper frame.

Figure 3.
Heat Guard Assembly



2-2 Attaching Left & Right Lower Frame Legs

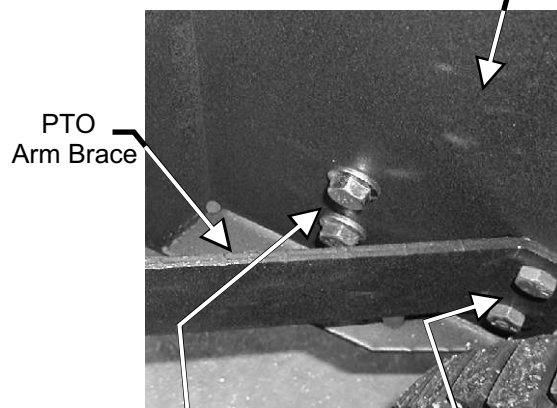
Remove the (4) Bolts (Figure 4) from the left side of the rear of the mower. Align the (4) holes of the left lower frame leg P#(B0064) to the (4) holes on the mower where the bolts were removed. Fasten the left lower frame leg to the mower by using the (4) bolts previously removed. Next, remove the (4) bolts (Figure 5) from the right side of the mower. Align the (4) holes of the right lower frame leg P#(B0149) to the (4) holes on the rear of the mower. Fasten **ONLY** the (2) bolts closest to the rear of the mower with (2) out of the (4) bolts previously removed. Locate the PTO arm brace P#(B0153) and fasten to the right lower frame leg by using (2) 3/8"-16 x 1" HHCS P#(K1182) and (2) 3/8"-16 flange nuts P#(K1215).

Figure 4. Left Lower Frame Leg Assembly



Remove and replace (4) existing bolts and nuts

Figure 5.
Right Lower Frame Leg Assembly



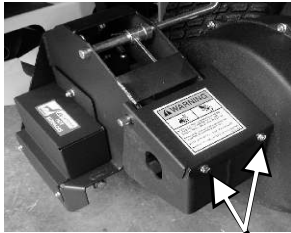
Attach (2) original bolts and nuts

Replace old hardware with (2) 3/8"-16 x 1" HHCS (2) 3/8"-16 Flange Nuts

2-3 Attaching PTO Assembly

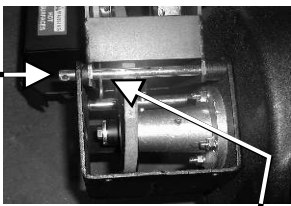
NOTE: To make this step easier for fastening, remove the blower assembly from the PTO assembly by removing the blower pivot pin. You must first remove the blower belt guard as shown in (Figure 6a). This will now allow you to remove the blower pivot pin (Figure 6b). Align the (3) holes on the PTO assembly P#(A0537) (Figure 7) to the (3) holes on the right lower main frame leg. Fasten by using (3) 3/8"-16 x 3/4" HHCS P#(K1190) and (3) 3/8"-16 flange nuts P#(K1215). Fasten the PTO arm brace to the PTO assembly by using (2) 3/8"-16 x 3/4" HHCS P#(K1190) and (2) 3/8"-16 flange nuts P#(K1215) Re-install blower pivot pin and blower belt guard once you have attached the right lower frame leg.

Figure 6a. Removal of Blower Belt Guard



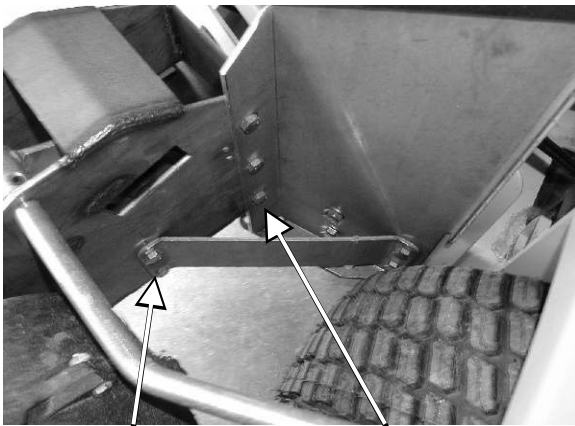
Remove both screws to remove the Blower Belt Guard

Figure 6b. Removal of Blower Pivot Pin



1-Remove Hair Pin Clip
2-Pull out Blower Pivot Pin

Figure 7. PTO Assembly



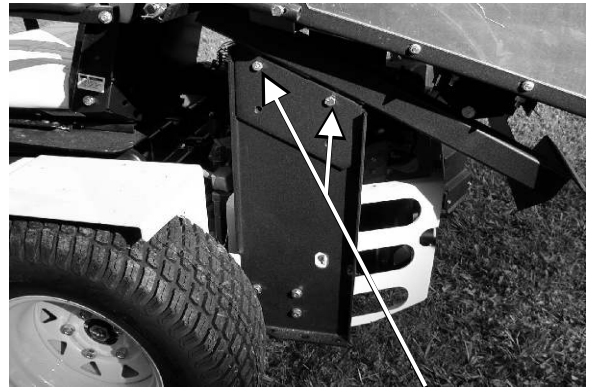
Attach (3) 3/8"-16 x 3/4" HHCS
(3) 3/8"-16 Flange Nuts
Attach (2) 3/8"-16 x 3/4" HHCS
(2) 3/8"-16 Flange Nuts

2-4 Attaching The Top Main Frame

Place the top main frame assembly P#(A0452) (Figures 8a & 8b) onto the main frame legs and fasten each side by using (2) 3/8"-16 x 1 1/2" HHCS P#(K0364) and (2) 3/8"-16 flange nuts.

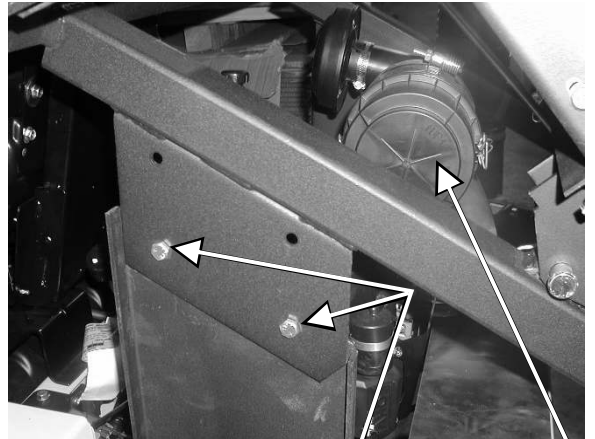
NOTE: Engines without a Donaldson Air Cleaner use top mounting holes(Figure 8a) and units with Donaldson Air Cleaners use lower mounting holes (Figure 8b)

Figure 8a. Top Main Frame without Air Cleaner



Attach (2) 3/8"-16 x 1" HHCS
(2) 3/8"-16 Flange Nuts
To upper mounting holes

Figure 8b. Top Main Frame with Air Cleaner



Attach (2) 3/8"-16 x 1" HHCS
(2) 3/8"-16 Flange Nuts
To lower mounting holes
Air Cleaner

2-5 Attaching The Lift Handle To The Aluminum Grass Container

The various parts of the handle assembly P#(A0273) must be attached to the container frame. Figure 9 shows the orientation and location of the components. Slide the lift handle into the slot in the handle mount bracket P#(B1730) on the grass container. It may be necessary to remove the handle grip P#(J0522) to allow the handle to fit through the slot.

