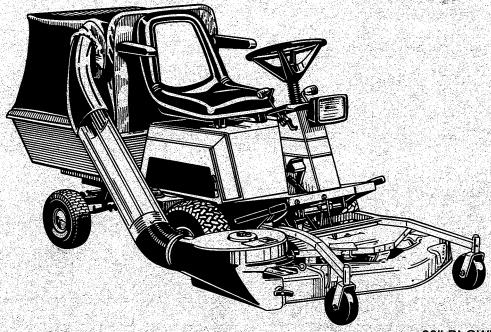
OPERATOR'S MANUAL TURBO COLLECTION SYSTEMS

FOR FRONT-CUT RIDERS



36" BLOWER ASSEMBLY MFG. NO. 1691373

42"BLOWER ASSEMBLY MFG. NO. 1691260

CART COLLECTION SYSTEM MFG. NO. 1691245

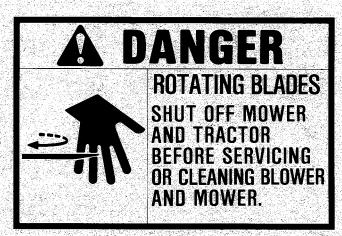
TWIN BAG COLLECTION SYSTEM MFG. NO. 1691572

FORM - 1702656-02 PRINTED IN U.S.A. 8/88

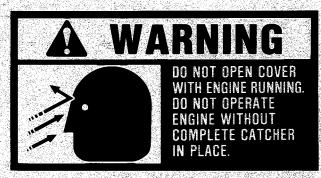
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Safety Decals



Located on Blower.



Located on Cart.

Safety Rules

A

Read these safety rules and the safety rules in your Operator's Manual and follow them closely. Failure to obey these rules could result in loss of control of vehicle, severe personal injury

to yourself, or damage to property or equipment. The triangle \triangle in the text signifies important cautions or warnings which must be followed.



WARNING

When blower assembly is removed from mower deck, the deflector must be installed as described in Operating Without Collection System.

- Know the controls and how to stop quickly. READ THE RIDER'S OWNER'S MANUAL.
- 2. Shut the engine (motor) off before attaching, adjusting, or disconnecting the Collection System.
- 3. Check the cart to make sure it is bolted tightly to rider.
- 4. Check the latch handle to make sure it is engaged so the cart's box is locked to the frame.
- 5. Look behind to make sure the area is clear before backing up.
- 6. DO NOT turn sharply when the rider is alongside a building or any object.
- 7. DO NOT carry passengers in the cart.

CAUTION:

- 8. For added tractor stability and to prevent tipping or loss of control;
 - A. DO drive in reduced speed on uneven ground and when turning corners.
 - B. Reduce loads on hillsides. It is recommended that the Collection System be kept only half full when negotiating any slopes. Start moving on slopes when the Collection System is empty.

- C. Mow up and down the face of slopes; never across the face of any slope.
- 9. **CAUTION:** Objects may be thrown from mower.

For your safety:

- A. DO NOT remove the cover while the mower blades are turning. Shut off the engine before opening the door or removing the grass chute.
- B. Be sure the complete Collection System is in place (cover secure and grass chute connected) before operating the mower.
- C. DO check the cart cover frequently for wear and tear. Replace with new cover for safety protection.
- 10. For best results when mowing grass: Set the mower to cut from 1 to 2 inches of grass. If grass is exceptionally tall, set your mower as high as possible for first cutting. Lower cutting height at succeeding cuttings until proper height is reached. It may be necessary to mow tall grass at a slower tractor speed.

INSTALLATION - 36" BLOWER ASSEMBLY

- Remove mower deck from rider. Refer to Operator's Manual for instructions.
- 2. Remove arbor cover by removing four capscrews. Retain hardware for new belt cover installation.
- 3. Remove right-hand arbor cover bracket by removing two capscrews, lockwashers, washers, and nuts. Retain one set of hardware for new belt stop installation (step 11).
- 4. Remove mower drive belt from right-hand arbor pulley. PTO rod can be moved by hand to release blade brake for belt removal.
- 5. Remove the mower deflector by removing two carriage bolts, lockwashers and nuts (A, figure 1). Save this hardware for use when blower is removed for side discharge.

