EASY DUMP BAGGING SYSTEM MODEL# EDBS



DESIGNED FOR THE BOSS AND CHARGER SERIES



OPERATOR'S MANUAL

ASSEMBLY • OPERATION • MAINTENANCE

MANUAL#: Q0357

PART# 629DT-001A

EASY DUMP BAGGING SYSTEM TABLE OF CONTENTS

S	SECTION	PAGE	S	2-12 Blower Cone Installation	PAGE
	Safety Safety Alert Symbols Warranty	3		2-12 Blower Cone Installation	16 17
I	INTRODUCTION AND DESCRIPTION 1-1 Introduction 1-2 Description	5 		2-16 Upper Hose Installation 2-17 Lower Hose To Blower Cone Installation- 2-18 Lower Hose To Boot Installation 2-19 Front Weight Installation	18 18 18
11	INSTALLATION FOR USE 2-1 Preparation Of Mower 2-2 Left, Right And Rear Mount Plate Installation - 2-3 Main Frame Assembly Installation 2-4 Universal PTO Installation 2-5 PTO Handle Installation	stallation 5-6 stallation 6-7 7 7	111	OPERATING INSTRUCTIONS	19 19 19
	2-7 Exhaust Diverter Installation 2-8 Cam Assembly Adjustment 2-9 Lift Handle Installation 2-10 Aluminum Container Installation		IV	/ MAINTENANCE	19
	2-11 Dump Mechanism Adjustment Exploded Parts And Drawing Views	10	V	PARTS AND SERVICE	20 21

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

SAFETY

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

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

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

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

Safety Alert Symbol



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

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

Safety Signs

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



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

White letters on **RED**



Black letters on **ORANGE**



Black letters on YELLOW

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.

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.

COUNTRY CLIPPER LIMITED WARRANTY FOR NEW PRODUCTS

A. WHAT IS WARRANTED?

Country Clipper extends the following warranties to the original purchaser of each new Country Clipper bagging system subject to the following limitations:

- 1. PRODUCT WARRANTY: Any part of the bagging system, which is defective in material or workmanship as delivered to the purchaser will be repaired or replaced, as Country Clipper 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 COUNTRY CLIPPER FOR INSPECTION TO DETERMINE VALIDITY OF WARRANTY CLAIMS. Freight and mailing will be borne by the customer.
- 2. PARTS REPLACED DURING WARRANTY: Any new Country Clipper bagging system 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 Country Clipper 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 Country Clipper for Return Authorization. Damaged or broken parts, other than engines or batteries, must be returned to Country Clipper Division of Shivvers Mfg. Inc., 613 W. English, Corydon, IA, 50060 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 Corydon, IA.

C. ITEMS NOT COVERED BY COUNTRY CLIPPER WARRANTY.

Engines, batteries, and gearboxes attached to Country Clipper products are covered under a separate warranty by the respective manufacturer.

D. UNAPPROVED ALTERATION OR MODIFICATION.

All obligations of Country Clipper, under this warranty, shall be terminated if products are altered or modified in ways not approved by Country Clipper.

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 Country Clipper 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, Country Clipper 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 Country Clipper bagging systems are set forth above. In no event will Country Clipper 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 Country Clipper 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 Country Clipper or to modify the terms of this warranty in any way.

SECTION I INTRODUCTION AND 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 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 twigs in pre-season and postseason 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.

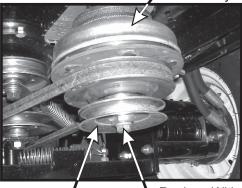
Section II INSTALLATION FOR USE 2-1 Preparation Of Mower

Carefully dismantle the wooden shipping crate from around the components. Cut the retaining straps and separate the parts. The grass 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 11 through 15.

From the underside of the engine remove the bolt and bushing from the electric clutch assembly. It will help to use a bungee cord or similar device to hold the electric clutch in place during this step. For 25HP Kawasaki or 23,27,28,& 30HP Kohler, replace these parts with the engine pulley assembly P#(A0611), 7/16" lock washer P#(K0140), and 7/16"-20 x 3-3/4" hex bolt P#(K0350). For 31HP Kawasaki, use engine pulley assembly P#(A0611), 7/16" lock washer P#(K0140), and 7/16"-20 x 3-1/4" hex bolt P#(K0351). For 26HP Kawasaki, use engine pulley assembly P#(A0611), 7/16" lock washer P#(K0140), and M10-1.5MM x 100MM hex bolt P#(K0398). For 37HP Kawasaki, use engine pulley assembly P#(A0732), 7/16" lock washer P#(K0140), 7/16"-20 x 2-3/4" hex bolt P#(K0397) and 1/4" x 1/4" x 1-1/2" keystock P#(K1623). The added pulley will power the collection system. Note that the center of the hub that is extended, should be upward toward the engine (Figure 2-1a.). Torque the bolt to 55 ft./lbs.

Figure 2-1a.