Before attaching the handle, hook one end of the spring P#(J0176) into the hole on the underside of the handle. Hook the other end of the spring into the open hole in the handle mount bracket. Fasten the handle to the grass container frame by using (1) 3/8"-16 x 2" HHCS P#(K1208) and (2) 3/8"-16 flange nuts P#(K1215). At this point the handle can pivot back and forth in the slot of

Figure 9.
Lift Handle Assy.

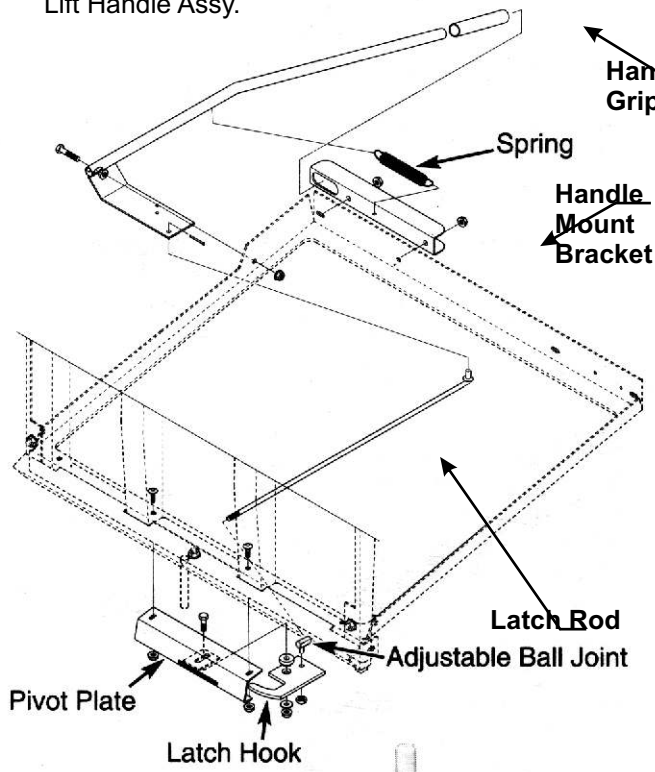


Figure 10.
Aluminum Grass Container
With Handle Attached

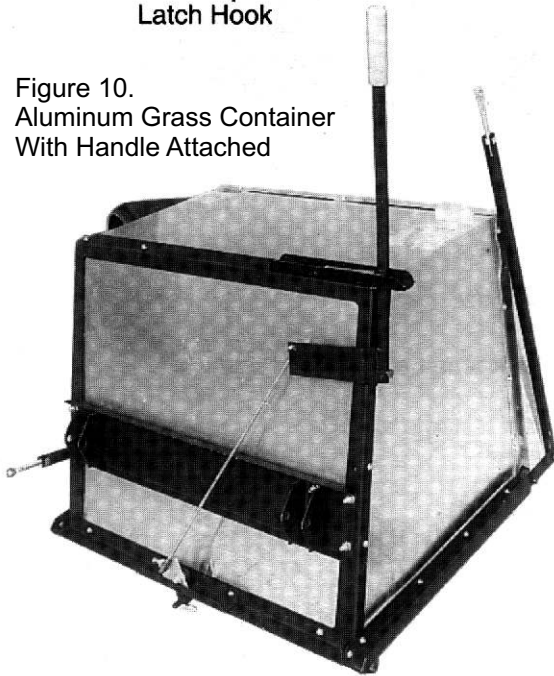
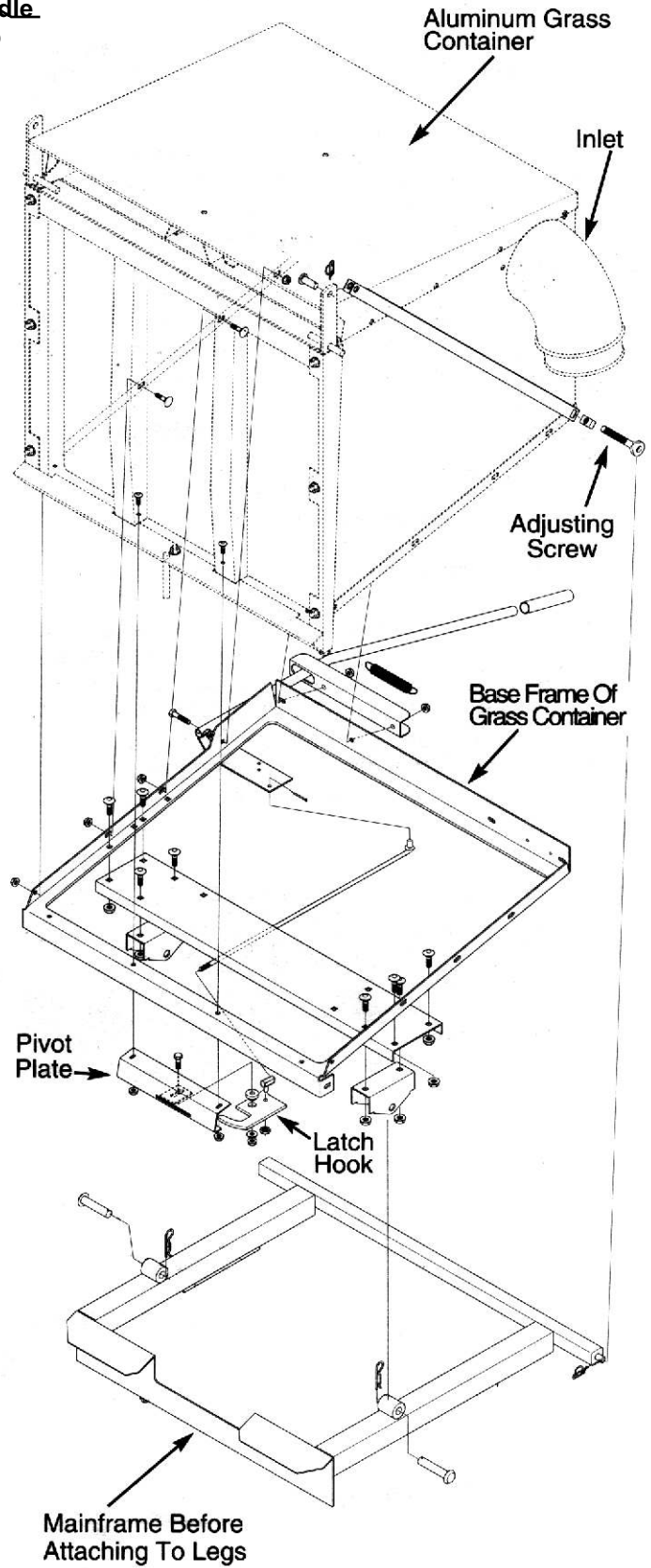