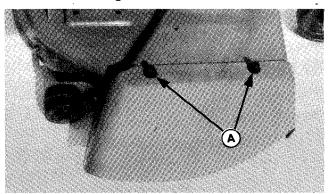


Figure 1.
A. Mounting Hardware

- 6. Drill a 9/32" hole in mower deck using the template supplied on the last page. Align the template with deflector mounting holes (hardware removed in step 5).
- 7. Remove the existing right-hand arbor pulley. Store the capscrew with the pulley. Retain the large washer and lockwasher for new pulley installation in step 12.
- 8. Install strap to deck with hardware shown in figure 2.

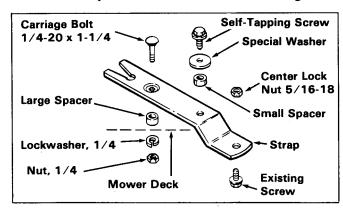


Figure 2.

9. Check the installation as shown in figure 3. The strap (A, figure 3) should be secured to mower deck using existing arbor screw and supplied jam locknut (B). Carriage bolt (C) and large spacer should be installed in drilled hole. The small spacer should be installed on top of strap with special washer (D) and self-tapping screw (E).

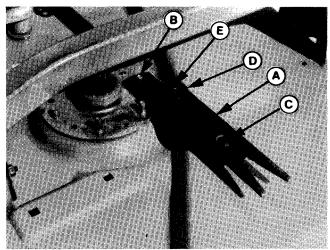


Figure 3.

- A. Strap
- B. Locknut, Jam
- C. Carriage Bolt
- D. Special Washer
- E. Self-Tapping Screw
- 10. Install new belt cover bracket (A, figure 4) using existing arbor screws and supplied 5/16-18 locknuts
 (B). Install upstop (E) on right rear post with 1/4-20 capscrew, lockwasher, and nut.

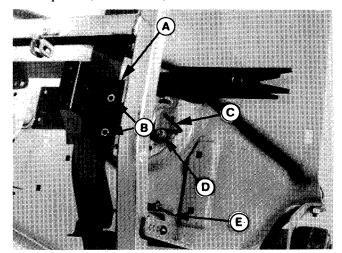


Figure 4.

- A. Belt Cover Bracket
- B. Locknuts, Jam
- C. Belt Stop
- D. Mounting Hardware
- E. Upstop

11. Install belt stop (C, figure 4) onto existing arbor screw as shown in figure 4. Secure with existing flat washer, lockwasher, and nut ((D, removed from bracket in step 3). Tighten snug only at this time.

NOTE

The new 2" capscrew (B, figure 5) installed in step 12 is packaged with the collection system box and not with the turbo blower.

12. Install the new double-groove pulley (A, figure 5) with 7/16-14 x 2.0 capscrew (B) and existing washer (C) and lockwasher (D). Torque to 55-70 ft. lbs. (74-95 Nm). Use a wood block to prevent blade from turning. Do not install belt at this time.

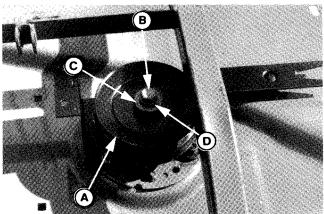


Figure 5.

- A. Pulley
- C. Washer
- B. Capscrew D. Lockwasher
- 13. Turn the mower deck upright and block in this position. Install the baffle (A, figure 6) as shown. For decks without rollers, install retainer nut (B) in baffle, then screw the 1/4" whizlock screw (C) into retainer nut. For decks with roller, use existing hardware to mount baffle (A). Insert 1/4" carriage bolt (D) from inside deck and install lockwasher and nut (E). Return mower deck to flat position.

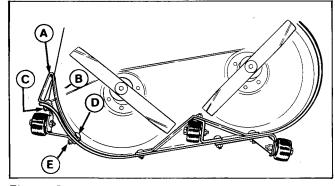


Figure 6. A. Baffle **B. Retainer Nut**

- C. Screw, Whizlock, 1/4-20 x 1/2 D. Bolt, Carriage, 1/4-20 x 5/8
- E. Lockwasher and Nut, 1/4

capscrew and install 5/16 lockwasher (D) and 5/16 nut (E). Thread the wingnut (F) onto capscrew and install the 5/16 locknut (G) flush with end of capscrew. NOTE

14. Install wing nut assembly (figure 7) as follows. Insert

5/16-18 x 2-1/2 capscrew (A) and 5/16 flat washer

(B) from inside the deck. Place the cup (C) onto the

Cup (C) must be installed as shown in figure 7.