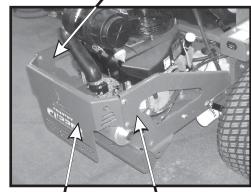
Added Engine Pulley Assembly Replace With Hardware Provided

Removing The Panel Guards

The left, right and rear panel guards must be removed before mounting the collection system to your mower. Remove the existing (4) 1/2"-13 x 1" hex bolts and (4) 1/2"-13 lock nuts from the rear panel guard and side panels. NOTE: Remove the deck spring before removing the left panel guard. The left and right rear panel guard will be replaced in the next steps. Refer to Figure 2-1b. for reference.

Figure 2-1b.

Left Panel Guard

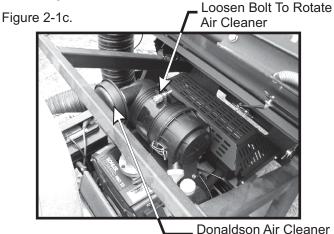


Rear Panel Guard

Right Panel Guard

Rotating The Donaldson Air Cleaner

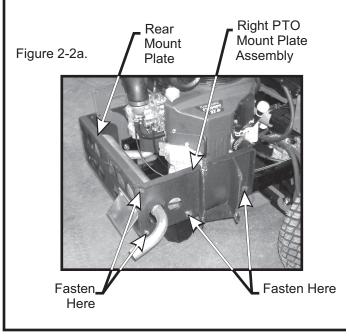
Note: If equipped with a Donaldson air cleaner, unit must be rotated to make clearance for top main frame assembly. To rotate the Donaldson air cleaner, loosen the bolt on the air cleaner bracket, rotate the air cleaner forward as needed for clearance as shown in Figure 2-1c. and tighten.



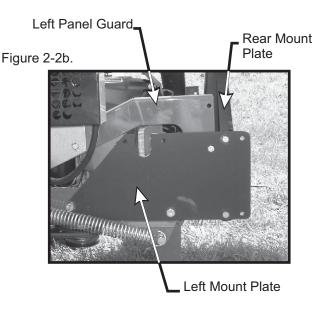
Donaldson Air Cleaner Rotated To Forward Position

2-2 Left, Right And Rear Mount Plate Installation

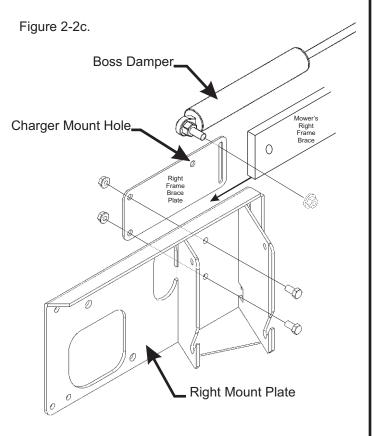
Fasten the right PTO mount plate assembly P#(A0708) to the rear frame of the mower, using (2) 1/2"-13 x 1-3/4" HHCS P#(K1301) and (2) 1/2"-13 nyloc nuts P#(K1247) as shown in Figure 2-2a. Fasten the left mount plate P#(B0408) and left panel guard to the rear frame using (2) 1/2"-13 x 1-3/4" P#(K1301) and (2) 1/2"-13 nyloc P#(K1247) nuts and existing hardware (Figure 2-2B.). Fasten the rear mount plate P#(B0350) to the right PTO mount plate assembly and the left mount plate using (4) 3/8"-16 x1" HHCS P#(K1191) and (4) 3/8"-16 flange nuts P#(K1215) as shown in Figure 2-2a.



NOTE: Fasten the rear mount plate to the farthest forward mounting holes as possible for your mower.

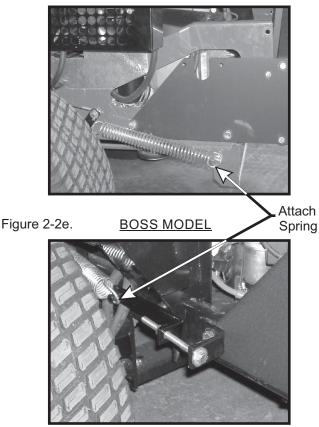


Fasten the right frame brace plate to the right mount plate using (2) 3/8"-16 x 3/4" HHCS P#(K1190) and (2) 3/8"-16 flange nuts P#(K1215). For the Charger series, fasten the mower's right frame brace to the hole on the right frame brace plate. For the Boss series, mount the damper, if equipped, to the slot in the right frame brace plate. Refer to Figure 2-2c. for reference.

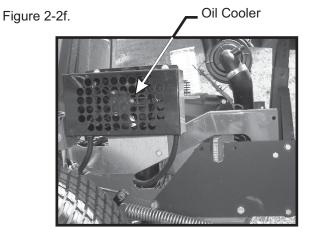


After installing the left, right and rear mount plates, the deck lift spring must be re-attached. See Figure 2-d. and 2-e. for reference.

Figure 2-2d. <u>CHARGER MODEL</u>



NOTE: The Charger series mower will require an aftermarket, externally mounted oil cooler that attaches to the rear chassis. The oil cooler is mounted to the left. Refer to your Country Clipper manual and Figure 2-2f. for reference. Note: Contact Country Clipper for oil cooler purchasing information (Part Number 629DS-001A).



