



## Electronic Service Manuals

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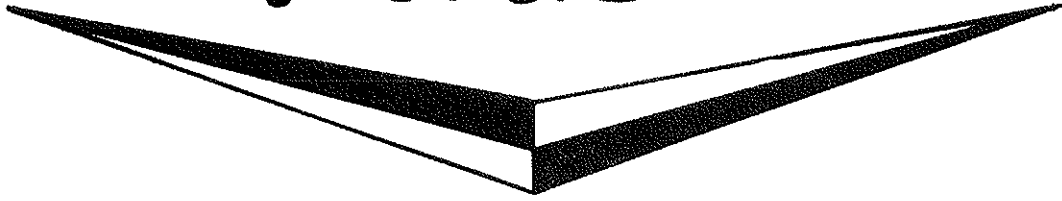
**Serving the Cleaning Industry Since 1922**

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# OWNER'S GUIDE



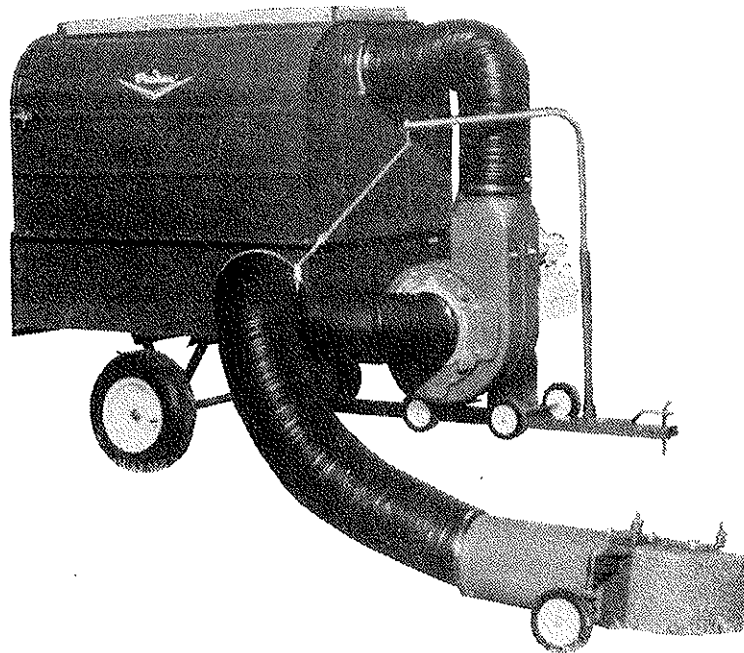
# Parker®



## CONESTOGA™ TRAIL VAC

PATENT PENDING

### MODEL TV-8828



**PARKER SWEEPER COMPANY**

**Box 1728**

**Springfield, Ohio 45501-1728**

Plate No. 1064 (Rev. 4-13-88)

87-220-A

## TO THE OWNER

These instructions were written to assist you in the assembly and operation of the Conestoga Trail Vac. **READ THE INSTRUCTIONS** thoroughly **BEFORE** attempting to assemble and operate the machine so that you are familiar with the complete procedure and the safety precautions.

### RULES FOR SAFE OPERATION



The following safety precautions are suggested to prevent damage to the equipment or injury to the operator or nearby persons.

1. Do not allow anyone to operate the Conestoga Trail Vac without proper instructions.
2. Stop the towing unit engine before reaching into the boot or mower deck to dislodge sticks or other debris.
3. Stop the engine before attempting to make any adjustment or performing any maintenance work on the Conestoga Trail Vac.
4. When working on the engine, always remove the spark plug wire from the engine and attach it to the V shaped clip on the engine head.
5. Do not run the engine in an enclosed area. Exhaust gases contain carbon monoxide, an odorless and deadly poison.
6. Do not fill the fuel tank while the engine is running. Spilling gasoline on a hot engine may cause a fire or an explosion.
7. While machine is running, do not leave it unattended.
8. Before using the machine to pick up debris, police the area to be cleaned first, picking up any large objects such as cans, toys, dog bones and chunks of wood. If these pass through the machine, they could damage the impeller, bend the engine crankshaft or put a hole in the hose.
9. Avoid using the machine in dangerous places where steep slopes or loose debris will endanger the safety of the operator or other people.
10. Keep all nuts, bolts and screws tight to be sure the Conestoga Trail Vac is in safe working condition.
11. Do not start or run engine unless hose is properly secured as injury may result.
12. Empty contents from cart and containers promptly. To not do so could cause spontaneous combustion.