Figure 11.
Latch Hook Mechanism Assembled



Figure 12. Aluminum Grass Container Assy.



the handle mount bracket. With the handle in place, fasten the ball joint P#(K1442) to the end of the latch rod P#(A0260). Tighten to approximately half way down the threads of the latch rod. Slide the ball joint into the hole on the latch hook P#(B1529). Use (1) 5/16"-24 hex nut P#(K1444) and (1) 5/16" lock washer P#(K0043) to fasten the ball joint to the latch hook. Attach the opposite end of the latch rod into the handle. Fasten the rod to the handle by using (1) 3/32" x 3/4" cotter pin P#(K0094). Adjust the rod to allow the hook to close the box door completely.

Refer to pages 8, 9, 10 and 11 for exploded parts drawings and photographs of the complete assembly.

2-6 Attaching The Aluminum Grass Container To The Unit

NOTE: IT IS RECOMMENDED THAT 3 PEOPLE ASSIST IN MOUNTING THE CONTAINER.

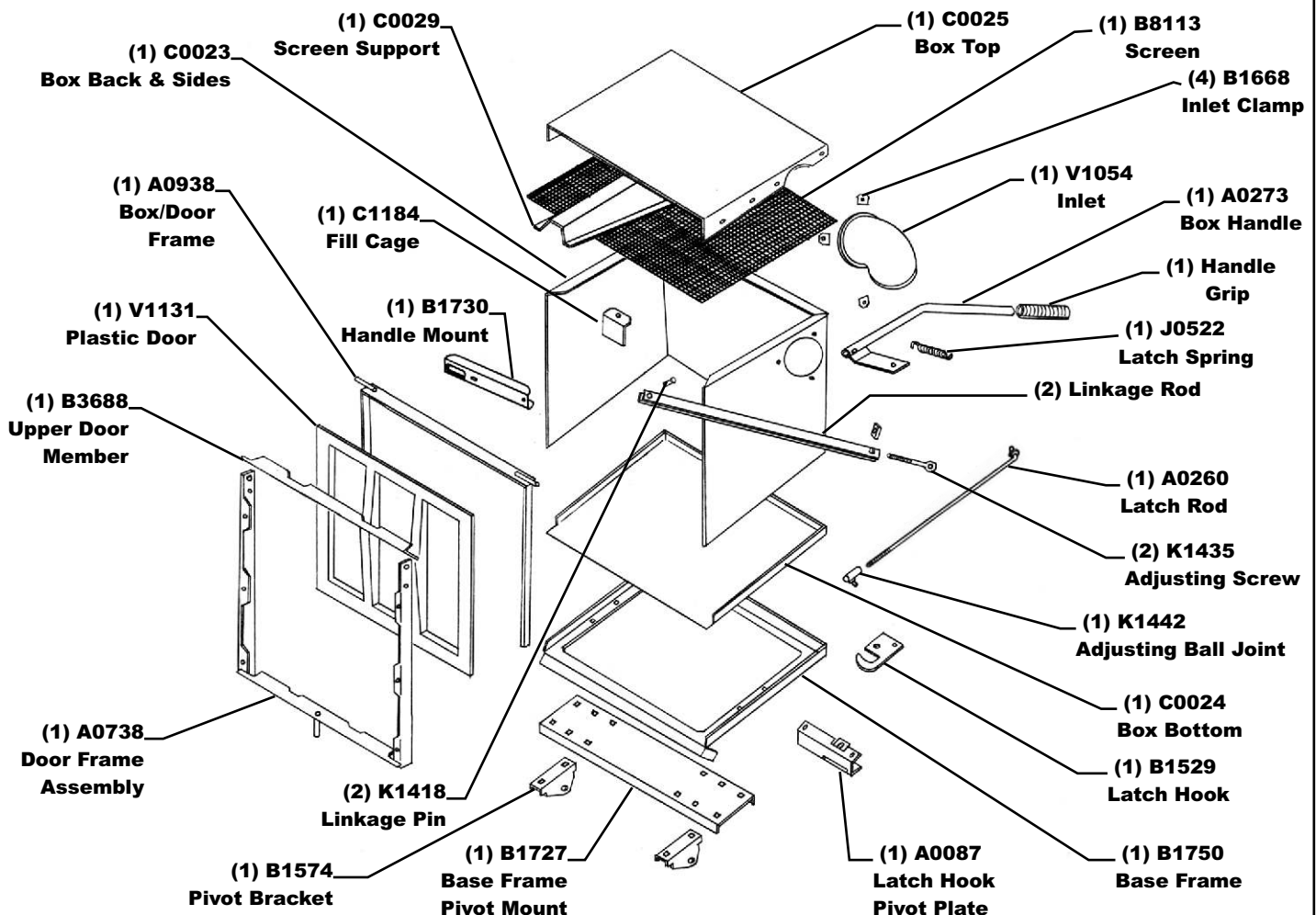
With three people available, two can lower the container onto the frame while the third person inserts the pivot pins P#(K0172) through the holes. Insert the pins from the outside to the inside. Secure with (1) 5/8" washer P#(K0058) and (1) 5/32" x 2-5/8" hair pin clip P#(K0088) per pivot pin. Reattach the bottom ends of the door

linkage rods 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 (Figure 9). The door of the container should open and the box should pivot towards the ground.