CHARGER SERIES ONLY

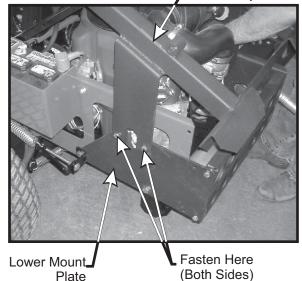
2-3 Main Frame Assembly Installation

NOTE: It is recommended that you have someone assist you in this procedure.

Lift the main frame assembly P#(A0711) into position above the lower mount plates. Align the mounting holes and fasten the legs to the left mount plate P#(B0408)and the right PTO mount plate assembly P#(A0708)using (4) 3/8"-16 x 1" HHCS P#(K1191) and (4) 3/8"-16 flange nuts P#(K1215). See Figure 2-3 for reference.

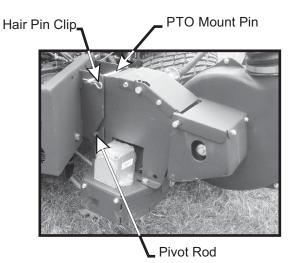


Main Frame Assembly



2-4 Universal PTO Installation

To mount the PTO assembly, insert the pivot rod on the PTO assembly P#(A0623) into the mounting slots located on the right PTO mount plate assembly P#(A0708). Tilt the PTO assembly upward and insert the PTO mount pin P#(B0274) through the hole in the top of the right PTO mount plate assembly. Secure the PTO mount pin using 1/8" x 2-3/8" hair pin clip P#(K0086) See Figure 2-4.

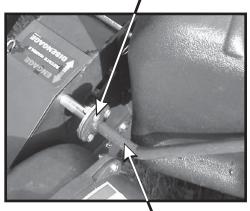


2-5 PTO Handle Assembly Installation

Mount the PTO handle assembly P#(A0603) to the universal PTO P#(A0623) using (3) 1/4"-20 x 3/4" HHCS P#(K1222) and (3) 1/4"-20 nyloc nuts P#(K1128). Before fastening, make sure that there is room for the handle to engage and disengage without the handle hitting the mower's fuel tank. See Figure 2-5 for reference.

Figure 2-5.

Fasten Here

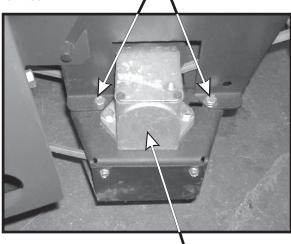


2-6 Belt Installation

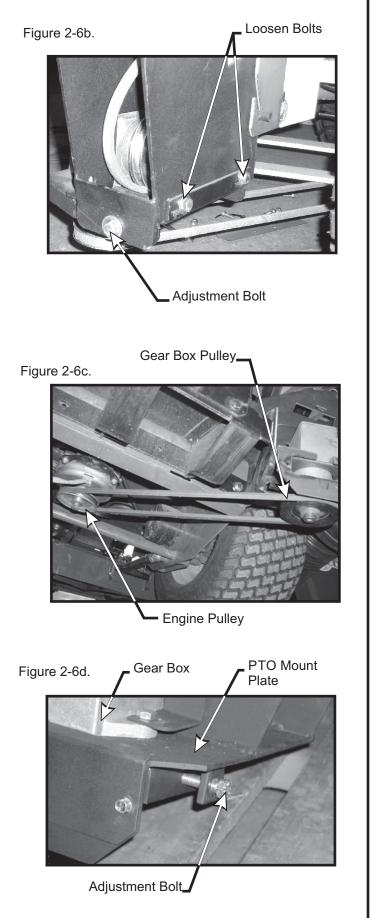
PTO Handle Assembly

Loosen the (4) bolts P#(K1191), (2) on each side, that secure the gear box assembly to the PTO assembly P#(A0623) (Figure 2-6a. and 2-6b.). Loosen the adjustment bolt P#(K0348) until the gear box assembly is at its far left adjustment (the gear box is moved toward the mower's engine pulley). Connect the kevlar cord belt A49K P#(M0243) from the engine pulley to the lower gear box pulley (Figure 2-6c.). To tension the drive belt, turn the adjustment bolt clockwise (Figure 2-6d.) until there is 1" of deflection, with 10-11 lbs. of pressure, at the center of the belt between the engine pulley and the gear box pulley. Once the correct tension of the belt is achieved, tighten the (4) bolts that secure the gear box assembly. Loosen Bolts

Figure 2-6a.