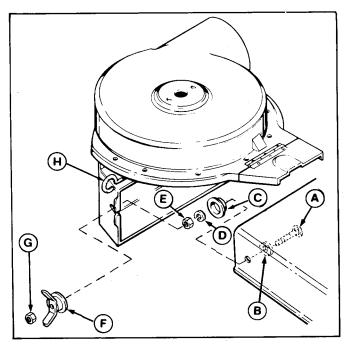


Figure 7.

- A. Capscrew B. Washer
- E. Nut F. Wingnut G. Locknut
- C. Cup D. Lockwasher
- H. Belt Retainer
- 15. The belt retainer (A, figure 8) must be positioned correctly. Loosen the nut (B) and position the leg(C) so it is against the side of the idler arm (D). Then, tighten the nut (B).

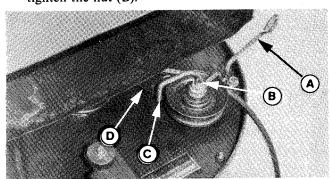


Figure 8. (Housing Viewed Upside Down)

- A. Belt Retainer
- C. Leg
- B. Nut
- D. Idler Arm

- 16. Install the blower assembly onto mower deck as follows:
 - a. The small notch in blower arm (not shown) will be placed onto top of deck strap spacer (A, figure 9).
 - b. The notch in deck strap (B) will accept blower arm spacer (C).
 - c. Slide the blower into position and tighten the wing nut (D).

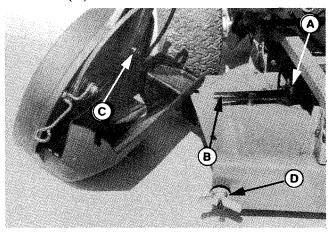


Figure 9.

A. Strap Spacer

B. Notch in Strap

- C. Blower Arm Spacer
- D. Wing Nut
- 17. Push the belt retainer (A, figure 8) to provide slack and install belt onto lower groove of pulley as shown in figure 10. Rotate pulley while installing belt.

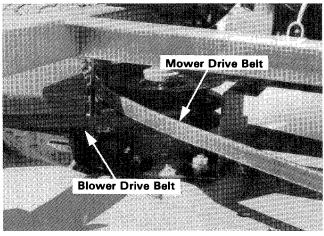


Figure 10.

- 18. Install the mower deck to rider. Refer to Operator's Manual for instruction. Adjust the belt stop so there is 1/8" clearance and tighten nut.
- 19. Place the mower deck drive belt in upper groove of pulley as shown in figure 10. Engage the PTO lever to release the blade brake.
- 20. Install the new belt cover bracket (A, figure 11) with two capscrews (B, removed in step 2) on lift end and new capscrews, lockwashers, and nuts on right side.

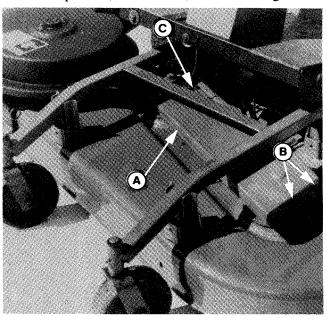


Figure 11.

- A. Belt Cover Bracket
- **B. Existing Capscrews**
- C. New Hardware

INSTALLATION - 42" BLOWER ASSEMBLY

- 1. Remove the right-hand mower cover by removing the two nuts at right-hand arbor, the screw (I, figure 12) at front and the nut (J). Remove the deflector by removing hardware at top two holes, and the front hole. Install this hardware in the deflector for future use.
- 2. Remove the idler pulley bolt (A, figure 13) and install the 2 inch long bolt from bottom. Install lockwasher and nut on top.
- 3. Place the new belt cover (A, figure 12) in position, placing hole over bolt installed in step 2. Install 3/8 nut (H, figure 12) onto the idler pulley bolt. Reinstall screw (I) and washer and nut (J). Secure cover (B) to belt cover with wing nut (also shown in figure 18).

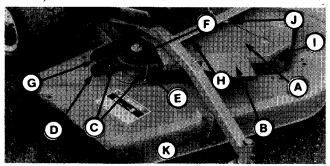


Figure 12.

- A. Belt Cover
- **B. Arbor Cover**
- C. Capscrew, 5/16-18 x 1-1/4
- D. Bracket
- E. Belt Stop

- F. Pulley
- G. Notch
- H. Nut
- I. Screw J. Nut
- K. Pin
- 4. Slip mower belt off the right hand pulley (F, figure 12). Remove the pulley from the arbor by removing capscrew and washers. Save washers for reinstallation. Use wood block to prevent blade from turning.
- 5. Remove two self-tapping screws from arbor and install two 5/16-18 x 1-1/4 capscrews (C, figure 12). Parts will be installed on these capscrews in steps 6 and 7.
- 6. Install the bracket (F, figure 14) with hardware shown. The RH capscrew (G) was installed in step 5. Use hardware without belt stop at LH hole (L). The bracket is shown installed in figure 12.