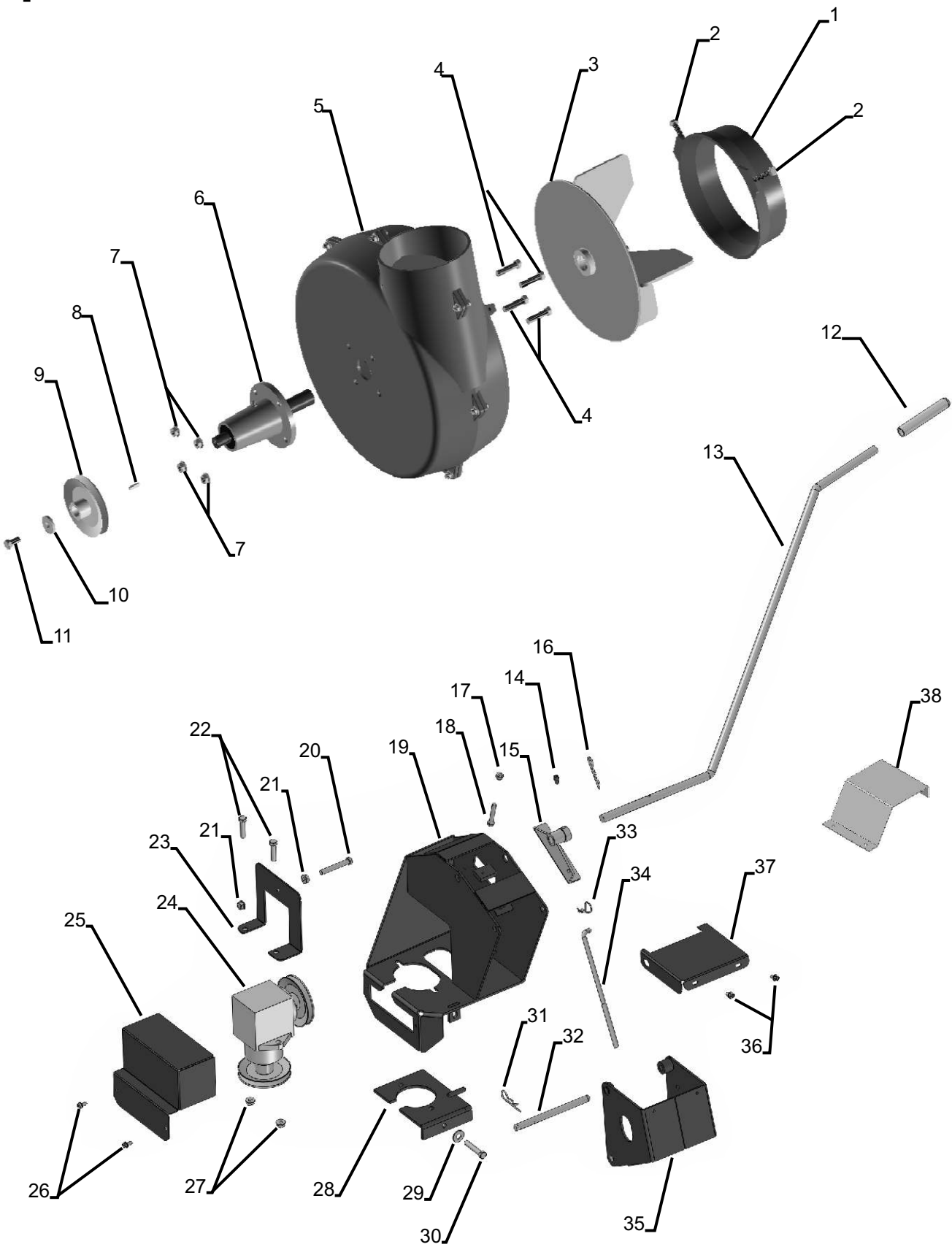
2-7 Aluminum Grass Container Inlet Attachment

The inlet will need to be attached to the container (Figure 12). Open the container, push the inlet from the inside of the container through the hole in the container to the outside. Orient the inlet opening to face the ground. Use the tabs P#(B1668) inside of the box to hold the inlet in place. It is recommended that two people perform this step. That way, one person on the inside of the container can position the tabs, while the other person tightens the bolts. Looking at the outside of the container, the most difficult tab to tighten down will be the tab at the 4-5 o'clock position. Tighten that tab first. Then proceed to tighten the others.

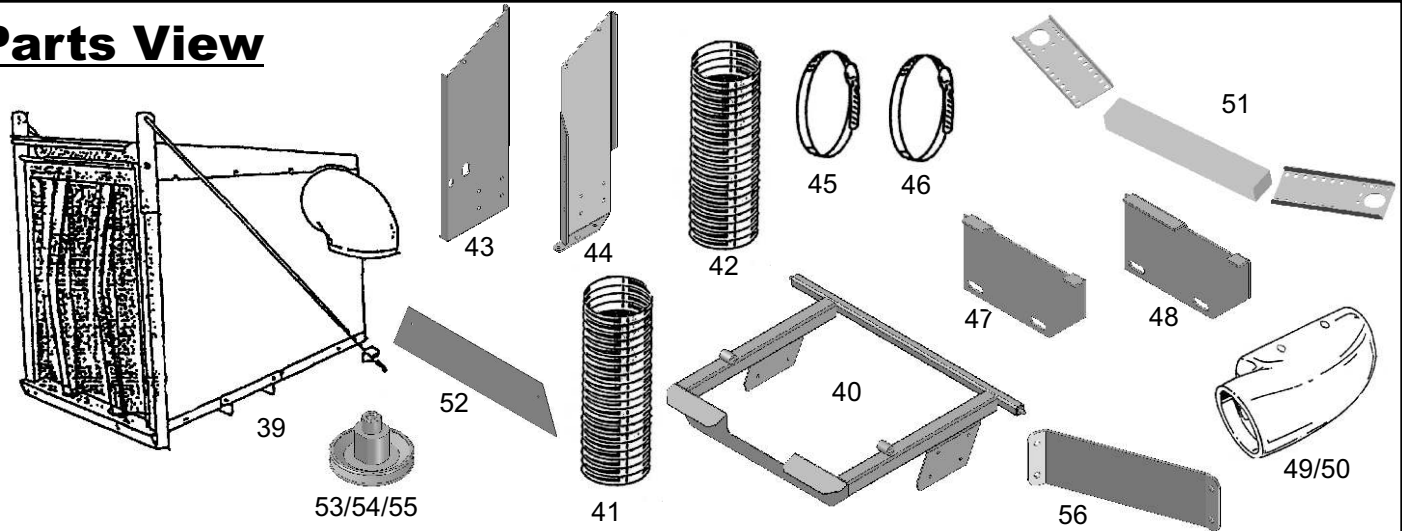
Figure 13. Aluminum Grass Container Exploded View