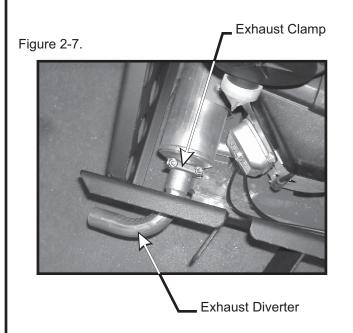


Gear Box Assembly



2-7 Exhaust Diverter Installation

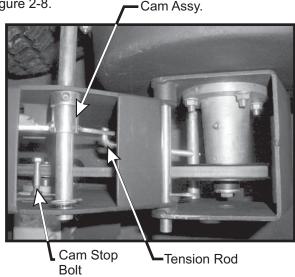
In order to divert the engine exhaust away from the PTO assembly, an exhaust diverter must be installed. Insert the diverter through the hole on the right PTO mount plate assembly. Fasten the exhaust diverter P#(J0282) to the muffler using the exhaust clamp P#(X1064). See Figure 2-7. for reference.



2-8 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#(K0130) from the belt tension rod P#(K0326) and pull the "L" end of the rod out of it's hole in the cam assembly. The tension rod may then be screwed out to tighten the belt or screwed in to loosen the belt. Replace the "L" end into the top hole in the cam and replace the hair pin clip. Adjust the cam stop bolt P#(K1159) to allow the cam to rotate slightly over center when the blower is engaged (Figure 2-8).





2-9 Lift Handle Installation

The various parts of the handle assembly P#(A0273) must be attached to the container frame. Page 11shows 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 the handle mount bracket. With the handle in place. fasten the ball joint P#(K1442) to the end of the latch rod P#(A0260) (Page 11). 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 11 and 12 for exploded parts drawings and photographs of the complete assembly.

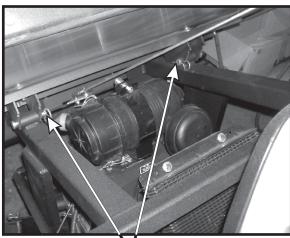
2-10 Aluminum Grass Container Installation

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 2-10).

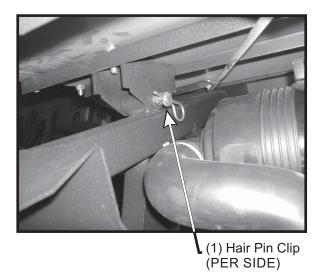
Reattach the bottom ends of the door opening linkages to the main frame by using (1) Rue-Ring cotter pin P#(K1437) per side.

To test the functionality of the dump mechanism, pull the lift handle away from the unit, and lift upward (Page 1). The door of the container should open and the box should pivot clockwise towards the ground.







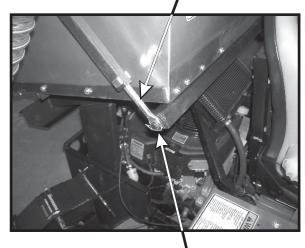


2-11 Dump Mechanism Adjustment

The linkage may be adjusted in two places, at the adjusting screw P#(K1435) and the latch assembly items. See page 11 for visual clarification. To change the door closure tightness, screw the adjusting screw (Figure 2-11a.) 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. Figure 2-11b. shows the grass container attached to the main frame.

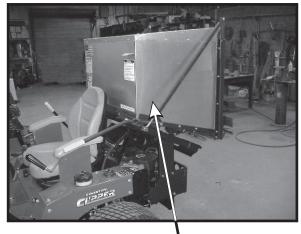
Figure 2-11a.