### IMPORTANT

**ALWAYS GIVE THE FOLLOWING INFORMATION WHEN ORDERING REPAIR PARTS:**

- |                               |                                     |
|-------------------------------|-------------------------------------|
| 1. Part Number (Not Ref. No.) | 3. Description of Part              |
| 2. Quantity Needed            | 4. Model No. of Conestoga Trail Vac |
|                               | 5. Serial No. if available          |

**If unable to obtain parts locally, write down above information and send to:  
PARKER SWEEPER CO., BOX 1728, SPRINGFIELD, OHIO 45501**

Your unit is right hand (R.H.) or left hand (L.H.) as you stand behind it.

**OBSERVE ALL SAFETY RULES. YOUR INJURIES MAYBE THE ONES YOU PREVENT.**

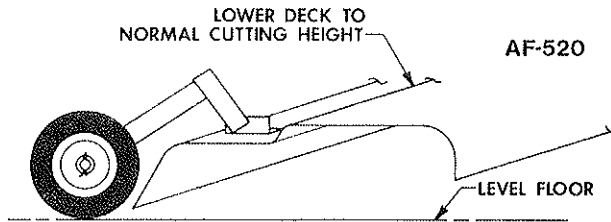
# ASSEMBLY INSTRUCTIONS

## INSTRUCTIONS FOR PREPARING AND ATTACHING BOOT TO MOWER DECK

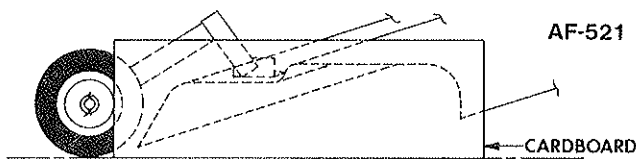
These instructions are designed to be used for right hand mower discharge **only**. A Boot Conversion Kit, MA-575-B is available for left hand mower discharge applications. This kit includes instructions for boot modification, engine mounting, and hose attachment.

**NOTE:** Remove the discharge extension or shield from the mower deck.

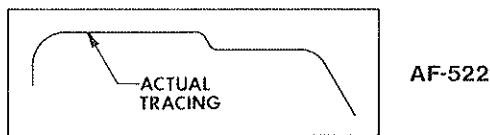
1. Lower mowing deck (on a level floor) to the normal cutting height.



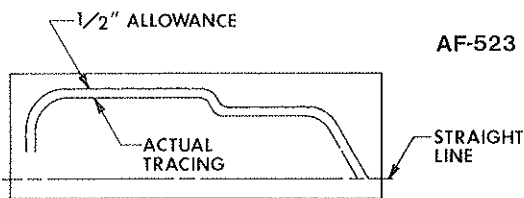
2. Make a template from a flap of the shipping carton. Place the straight edge on the floor so that the cardboard fully covers the discharge area of the mowing deck.



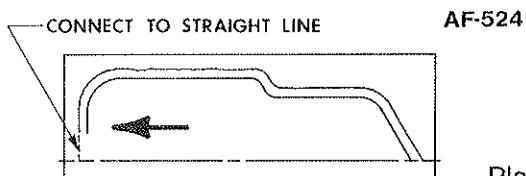
3. Trace the metal outline of the deck on the cardboard.