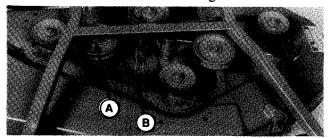


Figure 13.

A. Idler Pulley Bolt

B. Belt

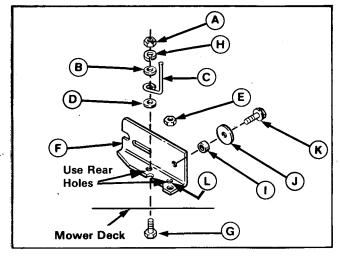


Figure 14.

- A. Nut, 5/16
- B. Washer, 5/16
- C. Belt Stop
- D. Washer, 5/16 E. Locknut, 5/16
- F. Arbor Bracket
- G. Capscrew, 5/16-18 x 1-1/4
- H. Lockwasher, 5/16
- I. Spacer
- J. Washer, Special
- K. Screw, Self-Tapping, 1/4-20
- L. Left-Hand Mtg. Hole
- 7. Install the other belt stop (E, figure 12) onto the other capscrew installed in step 5 with 5/16 washer, 5/16 lockwasher and 5/16 nut (snug).
- 8. Install new arbor pulley (F, figure 12) with hub down. Use 7/16-14 x 2-1/4 capscrew and washers removed in step 4. Torque to 55 to 60 ft. lbs. Use wood block to prevent blade from turning.
- 9. Slip the mower drive belt onto the lower groove of the new pulley (F, figure 12). With the belt engaged, adjust the belt stops 1/8" from belt. Tighten the hardware.
- 10. The blower belt (A, figure 15) should be installed as shown.

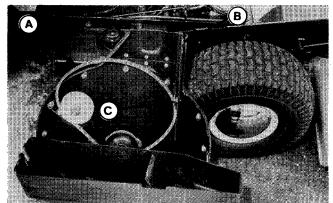


Figure 15.

A. Belt

- **B.** Notch
- C. Spacer

- 11. Install wing nut (D, figure 16) as follows:
 - a. Remove existing hardware from front end of stone guard.
 - b. From inside deck, install new 5/16-18 x 2-1/4 carriage bolt (F, figure 16). Then install the cup (A), 5/16 lockwasher (B), and 5/16 nut (C). Tighten the nut.
 - c. Thread the wing nut (D) far enough onto the screw so that the 5/16 locknut (E) can be threaded on flush with the end of screw.

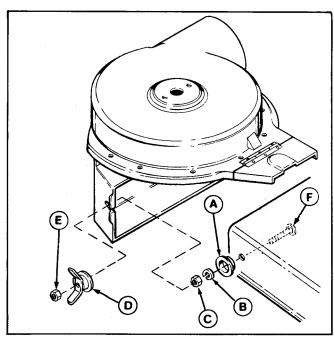


Figure 16.

- A. Cup
- B. Lockwasher, 5/16
- C. Nut, 5/16
- D. Wing Nut
- E. Locknut, 5/16
- F. Carriage Bolt
- 12. Install the new baffle (A, figure 17) in deck on stone guard using existing hardware. Hardware may be installed with nut to inside or nut to outside.

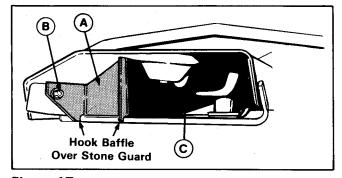


Figure 17.

- A. Baffle
- B. Carriage Bolt
- C. Mower Discharge Opening

13. The belt retainer must be positioned correctly and retaining nut tightened on the blower. Turn housing upside down and reposition belt retainer (A, figure 17A) so that leg (C) contacts side of idler arm (D) as shown. Tighten nut (B) securely.

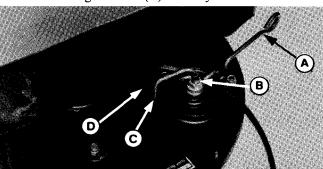


Figure 17A.