Exploded Parts View



Parts View



Item	Part No.	Qty.	Description	Item	Part No.	Qty.	Description
1	E6004-	1	Blower Cone 7" (52" Deck)	34	K0326-	1	Belt Tension Rod 3/8"-16
	E6009-		Blower Cone 8" (61" Deck)	35	A0144-	1	Blower Mount Bracket Assembly
2	K1159-	2	5/16"-18 x 2" HHCS	36	K0353-	2	1/4"-20 x 1/2" HHSTS
3	A0914-	1	4 Blade Impeller Assembly	37	B0121-	1	Blower Belt Guard
4	K1193-	4	3/8"-16 x 1-1/2" HHCS	38	B0162-	1	Skid Plate
5	E4004A	1	Blower Housing Assembly	39	A0794-	1	12 cu. ft. Box Assembly
6	A0306-	1	PTO Shaft Assembly	40	A0452-	1	Top Main Frame Assembly
7	K1215-	4	3/8"-16 Flange Nut	41		1	7" x 38" Lower Hose (52" Deck)
8	J0254-	1	3/16" x 3/4" Key-way			1	8" x 38" Lower Hose (61" Deck)
9	M0228	1	Blower Pulley	42		1	6" x 38" Upper Hose
10	K1446-	1	Washer	43	B0064-	1	Left Lower Frame Leg
11	K1190-	1	3/8"-16 x 3/4" HHCS	44	B0149-	1	Right Lower Frame Leg
12	V1151-	1	5/8" Black Handle Grip	45	J6006-	2	7" - 8" Hose Clamp
13	B0066-	1	PTO Handle	46	J6011-	2	5" - 6" Hose Clamp
14	K0356-	1	3/8"-16 Set Screw		A0535-	1	52" Deck Boot Kit
15	A0422-	1	Cam Bracket Assembly		A0534-	1	61" Deck Boot Kit
16	K0086-	1	1/8" x 2-3/8" Hair Pin Clip	47	B0096-	1	52" Deck Boot Plate
17	K1180-	1	5/16"-18 Nylock Nut	48	B0088-	1	61" Deck Boot Plate
18	K1159-	1	5/16"-18 x 2" HHCS	49	E1031-	1	52" Deck Boot
19	A0532-	1	PTO Arm Assembly	50	E1030-	1	61" Deck Boot
20	K1197-	1	3/8"-16 x 2-1/2" HHCS	51	A0508-	1	Weight Kit
21	K1215-	2	3/8"-16 Flange Nut		B2220-	1	100lb. Weight Bar
22	K1193-	2	3/8"-16 x 1-1/2" HHCS		B0026-	2	Weight Bracket
23	B0076-	1	Belt Guide Bracket		M0237	1	A33K Kevlar Cord Belt For Engine Pulley To Gear Box
24	A0429-	1	Gear Box Assembly		M0241	1	A50K Kevlar Cord Belt For Engine Pulley To Gear Box
25	B0075-	1	Pulley Guard		M0242	1	A51K Kevlar Cord Belt For Engine Pulley To Gear Box
26	K0353-	2	1/4"-20 x 1/2" HHSTS	52	C0015	1	Heat Guard
27	K1215-	2	3/8"-16 Flange Nut	53	A0533-	1	Engine Pulley Assembly For Chariot 23 & 25 HP Kawasaki Engines
28	A0436-	1	Belt Tension Bracket Assembly	54	A0540-	1	Engine Pulley Assembly For Chariot/Chariot LX - 25 HP Kohler Engines And Chariot LX - 25 HP Kawasaki Engines
29	K0047-	1	3/8" Flat Washer	55	A0419-	1	Engine Pulley Assembly For Chariot LX 27 HP Kohler Engines
30	K0348-	1	3/8"-16 x 2" HHCS	56	B0153-	1	PTO Arm Brace
31	K0086-	1	1/8" x 2-3/8" Hair Pin Clip				
32	B1755-	1	Blower Pivot Rod				
33	K0130-	1	3/32" x 1-5/8" Hair Pin				

2-8 Adjusting The Dump Mechanism

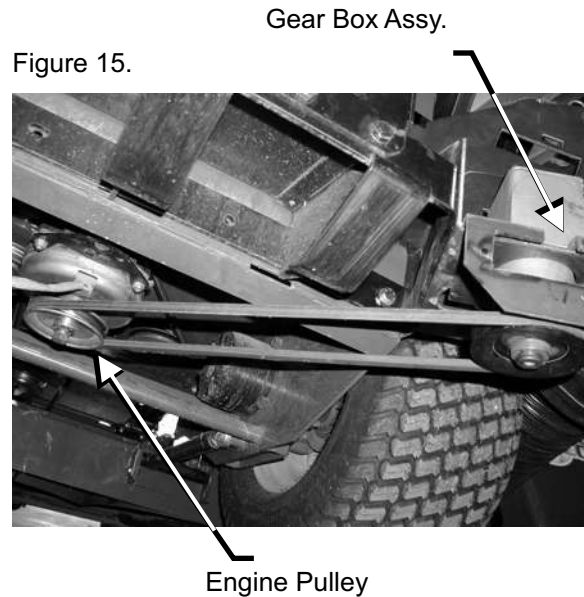
The linkage rods may be adjusted in two places, at the adjusting screw P#(K1435 and the latch assembly items. See Figures 9 & 11 for visual clarification. To change the door closure tightness, screw the adjusting screw in or out. To adjust the latch, change the length of the latch rod by screwing the latch adjusting ball joint in or out. The latch hook pivot should be in the middle of the slot in the latch hook pivot plate. Slide the pivot back or forth and then re-tighten.

2-9 Belt Installation

Loosen the (2) bolts that secure the gear box assembly P#(A0429) to the PTO mount plate (Figure 14). Loosen the adjustment bolt P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved towards the mower's engine pulley). Connect the kevlar cord belt from the engine pulley to the lower gear box pulley (Figure 15).

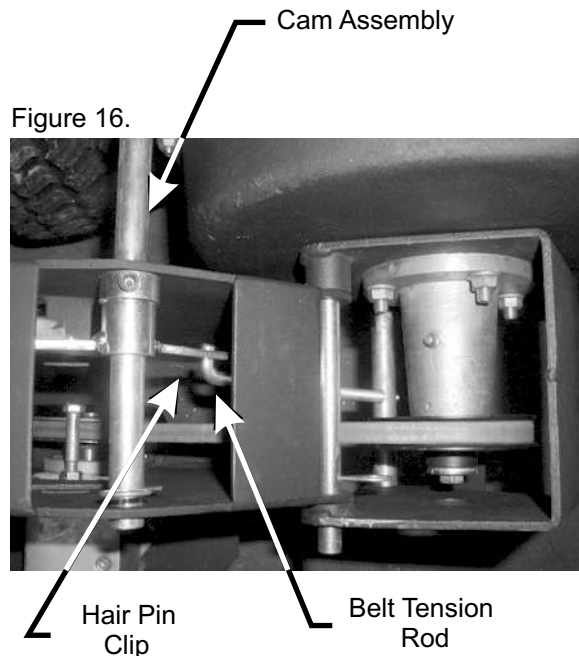
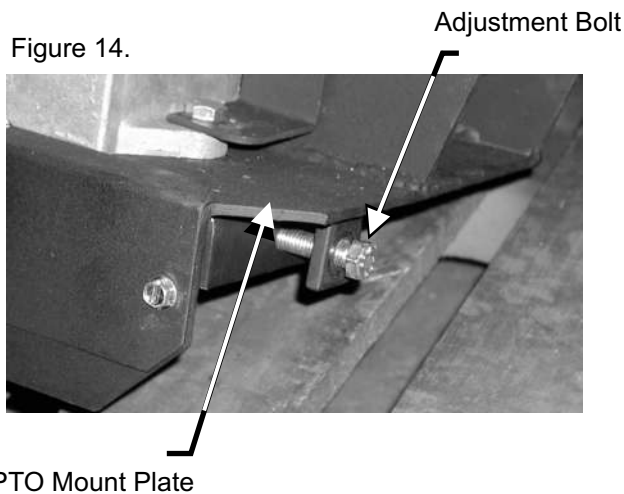
To tension the drive belt, turn the adjustment bolt clockwise until there is 1" of deflection, with 10-11 lbs. of pressure between the engine pulley and the gear box pulley.