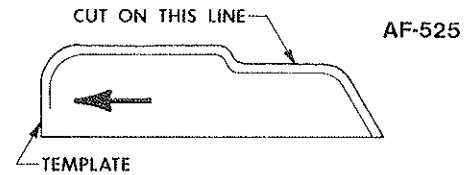
4. The opening in the boot should be approximately 1/2" larger than the deck to allow for proper fit and operation. To accomplish this, retrace the outline 1/2" larger on the cardboard. Draw a line parallel to the bottom straight edge of the cardboard from the lowest point of the deck.



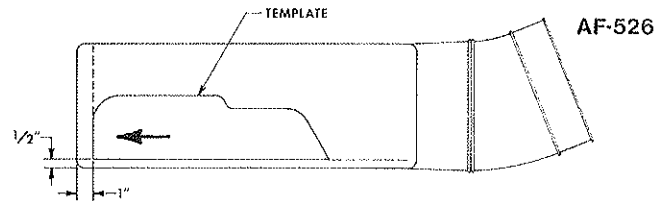
5. Connect the front outline of the deck to the straight line. Place an arrow on the template indicating the front of the deck.



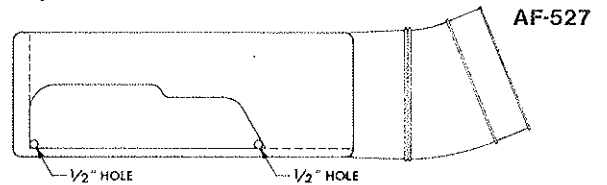
6. Cut out template with a sharp knife.



7. Place the template on the boot, adjusting it so that the template is approximately 1" back from the front edge and 1/2" from the bottom edge. With a black marking pen trace the outline on the boot. Before proceeding further, hold boot against deck opening to be sure that the opening corresponds.

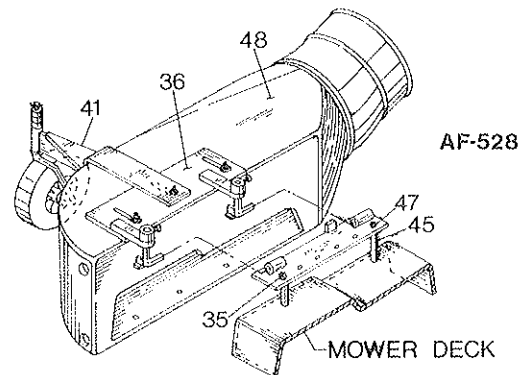


8. If everything is in order, drill a 1/2" hole tangentially at each bottom corner.



9. Use a saber saw with a medium cut blade 1/2" wide to cut the outline of the template from the boot. **NOTE:** This will cause each corner to have a 1/4" radius.

10. Use a file to remove the rough edges.



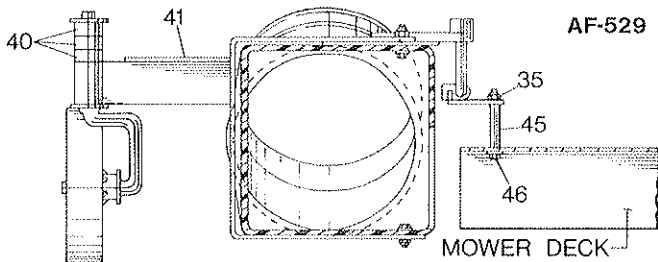
11. Attach hinge assembly (36) by the two outside holes to top of boot (48) using hex head bolts, flatwashers against inside of boot and flatwashers and lock nuts on top of hinge assembly. Do not assemble a bolt in the middle of the hinge assembly.