Adjusting Screw

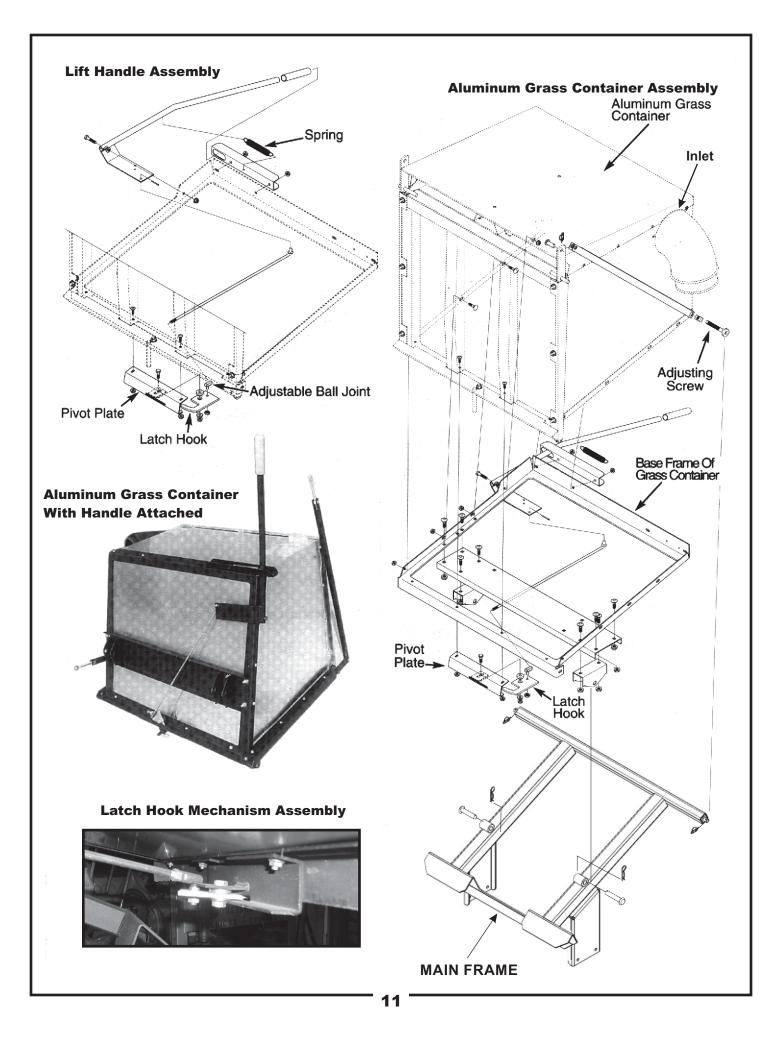


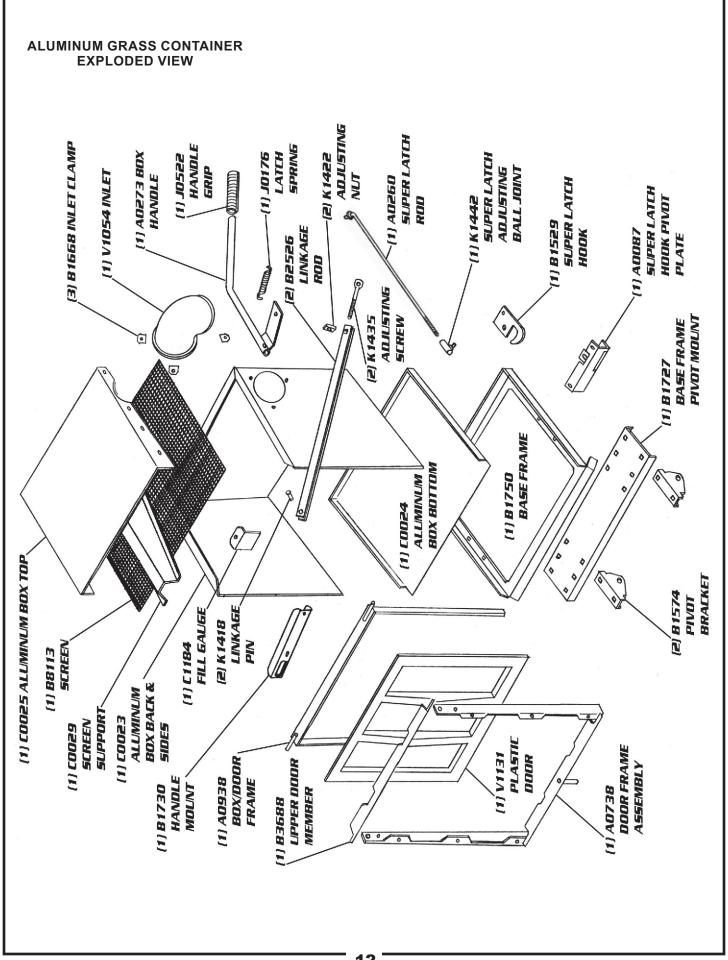
Cotter Pin

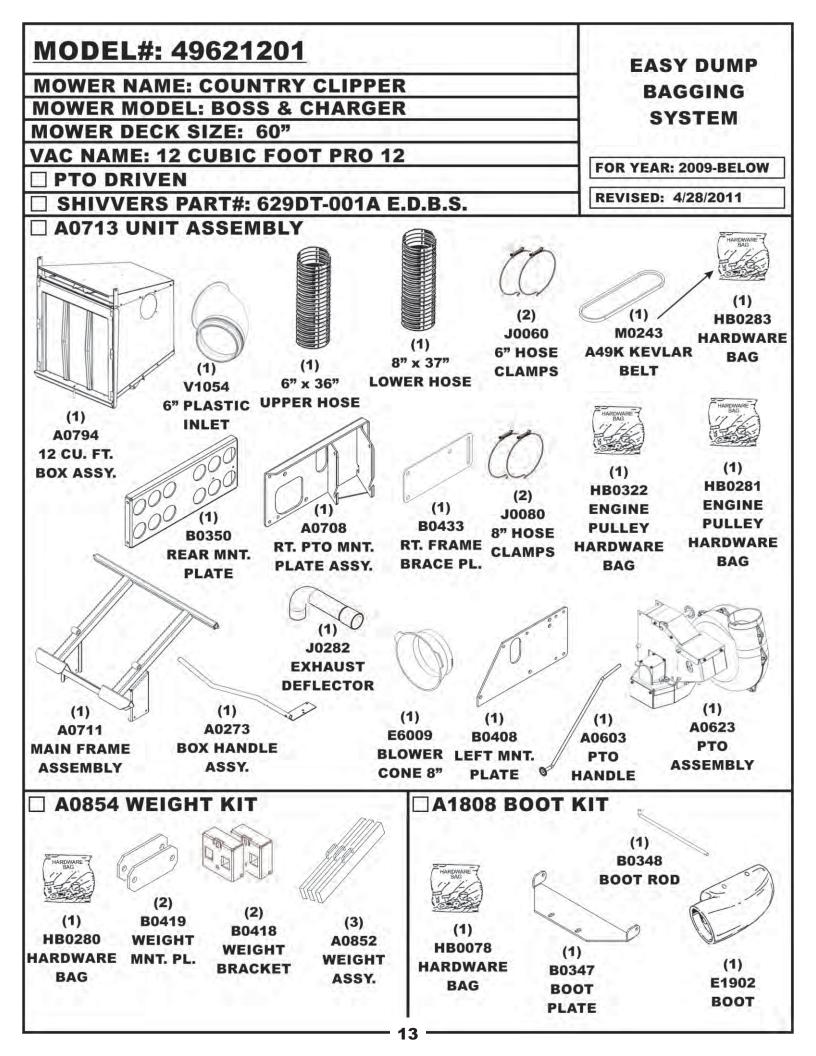
Figure 2-11b.