- A. Belt Retainer
- B. Nut
- C. Leg
- D. Idler Arm
- 14. Install the blower assembly as follows:
 - a. Align the notch (B, figure 15) with spacer (I, figure 14) on arbor bracket. Align spacer (C, figure 15) with notch (F, figure 14) on arbor bracket. Slide the assembly into place as shown in figure 18, while aligning front notch between cup and wing nut (A, figure 18). Tighten wing nut.
 - b. Raise the flap (A, figure 19) and install the blower drive belt (C) in the top groove of the pulley (B).

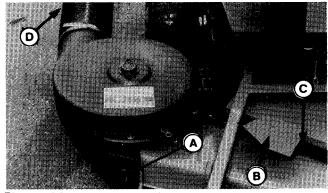


Figure 18.

- A. Wing Nut
- C. Stud
- B. Cover
- D. Hose

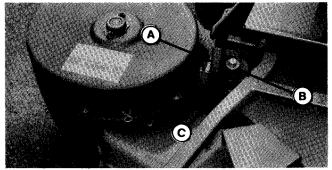


Figure 19.

- A. Flap
- B. Pulley
- C. Drive Belt

INSTALLATION - CART COLLECTOR

- Install the frame (A, figure 20) at four locations (B) with 5/16-18 x 1-1/2 capscrew, washer and nut. Install spacers (F) at top capscrew on each side.
- 2. Attach the bracket (C, figure 20) with two 5/16-18 x 1-3/4 bolts (B), washers and nuts. Attach strap (E) with lower set of hardware.

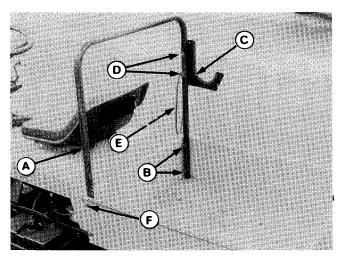


Figure 20.

A. Frame
B. Fastener Locations

B. Fastener Locati
C. Bracket

D. Bolt

E. Strap F. Spacer

- 3. The support rod and frame rod must be inserted into the cover (A, figure 21) as follows.
 - a. The frame rod (C, figure 21) must be inserted through the bottom sleeve of the cover so that the two bent ends extend out openings, which are next to the cord loops (D). The frame rod position is indicated by dotted line (B, figure 22).

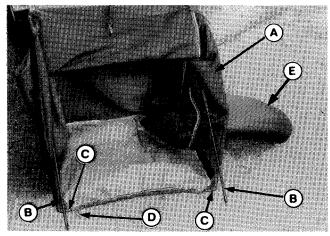


Figure 21.

A. Cover

B. Support Rod

C. Frame Rod D. Cord Loops E. Elbow b. The support rod (B, figure 21), which has eyebolt ends, must be threaded through the sleeve inside the cover. The position is indicated by dotted line (A, figure 22).

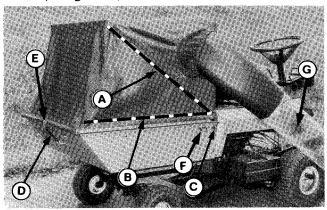


Figure 22.

A. Support Rod Location

E. Clip

G. Tube

B. Frame Rod Location

F. Decal, Warning

C. Cord Loop

D. Strap

NOTE

When you pick up cover to place over the frame, be sure support rod (B, figure 21) is inside frame rod (C).

- 4. Insert the elbow (E, figure 21) into the cover opening.
- 5. Pick up the cover and place down onto the frame (A, figure 20) inserting the elbow (A, figure 23) into the bracket (B) (shown without cover for clarity). Pull the rubber strap (C) over the elbow and hook into bracket as shown.

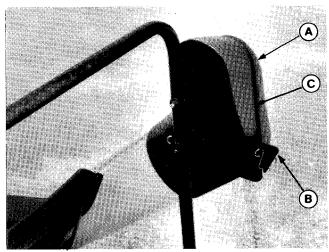


Figure 23. (Shown without cover for clarity.)

A. Elbow B. Bracket C. Strap

- 6. On each side, place the eyebolt of the support rod (B, figure 21) onto the frame rod, then insert frame rod (A, figure 24) through the frame (B). Insert clip (C) through frame rod to secure.
- 7. Insert an "S" hook to each end of the strap (D, figure 22). Hook one end through washer (E, figure 22) and pinch closed with a pliers.
- 8. Pull the cover down so it appears as in figure 22. To secure the front, pull the cord loops (C) onto the spacers. To secure the rear, hook the strap (D) onto back of cart as shown.
- 9. Install warning decal (F, figure 22) so it is visible from right-hand side. Make sure surface is clean. Remove backing paper and tack edge of decal in position. Then apply with heal of hand, smoothing out bubbles. The edge of a ruler can also be used.
- 10. Insert the tube (G, figure 22) securely into the hose (D, figure 18) which is clamped to the blower housing and into the elbow.