12. Slide caster wheel assembly (41) over boot and hinge assembly. Secure top and bottom with hardware provided.

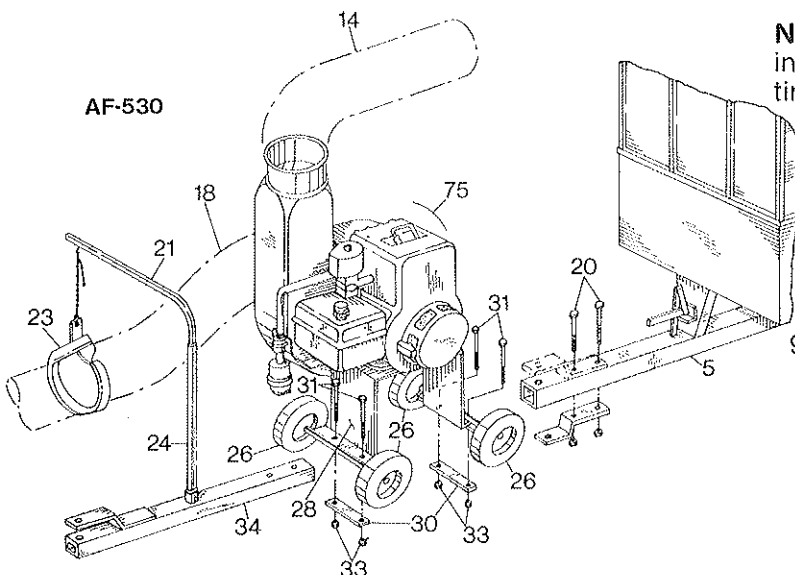
**NOTE:** Hinge assembly (36) should be moved as close to the boot as possible before tightening hardware.

## ASSEMBLY INSTRUCTIONS (Continued)

13. Attach deck plate assembly (47) to Hinge Assembly (36).
14. Remove nuts, bolts and spacers from deck plate assembly (47).
15. Position boot (48) flush with end of mower discharge opening and mark location of outside deck plate bolt holes and drill two 5/16 diameter holes thru mower deck.
16. Mount hinge assembly on the top of the mower deck keeping the boot opening concentric with the deck opening. Cut off spacers (45) to fit between hinge assembly (47) and mower deck to keep boot level. This may require spacer (45) to be cut at an angle to match deck contour.
17. Attach hinge assembly to mower deck using full thread hex head bolts (46), spacers (45), and hex lock nuts (35) provided.
18. Excess bolt length should be cut off with hacksaw to permit minimum of two full threads and maximum of 1/4" to protrude thru hex lock nut.
19. Boot can now be adjusted up and down and in and out. For best performance, boot should be positioned 1" to 1 1/2" from end of deck. Adjust caster wheel by positioning spacers (40) to proper height so that bottom edge of boot is parallel to the ground as shown below.



20. Inspect all hardware of boot-to-deck attachment to assure they have been tightened securely.

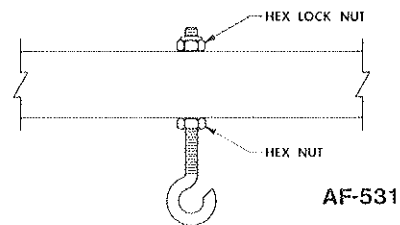


### POWER PACKAGE ASSEMBLY

1. Attach engine and blower housing assembly (75) to tongue (5) and towbar extension (34) using two mounting plates (30) and four hex head bolts (31) and nuts (33).
2. Attach muffler to engine making sure that lock nut is drawn tight. Secure with "U"-bolt. Remove oil drain plug from engine inserting pipe drain in its place.
3. Install four wheels (26) on axles of engine base (28) using washers and push-on retainer caps.
4. Insert Arm Stand (24) in towbar extension (34).
5. Insert Arm (21) in Arm Stand (24).

### FINAL ASSEMBLY

1. Remove the two bolts securing the clevis (for towing) from the cart towbar.
2. Slide rear of towbar extension (34) into the end of the tongue of the cart.
3. Attach towbar (34) to the tongue (5) with bolts (20) having the clevis on the underside of the tongue.
4. Attach the collar end (smooth end) of short hose (14) to canopy assembly and secure with clamp (13). Attach other end to blower housing with clamp (19).
5. Attach long hose (18) to front of blower housing and to the boot assembly. Secure both ends with clamps (30).
6. Attach eyebolt (53) to Arm (21) using hex nuts.