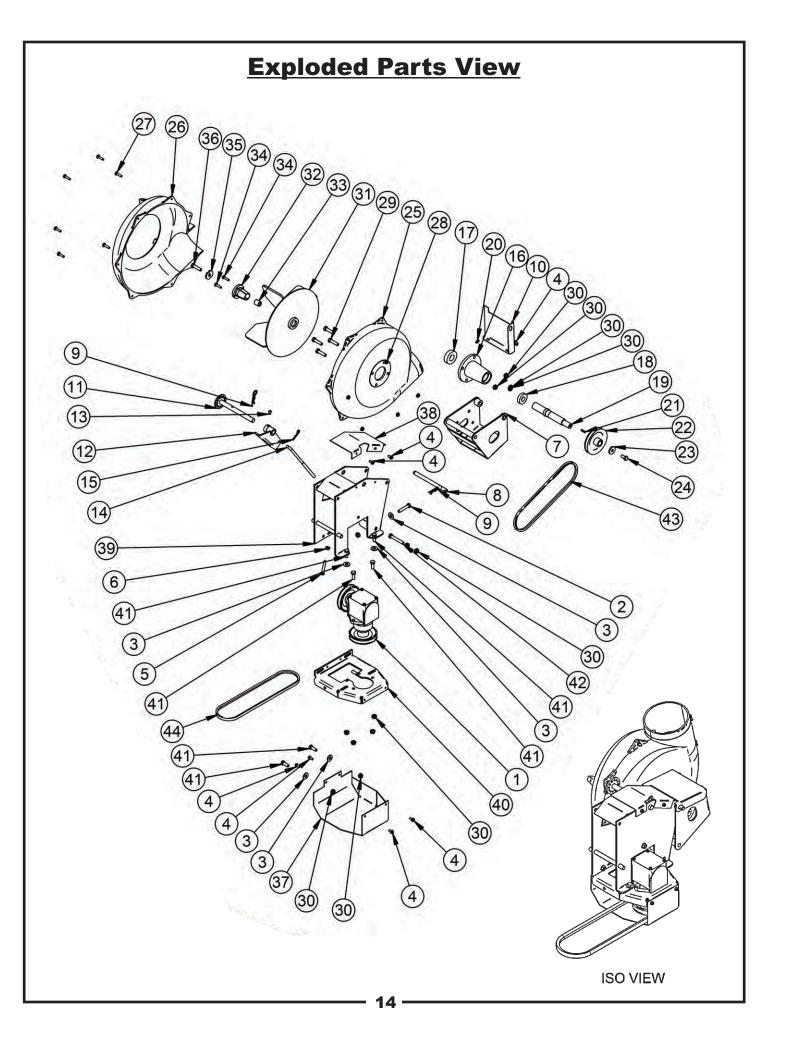












PTO Parts List

ltem Number	Document Number	Title	Quantity
1	A0429	GEAR BOX ASSEMBLY	1
2	K0348	3/8"-16 x 2" ALL THREAD HHCS	1
3	K0047	3/8" FLAT WASHER 1.00 OD x .446 ID x .075 T	5
4	K0353	1/4"-20 x 1/2" HHSTS	7
5	K1159	5/16"-18 x 2" ALL THREAD HHCS	1
6	K1178	5/16"-18 FLANGE NUT	1
7	A0144	BLOWER MOUNT BRACKET ASSEMBLY	1
8	B1755	BLOWER PIVOT ROD	1
9	K0086	.125 OD x 2.50 HAIR PIN CLIP	2
10	B0121	BLOWER BELT GUARD	1
11	A0604	PTO HANDLE MOUNT ASSY	1
12	A0422	CAM BRACKET ASSEMBLY	1
13	K0356	3/8"-16 TAPERED SET SCREW	1
14	K0326	BELT TENSION ROD 3/8"-16	1
15	K0130	.091 OD x 1.625 L HAIR PIN CLIP	1
16	E0121	PTO SHAFT HOUSING	1
17	N0147	BEARING 2.0472 OD, 0.9843 ID, 0.5906 W (6205RS PEER)	1
18	N0148	BEARING 1.625 OD, 0.75 ID, 0.4375 W (9R12 PEER)	1
19	B1758	PTO SHAFT	1
20	J0801	1/4"-28 ZIRC FITTING	1
21	J0254	3/16" SQ. x 3/4" LONG KEYWAY	1
22	M0228	BLOWER PULLEY	1
23	K1446	1.187 OD x .380 ID x .187 WASHER	1
24	K1190	3/8"-16 x 3/4" HHCS	1
25	E4004B	BLOWER HSG. BACK	1
26	E4004F	BLOWER HSG. FRONT	1
27	K1125	1/4"-20 X 1" HHCS	6
28	K1126	1/4"-20 FLANGE NUT	5
29	K1193	3/8"-16 x 1-1/2" HHCS	4
30	K1215	3/8"-16 FLANGE NUT	12
31	A0645	SMALL 4-BLADE IMPELLER	1
32	S4302	TAPER-LOCK BUSHING	1
33	S3242	PLATED BUSHING	1
34	K1225	1/4"-20 X 1" HHCS GRADE 8	2
35	K0278	TAPER-LOCK BUSHING WASHER	1
36	K1211	3/8"-16 x 1-1/2" HHCS GRADE 8	1
37	B0269	GEAR BOX PULLEY GUARD	1
38	B0270	PTO ARM GUARD	1
39	A0622	PTO ARM ASSY.	1
40	A0624	BASE PLATE ASSY.	1
41	K1191	3/8"-16 x 1" HHCS	6
42	K1197	3/8"-16 X 2 1/2" HHCS	1
43	M0250	A30K KEVLAR BELT	1
44	M0268	A47K KEVLAR BELT	1

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. See Figure 2-12.

(2) 5/16"-18 x 2-1/2" ALL THREAD HHCS BOLTS 5/16"-18 JAM NUTS BLOWER CONE

Figure 2-12.

BLOWER CONE TAB

BLOWER HOUSING

IMPELLER BLADE

2-13 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 2-13. 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.

BLOWER HOUSING TAB **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 2-13.