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



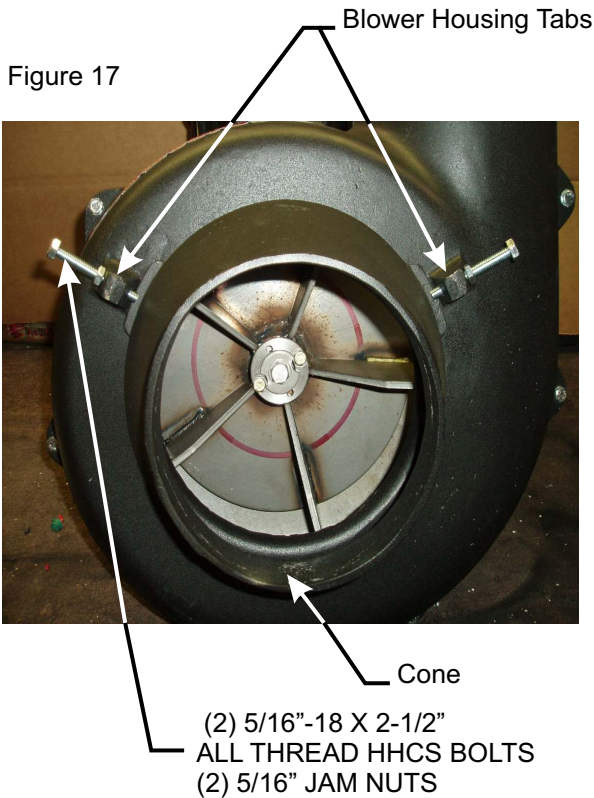
2-10 Cam Assembly Adjustment

The cam assembly P#(A0422), which controls the blower belt tension, comes from the factory pre-adjusted. If the belt is too tight or becomes too loose, remove the hair pin clip P#(K0099) from the belt tension rod P#(K0326) and pull the "L" end of the rod out of its hole in the cam assembly. The tension rod may then be screwed out to tighten the belt or screwed in to loosen the belt. Replace the "L" end into the top hole in the cam and replace the hair pin clip. Adjust the cam stop bolt P#(K1159) to allow the cam to rotate slightly over center when the blower is disengaged (Figure 16).



2-11 Blower Cone Installation

Thread (1) 5/16"-18 jam nut P#(K0120) onto each end of (2) 5/16"-18 x 2-1/2" HHCS P#(K0125). Now partially thread the bolts into each of the two tabs located on the blower housing. Place blower cone so the two tabs line up with the bolts then tighten completely. See Figure 17.



2-12 Impeller Blade Removal/Replacement

To Remove: First remove the center bolt (#1), washer (#2) and spacer (#3) from the taper-lock bushing (#5). See Figure 18. Next remove the (2) 1/4"-20 bolts (#4) and place them into the threaded holes of the taper-lock bushing (next to the holes they were removed from). 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, 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 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 HHCS grade #8 bolts, (1) spacer washer and (1) HHCS bolt w/ washer. Torque to the proper specifications in the torque chart on the back of this manual. Next, rotate the impeller blade to insure that the blade is clear of contact on all sides of the blower housing.

Figure 18

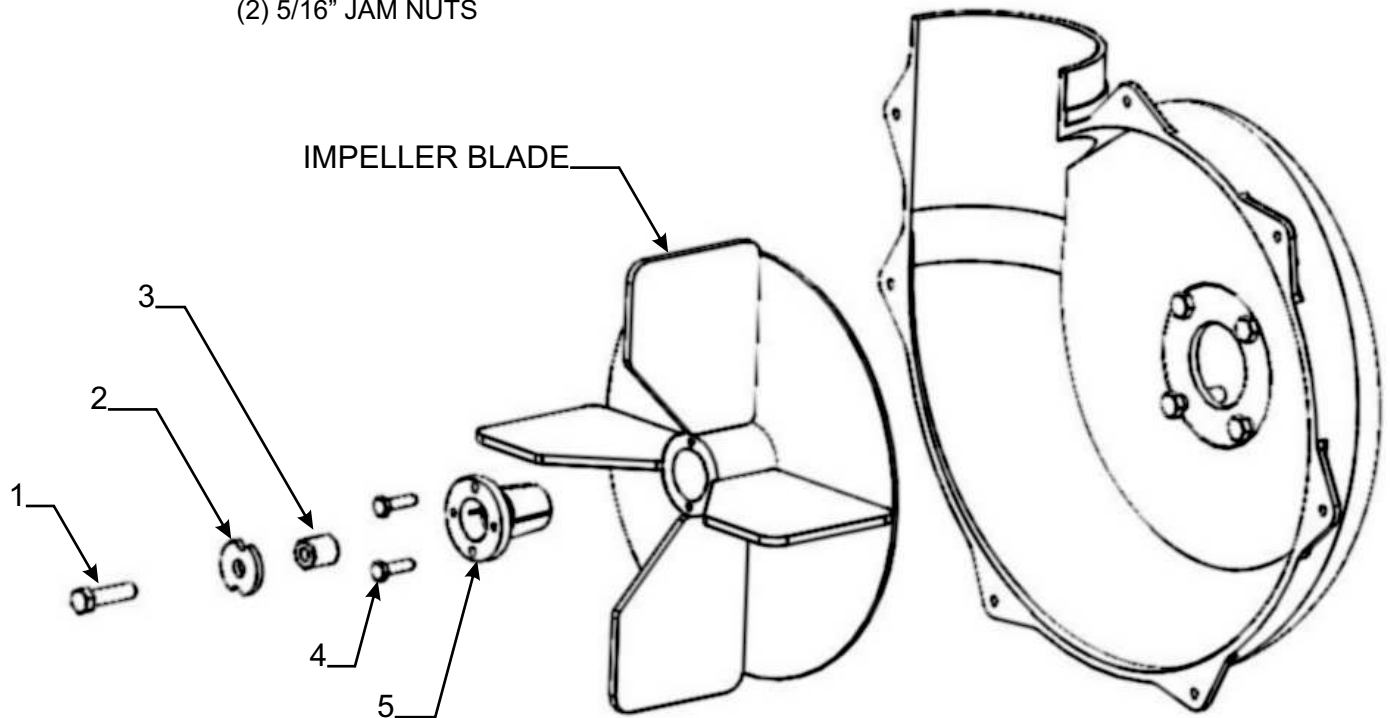


Figure 19.