7. Extend the Arm to a position that prevents the hose from rubbing the rear tire.
8. Place sling (23) around hose, and attach to eyebolt with "S" hook and chain.

**NOTE:** Hose height may be adjusted by lengthening or shortening the chain to prevent dragging or tire interference.

9. If, after use, hose is excessively long, it may be shortened as necessary using bolt cutters or hacksaw. **DO NOT CUT TOO SHORT!** To determine correct length of boot hose, park the tractor with the Trail Vac in a full left hand turn. Hose should not be stretched tightly. If hose is too long when placed in this mode, then hose should be cut off.

# CANOPY ASSEMBLY

## TV-8828

**YOUR SAFETY IS OUR CONCERN. READ ALL SAFETY RULES AND OPERATING INSTRUCTIONS BEFORE ATTEMPTING TO OPERATE THIS EQUIPMENT. FAILURE TO FOLLOW SAFETY RULES AND OPERATING INSTRUCTIONS MAY RESULT IN SERIOUS INJURY.**

**NOTE:** When first assembling, all bolts should be installed finger tight. Final tightening instructions will follow.

1. Place the two Canopy Sides (11) parallel on the floor, facing each other and resting on the bottom flanges.
2. Secure top angles together with Link (28) and two Hex Head Bolts (10), at both ends.
3. At this point, either end of the Canopy may be considered, "front." Remove the four Plastic Fasteners (17) from the large Hardware Bag and insert them into the two holes, each side, at one end, as follows:
  - (a) Carefully bend the stem of the Plastic Fastener back and forth where it joins the sheath of the Fastener, but do not break it apart.
  - (b) Insert the Fastener through the hole in the Canopy rib from the outside, until the sheath of the Fastener stops against the side.
  - (c) Tap the Fastener head lightly with a hammer. The Fastener will break free of the sheath and continue in until the head seats. **NOTE:** This end is now the "Front" of the Canopy.
4. Remove Louver Assembly (1) from the carton.
5. Remove three 1/4-20 Hex Head Bolts (10) and Lockwasher (25) from each side of Louver Assembly (1), near the bottom of the Assembly.
6. Place Louver Assembly (1) on top of assembled Canopy, between top rails, with the movable Louver to the rear of the Canopy. **NOTE:** Front and rear of the Louver assembly must be fitted between the bolt that secures Link (28) in step 2 and the angle at the top of the Canopy assembly.
7. When properly fitted into the Canopy, the holes in the Louver Assembly will line up with those in the top rails of the Canopy. Secure with three 1/4-20 Hex Head Bolts (10) and Lockwashers (25) removed from each side of Louver Assembly (1) in step 5.
8. Assemble hose adaptor (15) to Canopy front assembly (12) using four Hex Head Bolts (7) and four Hex Lock Nuts (4).
9. Install Canopy front assembly (12) to Canopy (11) using four socket head cap screws (16) and four hex lock nuts (4). **NOTE:** Screw (16) head must be next to Canopy with nut (4) against front.
10. Install two latches (22) to rear sides of Canopy (11) using 4 round head screws (21), four split lockwashers (25) and four Hex nuts (26). **NOTE:** Ring on lock assembly (20) must be secured under the screw head toward the front of the Canopy.
11. Beginning with paragraph one, tighten all bolts and nuts and inspect to assure all assembly procedures are complete to this point.
12. With an able-bodied person to assist, lift the completed Canopy onto the top sides of the cart. **NOTE:** Carefully align bottom flange of Canopy and sides of cart.
13. Secure aligned Canopy to cart with C-clamps or vise grips in at least four places.
14. **NOTE:** Canopy must be centered on side rails of cart body to assure cart rear gate can be removed.