16

2-14 Boot To Mower Deck Installation

Before installing the boot, the grass deflector must be removed from the mower deck. Remove the existing hardware from the grass deflector and remove the deflector from the deflector mount plate. Refer to figure 2-14a. and 2-14b. for reference.

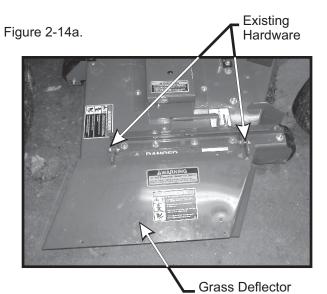


Figure 2-14c. Boot Plate

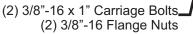
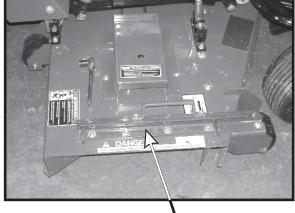


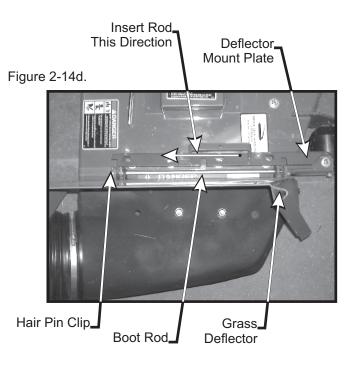
Figure 2-14b.



Deflector Mount Plate

Mount the boot plate P#(B0347) to the boot P#(E1902) with (2) 3/8"-16 x 1" carriage bolts P#(K1182) and (2) 3/8"-16 flange nuts P#(K1215). Insert the carriage bolts from inside the boot, so that the threads are turned upwards and the nuts fasten on the top of the boot. This will prevent grass clippings from building up on the bolts. Refer to Figure 2-14c. for details.

Mount the boot to the mower deck by inserting the boot rod P#(B0348) through the holes in the grass deflector, the deflector mount plate and the boot plate. Continue to push the boot rod through the boot plate, deflector mount plate and the grass deflector. Fasten the boot rod with (1) hair pin clip P#(K0099). Refer to Figure 2-14d. for reference.



2-15 Length Of Hose Adjustment

The hoses in steps 2-16. and 2-17. must be cut to fit your machine. Follow steps 2-16. and 2-17. Do not cut the hoses until you have tried to fit them on your machine. Remember that the hoses have to be long enough to adjust for the blower assembly's movement as well as allow for enough clamping surface between the inlet, blower assembly, and the deck boot.

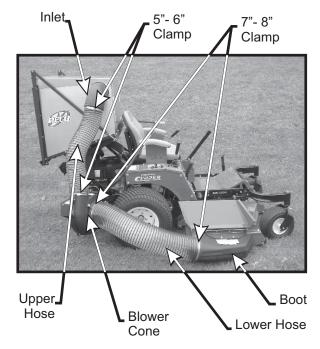
2-16 Upper Hose Installation

Slide a 5"-6" upper hose clamp P#(J6011) onto both ends of the 6" upper hose (Figure 2-17). 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 2-17 for details. Make sure both ends of the hose are clearly attached to the inlet and the blower assembly inlet. Tighten the hose clamps.