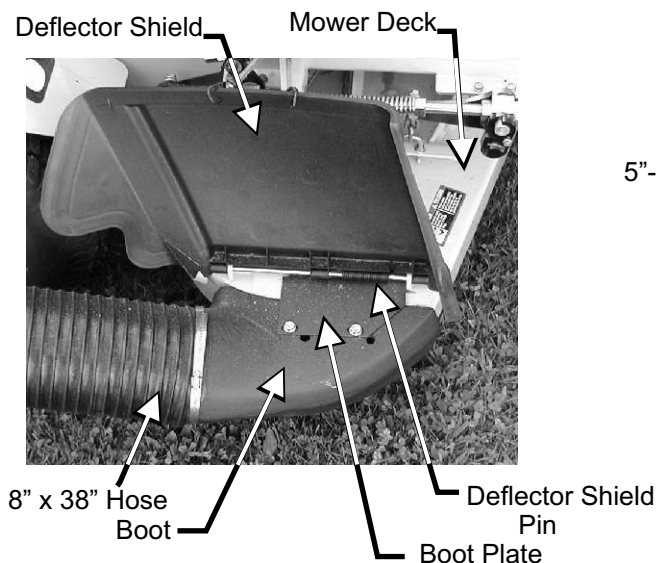
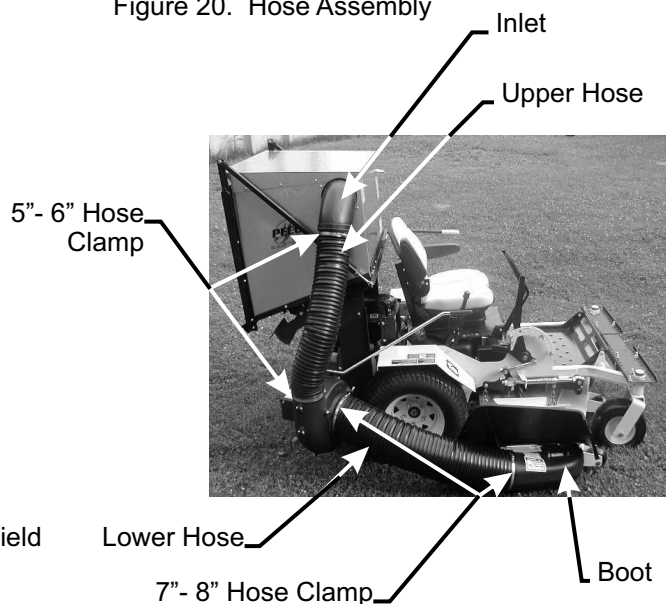


Figure 20. Hose Assembly



2-13 Attachment Of The Boot To The Mower Deck

61" Mounting Instructions

To mount the boot plate P#(B0088) to the boot P#(E1034) use (3) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 flange nuts P#(K1215). To mount boot, position boot plate behind deflector shield pin (Figure 19).

52" Mounting Instructions

To mount the boot plate P#(B0096) to the boot P#(E1113) use (2) 3/8"-16 x 3/4" carriage bolts P#(K1181) and (2) 3/8"-16 flange nuts P#(K1215). To mount boot, position boot plate behind deflector shield in(Figure 19).

Make certain that 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.

2-14 Adjustment Of The Lengths Of The Hoses

The hoses in steps 2-15 thru 2-16 must be cut to fit your machine. Follow steps 2-15 thru 2-16. Do not cut the hoses until you have tried to fit them on your machine. Remember that the hoses have to be long enough to allow for enough clamping surface between the inlet, blower assembly, and the deck boot.

2-15 Attachment Of The Upper Hose

Slide a 5"-6" upper hose clamp P#(J6011) onto both ends of the 6" upper hose (Figure 20). Then slide one end of the 6" hose onto the inlet. Make sure there is about a two-inch overlap between the hose end and the container inlet. Proceed to slide the opposite end of the 6" hose onto the outlet of the blower assembly. See Figure 20 for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

2-16 Attachment Of The Lower Hose To The Blower Cone

Slide a 7"-8" hose clamp P#(J6006) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. The assembly should look like Figure 20.

2-17 Attachment Of The Lower Hose To The Boot

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 20). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to add in retaining boot to mower deck.

2-18 Front Weight Assembly

Place (1) weight bracket P#(B0026) over each front caster. Fasten each weight bracket to the front caster loosely, by using (1) 3/8"-16 x 3-1/2" u-bolt P#(K0286) and (2) 3/8"-16 flange nuts P#(K1215) per bracket. When installing the 100 lb. weight you should have another person help position the weight onto a floor jack. Using the floor jack will make installing the weight much easier. Lift the weight up to the bottom of the weight brackets. Fasten the weight to the weight brackets by using (1) 1/2"-13 u-bolt P#(K0331) and (2) 1/2"-13 flange nuts P#(K1246) per bracket. Once the weight is secure tighten all nuts. See Figure 21 for more detail.