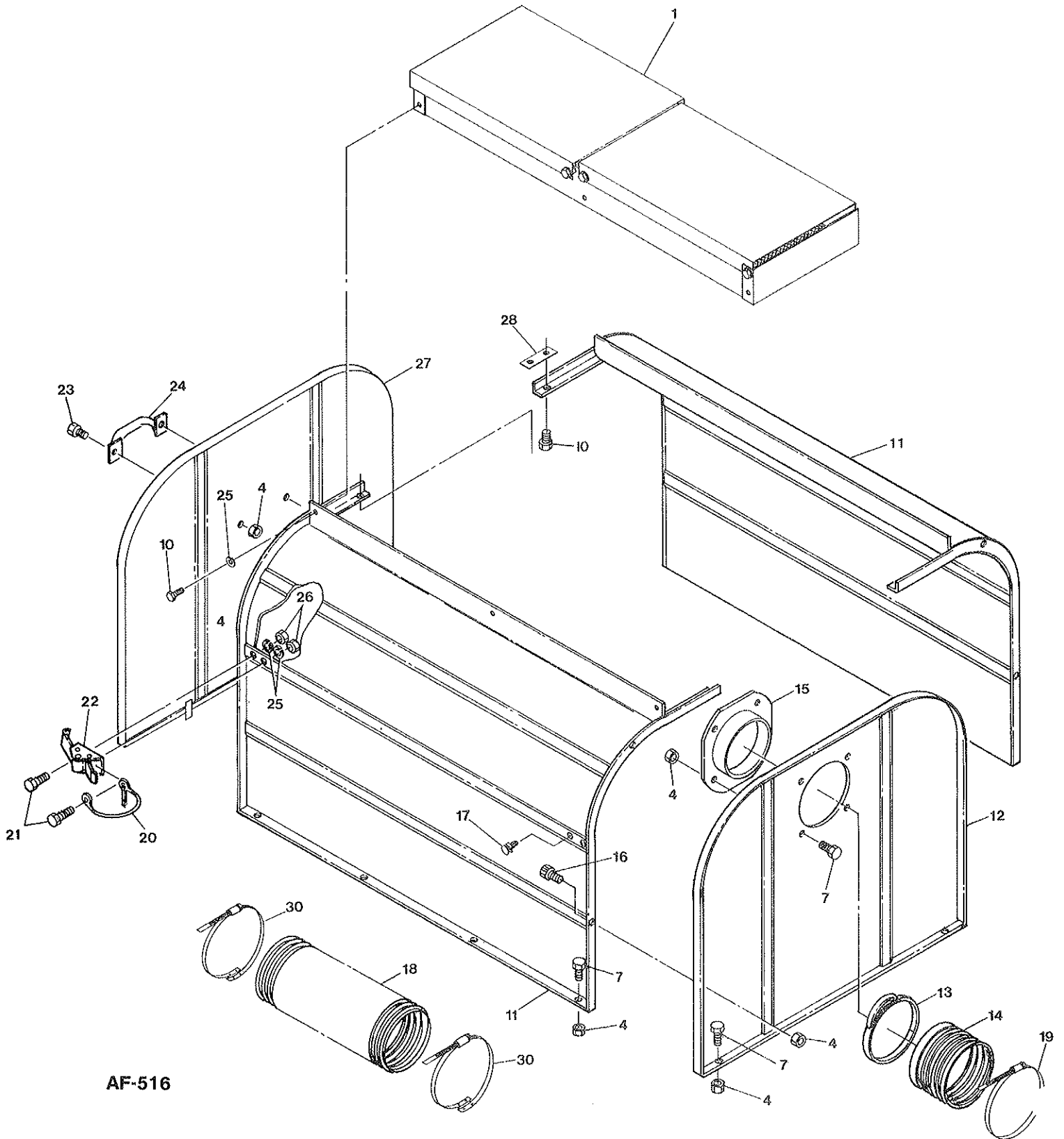
**CAUTION:** The Canopy must be flush at the back, with the front of the Cart Rear Gate, to allow the Canopy Tail Gate (27) Tab to fit behind the Cart Rear Gate when the Canopy Tail Gate (27) is latched in place.