2-17 Lower Hose To Blower Cone Installation

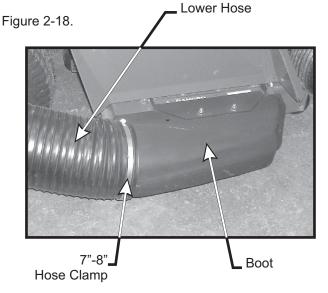
Slide a 7"-8" hose clamp P#(J6006) over both ends of the lower hose. Then proceed to slide the lower hose onto the blower cone. Tighten the hose clamp. The assembly should look like Figure 2-17.

Figure 2-17.



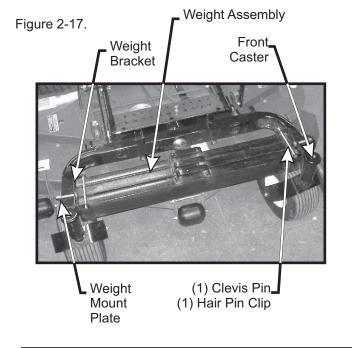
2-18 Lower Hose To Boot Installation

Take the unattached end of the lower hose and slide it over the circular end of the boot. Use the lower hose clamp to secure the hose to the boot (Figure 2-18). Tip: Before securing clamp rotate hose counter-clockwise (away from yourself) approximately 1" to add in retaining the boot to the mower deck.



2-19 Front Weight Installation

Fasten the weight brackets P#(B0418) and the weight mount plates P#(B0419) to the front casters using (4) 3/8"-16 x 3" carriage bolts P#(K1187) and (4) 3/8"-16 nyloc nuts P#(K1216). Tighten bolts only finger tight at this point. Insert (3) weight assemblies P#(A0852) into the weight mount brackets. Secure the weight assemblies using (2) 3/8" x 6-1/8" clevis pins P#(K1624) and (2) hair pin clips P#(K0086). See Figure 2-17 for reference.



18

SECTION III OPERATING INSTRUCTIONS

3-1 General Safety

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

3-2 Operation And Tips On Mowing

A. Perform BEFORE EACH USE the maintenance list in

paragraph 4-1.

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

NOTE: If the collection system does not appear to be collecting the grass clippings, disengage the deck and blower, then, engage the parking brake and turn the mower off. Proceed to section 3-3, and review the section 2-3 and 2-4, 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 2-5 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 immediately.

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. Check belt for proper tension.

4-2 Lubrication

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

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

SECTION V PARTS AND SERVICE

5-1 Parts And Service Information

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 Country Clipper and include the following information on the chart below.

THE SERIAL NUMBER PLATE IS LOCATED ON THE TOP ASSEMBLY P#(A0794) SEE PAGE 13 FOR REFERENCE)	WRITE THE MODEL AND SERIAL NUMBER IN THE BOX TO THE LEFT FOR FUTURE REFERENCE.					
Unit Model Number:						
Phone Number:						
Country Clipper Division of Shivvers Mfg. Inc 613 W. English Corydon, IA 50060 Phone: 1-800-344-8237 641-872-2544 Fax: 641-872-1593 E-Mail: www.countryclipper@countryclipper.com						

SAFETY DECALS

To promote safe operation, Country Clipper 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.



21

TORQUE SPECIFICATIONS							
AME	RICAN	Recommended Torque in Foot Pounds (Newton Meters).*					
Bolt Hea	Bolt Head Markings		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)	
	SAE Grade 2 (No Dashes)	1/2	5/16 - 24 UNF	13 (17)	19 (26)	27 (37)	
	(NO Dashes)	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)	
	SAE Grade 5	7/8	9/16 - 18 UNF	79 (107)	122 (165)	172 (233)	
	(3 Dashes)	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)	
	Diameter "B	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)	
	Diam	1-5/16	7/8 - 14 UNF	184 (249)	474 (642)	668 (905)	
1		1-1/2	1 - 8 ŲNC	250 (339)	644 (873)	909 (1232)	
		1-1/2	1 - 12 UNF	274 (371)	705 (955)	995 (1348)	
/rench ize "A"	SAE Grade 8	1-1/2	1 - 14 UNF	280 (379)	721 (977)	1019 (1381)	
	(6 Dashes)	1-11/16	1-1/8 - 7 UNC	354 (480)	795 (1077)	1288(1745)	
Т		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)	

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)
b	36	24	211 (286)	563 (763)		778 (1054)
	41	27		821 (1112)		1138 (1542)
	46	30	418 (566)	1119 (1516)		1547 (2096)

METRIC Urench Size "A" 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.



Country Clipper Division of Shivvers Mfg. Inc 613 W. English | Corydon, IA | 50060 Phone: 1-800-344-8237 | 641-872-2544 Fax: 641-872-1593 E-Mail: www.countryclipper@countryclipper.com