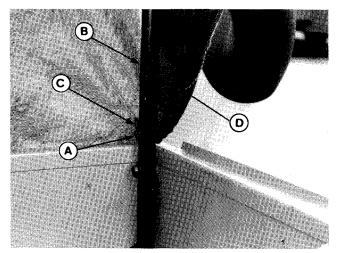


Figure 24.

- A. Frame Rod
- B. Frame
- C. Clip
- D. Support Rod

MODIFICATION TO RIDER

- 1. After installation of collection system, only one weight is required in rear. There should be one weight in rear channel.
- 2. Increase the rear tire pressure to 20-25 psi.

INSTALLATION - TWIN BAG COLLECTOR

1. The hardware for latch (B, figure 25) and the hinge (C) are used to secure the angle brackets (A) to the bottom of platform (D). Also the two front bolts (A, figure 26) go through the upper bracket (B). Proceed as follows to install the angle brackets and upper bracket to the platform.

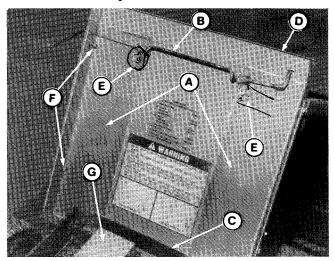


Figure 25.

- A. Angle Brackets
- B. Latch
- C. Hinge
- D. Platform
- E. Washer
- F. Capscrews
- G. Weight

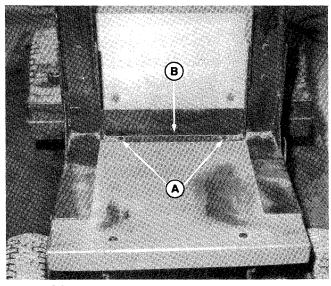


Figure 26.

- A. Bolts
- **B.** Upper Bracket

- a. Remove the platform from the hinge by removing the hardware. Remove the latch (B, figure 25) from the platform.
- b. Use this existing hardware to attach bracket (B, figure 26), angle brackets (A, figure 25), and latch (B) to the platform. Use the same hardware, except add two supplied 5/16" washers (E, figure 25) (against angle brackets).
- c. Insert the four supplied 1/4-20 x 3/4" capscrews (F, figure 25) through angle bracket, platform, and upper bracket. Install the 1/4" lockwasher and nuts onto the capscrews.
- d. Attach the platform (D, figure 25) to the hinge (C) with the original hardware, and two new one inch long capscrews.
- 2. Attach the two upper braces (A, figure 27) to the bracket (B) with four 5/16-18 x 7/8" capscrews, 5/16" lockwashers and nuts (C).
- 3. Attach the support plate (A, figure 28) and hinges (B) to the two upper braces (C). Insert four 5/16-18 x 7/8 capscrews from rear, then install 3/8 (ID) x 7/8 (OD) washers, lockwashers and nuts (D) (unless already assembled).

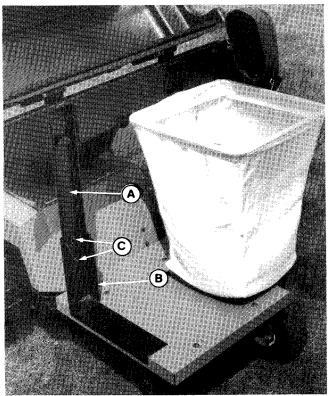


Figure 27.
A. Upper Brace
B. Bracket
C. Nuts

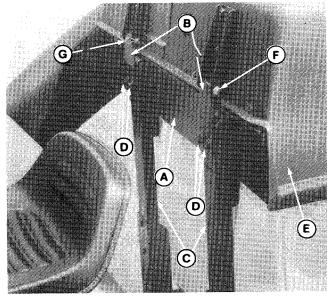


Figure 28. (Shown With Cover Installed)

A. Support Plate E. Cover
B. Hinges F. Pin
C. Braces G. Clip

D. Nuts

4. Connect the elbow bracket (B, figure 29) to right-hand rear side of support plate by inserting 5/16-18 x 7/8" carriage bolts (A) from rear and then installing 5/16" lockwashers and nuts.