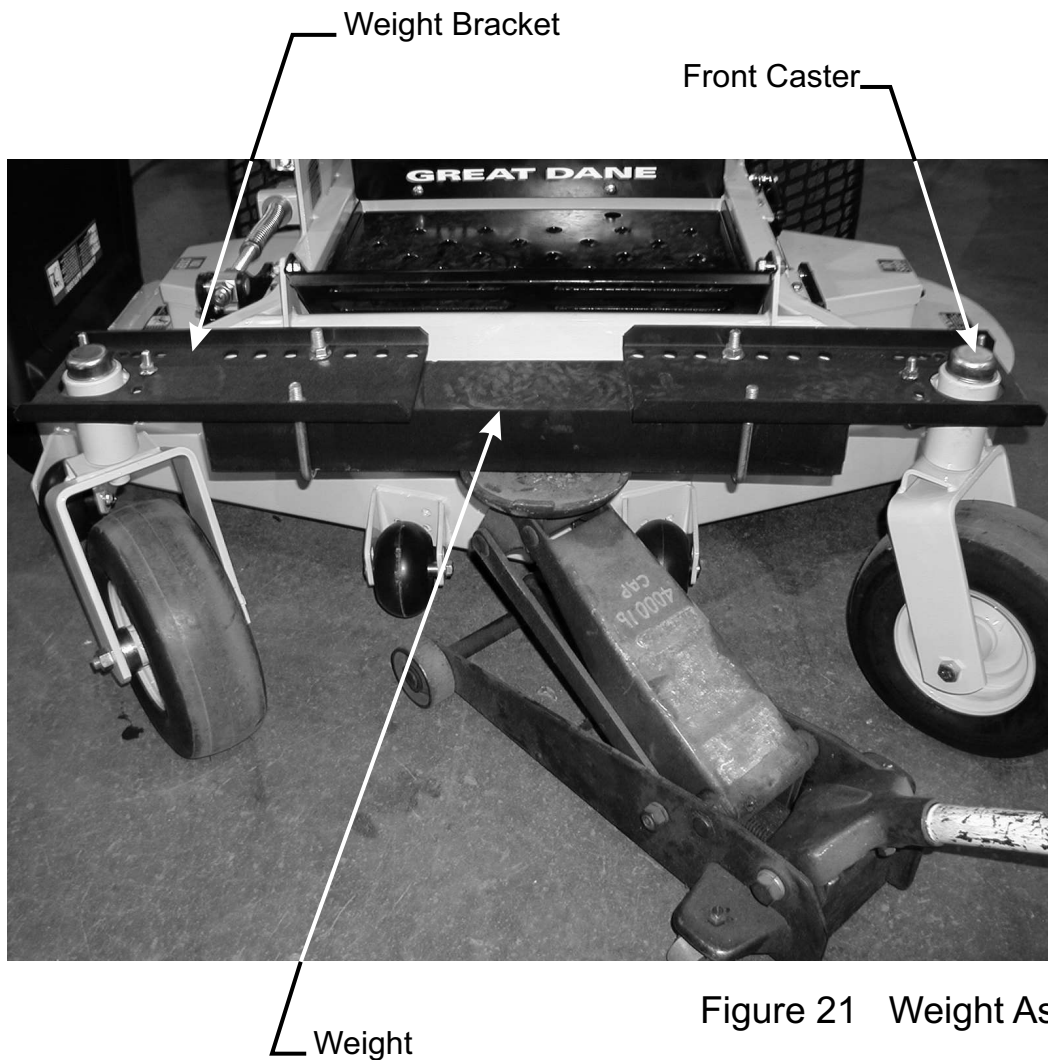


Figure 21 Weight Assembly

SECTION III

OPERATING INSTRUCTIONS

3-1 General Safety

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

3-2 Operation And Tips On Mowing

- A. Perform BEFORE EACH USE the maintenance list in paragraph 4-1.
- B. Start mower.
- C. With the mower at high idle speed, engage the mower deck.
- D. While seated in the operator's seat, rotate the engagement handle of the collection system away from the mower. Continue to rotate the handle until it stops in an over center position. With the blower engaged, you can proceed to operate the control levers of the mower.

NOTE: If the collection system does not appear to be collecting the grass clippings; disengage the deck, and blower, engage the parking brake and turn the mower off. Proceed to section 3-3, and review the section 2-9, in this manual.

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

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

3-3 Disengagement Of The Blower

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

WARNING: The blower will continue to spin. DO NOT TOUCH the blower, pulleys, or the belt until the tractor is turned off. DO NOT adjust the belt tension until the mower is turned off. Refer to section 2-9 of the manual

3-4 Unloading The Collection System

NOTE: 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.
- 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. 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 off of

- safety decals. Replace any missing or illegible decals.
- Inspect the unit for worn or damaged components. Repair or replace before the next use. Any replacement component installed during repair shall include the component's current safety decal specified by the manufacturers to be affixed to the component.
 - Check belt for proper tension.

4-2 Lubrication

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

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

SECTION V PARTS AND SERVICE

5-1 Parts And Service Information

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

THE SERIAL NUMBER PLATE IS LOCATED ON THE ALUMINUM BOX NEAR THE DUMP HANDLE

PECO	
OUTDOOR POWER EQUIPMENT	
Model Number	<input type="text"/>
Serial Number	<input 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.

P.O. Box 1197

Arden, NC 28704

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

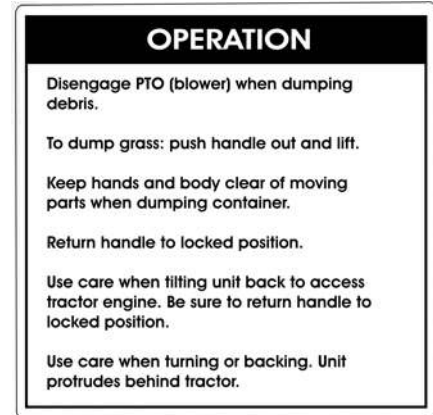
Email: pecoinc1@bellsouth.net

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 #: R1050



Part #: R1049



Part #: R1054



Part #: R1051



Part #: R1053



Part #: R1057



Part #: R4037



Part #: R1052

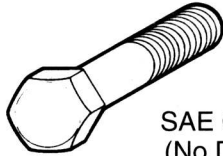


Part #: R1055

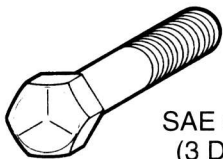
TORQUE SPECIFICATIONS

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

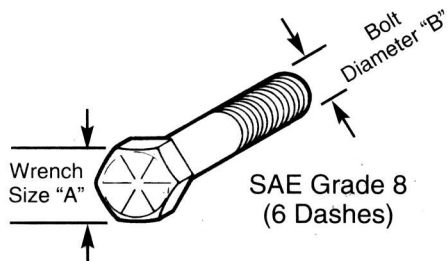
AMERICAN Bolt Head Markings



SAE Grade 2
(No Dashes)



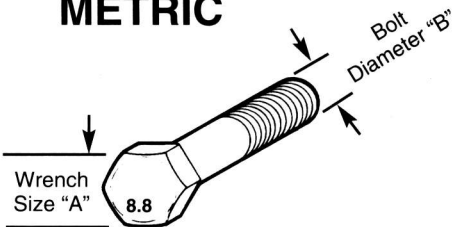
SAE Grade 5
(3 Dashes)



SAE Grade 8
(6 Dashes)

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

METRIC



Numbers appearing on bolt heads indicate ASTM class.

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

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

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

NOTES



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