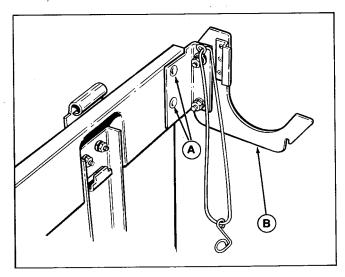


Figure 29.

A. Bolts

B. Elbow Bracket

- 5. Install clear tube (A, figure 30) onto flexible hose (B) until combined length is 45". When length is correct, perforate hose at four tube hole locations.
- 6. Install washers (D) onto 10-32 x 1/2 screws (C) and insert through hose and tube from inside out. Install washer (D) and nut/lockwashers (E) combination and tighten snug.
- 7. Install tube and hose assembly to turbo-vac housing and secure with band (F).

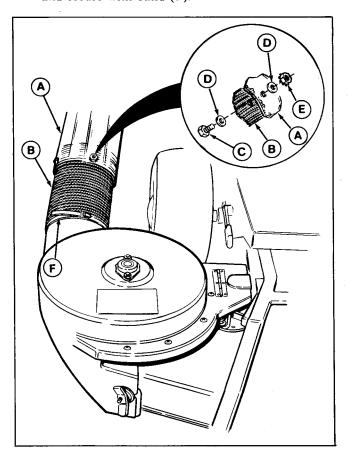


Figure 30.

- A. Tube
- B. Hose
- C. Screws, 10-32 x 1/2
- D. Washers
- E. Nut/Lockwasher
- F. Band
 - 8. Insert tube (A, figure 31) into elbow, then insert the elbow (B) into the elbow bracket (E). Pull the rubber strap (C) over the elbow and hook as shown.

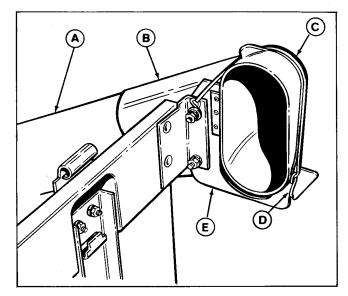


Figure 31.

- A. Tube
- B. Elbow
- C. Rubber Strap
- D. Hook
- E. Elbow Bracket

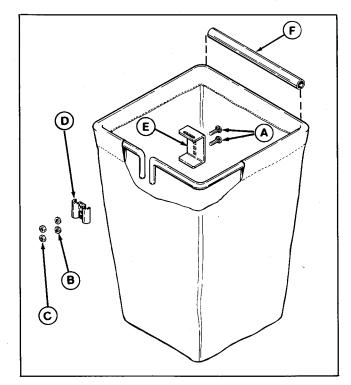


Figure 32.

- A. Bolt, Carriage, 5/16 x 7/8
- B. Lockwasher, 5/16
- C. Nut, 5/16
- D. Bracket
- E. Slotted Bracket
- F. Tube

- Place cover (E, figure 28) onto the support plate and align the hinges. Insert two pins (F) and install clips (B). The front edge of the cover must seal against the support plate. Loosen nuts (D) to re-position if necessary, then tighten.
- 10. Connect the brackets (D & E, figure 32) to the bag frames with slot toward top. Use two carriage bolts (A), lockwashers and nuts for each bag. Use top and bottom holes in brackets (D & E); the middle hole will be empty. The cloth is shown cut away for clarity only be sure the brackets are outside of the bag.
- 11. Install the tubes (F, figure 32) onto the bags as shown.
- 12. Hang the bags onto the frame (figure 33) by hooking onto slotted bracket.

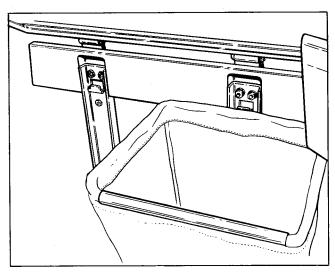


Figure 33.

MODIFICATION TO RIDER

- After installation of twin bags, use only one weight underneath platform. Place weight in the center.
- 2. Increase tire pressure to 20-25 psi.

Maintenance



WARNING

The cart cover is subject to wear and deterioration. Check the cover frequently. Use an approved replacement cover.

The cover can be rinsed with a hose when dirty. A dirty cover will inhibit the fast flow of grass clippings into the cover. Do not leave grass or leaves in the cart for a long period of time.

Operation



WARNING

For safety reasons grass and debris are to be removed only after engine is shut off, key removed, and all moving parts stopped.



○ WARNING

Before raising cover, shut off engine, remove key, and set parking brake.

BEFORE OPERATION

Clear the lawn of all sticks, stones, wire and other debris which may be caught or thrown by the mower blades.

Clean the tube with mild detergent (other products may damage tube). The flow of grass can be seen through the tube while moving.

Check grass condition. If wet, wait until later in the day. If grass is wet plugging may occur.

For efficient bagging, air circulation under the mower deck, through the chute and into the bag is very important. For this reason, you should remove grass and debris from underside of mower deck, discharge chute and cover.

The adapter, tube and elbow can be removed as an assembly for cleaning. Remove the nuts and washers that hold the adapter to mower deck and unhook rubber strap from elbow.

OPERATION

Grass should be cut often, and not too short. If grass is too long or lush it may be necessary to keep ground speed to a minimum or to cut only half the width to prevent clogging. If grass is high, operate with mower in high cutting position. Cut the grass again in lower cutting position, if desired.

The collector is full when grass builds at the window.

Always operate with throttle at full speed.

DUMPING GRASS AND LEAVES

\mathbf{A}

WARNING

For safety reasons grass and debris are to be removed only after engine is shut off, key removed, and all moving parts stopped.

A

WARNING

Before raising cover, shut off engine, remove key, and set parking brake.

Cart Collector

- 1. Back the rider to the desired place for unloading. Shut the rider's engine off before getting off the rider's seat.
- 2. Unhook the strap from the door lock and raise the cover assembly to the open position. Lock the cover in place by hooking the strap to the locking tab (figure 34).
- 3. Move the latch handle to the unlock position and dump the cart's box using one of the front lift handles. The connecting tube will slide off the elbow and the cart's box will dump at a 90 degree angle for quick unloading.
- 4. If bagging the grass clippings is desired, the grass can be pulled from the cart at the curve side into a plastic lawn bag. Also, the grass can be dumped onto a tarp for throwing into a trailer.

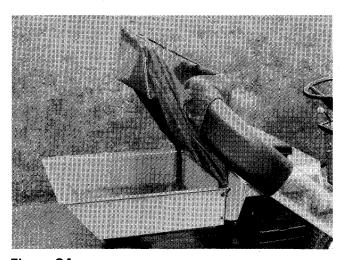


Figure 34.

Twin Bag Collector

- 1. Raise the cover. If a plastic liner was not used, unhook the bag and turn upside down to empty (use handle on bottom).
- 2. If plastic liner was used, first tie up top of liner. Then, either pull the liner out, or turn the bag upside down and allow the filled liner to slide out.

STORAGE

- 1. Clean the grass catcher thoroughly.
- 2. If paint has been scratched on metal parts, coat with paint or oil.
- 3. Store in a dry area. Hang the bags or cover to dry. Always store away from moisture.

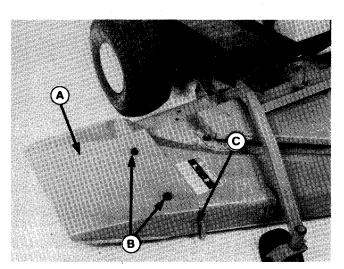


Figure 35.

- A. Deflector
- **B. Nuts**
- C. Nut

OPERATING WITHOUT COLLECTION SYSTEM

42" Blower

To operate without the grass collection system, remove the blower by removing the front wing nut. Re-install the mower deflector (A, figure 35) by installing front nut (C) and inserting 3/8-16 x 3/4 carriage bolts in top holes (B). Install washers, lockwashers and nuts on carriage bolts.

Remove the wing nut which holds the cover (B, figure 18) to belt cover. Remove the right-hand front mower attachment pin (K, figure 12). Push right-front corner of mower deck and swing the cover around so it covers the arbor (B, figure 19). Insert stud (C, figure 18) through the bracket and secure in place with the wing nut. Re-install the right-hand front attachment pin (K, figure 12).

36" Blower

To remove the blower assembly, first loosen the front wing nut. To provide belt slack, push the belt retainer (H, figure 7). Slip the belt off the pulley. The blower can be removed from deck.

Install the mower deflector (A, figure 1) with two carriage bolts, lockwashers and nuts.

MODIFICATION TO RIDER

- 1. Use two rear weights to operate without collection system. Place one on each side.
- 2. Return rear tire pressure to standard.

EDGE OF DECK

TEMPLATE FOR DRILLING MOUNTING HOLE FOR 36" TURBO VAC.

Align with deflector mounting holes.

Drill 9/32" Dia. Hole

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