Drill 10 mounting holes in side rails of cart using 9/32 diameter drill through holes in bottom flange of Canopy.
15. Attach Canopy to cart using ten Hex Head Bolts (7) and ten Hex Lock Nuts (4).
16. Place bottom of Canopy tailgate on top of cart rear gate and against Canopy, with tabs of Canopy tailgate behind cart rear gate. Secure with latches on both sides of Canopy.
17. Slide cotter pins attached to latches through holes provided in latches to assure latches remain secured.

### MAINTENANCE

1. **NOTE:** Periodic inspection of the Canopy should be made and all bolts should be routinely tightened to assure the Canopy remains structurally sound.
2. For a "like new" appearance, wash the Canopy and Blower Housing with soap and water, rinse with clear water and wipe dry. Do not use harsh abrasives or cleaners as they will dull the finish.
3. Periodically rotate Canopy Hose (14), to improve Hose life.

CANOPY PACKAGE



AF-516

## CANOPY PACKAGE

## PARTS LIST

Ref. No.	Part No.	Qty. Per Unit	Description
1	SA-1515-D	1	Louver Assembly
4	365-416	20	Nut, Hex Lock 1/4-20
7	65-416-12	14	Bolt, Hex Hd. 1/4-20 x 3/4
*10	65-416-8	10	Bolt, Hex Hd. 1/4-20 x 1/2
11	88-22-C	2	Canopy Side
12	84-91-C	1	Canopy Front Weldment
13	84-373-C	1	Clamp, Quick Release
14	84-345B	1	8" Dia. Hose (Canopy)
15	84-96-D	1	Hose Adapter
16	524-416-12	4	Screw, Socket Hd. Cap 1/4-20 x 3/4
17	86-110-A	4	Plastic Fastener
18	84-130-B	1	8" Dia. Hose (Boot)
19	84-152-C	1	Clamp
20	85-82-A	2	Lock Assembly
21	515-416-10	4	Screw, Rd. Hd. Mach 1/4-20 x 5/8
22	84-245-A	2	Latch
23	65-416-10	2	Bolt, Hex Hd. 1/4-20 x 5/8
24	84-296-B	1	Handle
*25	935-416	10	Lockwasher, Spring 1/4
26	335-416	4	Nut, Plain Hex 1/4-20
27	84-117-C	1	Tailgate Silkscreen
28	84-88-A	2	Link
30	84-389-C	2	Hose Clamp (w/step)

**NOTE:** Canopy Package also includes parts for the Power Package.  
These parts are:

84-343-C	1	Arm
84-197-A	1	Eye Bolt
335-10	1	Nut, Hex Plain 10-24
365-10	1	Nut, Hex Lock 10-24

\*Item 10 and six of item 25 are supplied with item 1, Louver Assembly.

# OPERATING INSTRUCTIONS

## IMPORTANT

Read the engine manual carefully before operating TRAIL VAC.

1. The engine contains no oil when shipped. Be sure to fill the engine crankcase with the proper type and amount of oil.
2. Be sure boot is secured properly and all hoses are in place and secure.
3. Be sure Tailgate is in place and secure.

## WARNING

When refueling, care should be taken not to spill fuel on hot engine. This could cause the fuel to ignite, resulting in serious injury to operator or damage to unit.

## OPERATING TIPS

Best vacuum is obtained by running engine at full throttle.

Use good judgment. Do not mow in contour pattern if grades are so steep as to make tipping possible.

The boot should be adjusted to remain level by moving the spacers. To raise the boot, remove cotter hairpin from the caster spindle. Remove the spindle from the bearing and add spacers under the bearing on the spindle. Check boot instruction # 19 for proper spacing.

The unique design of the Conestoga™ Trail Vac permits the operator to determine when the canopy is filled without leaving the tractor seat. The canopy will fill from the tailgate forward. As an area becomes full, the louver above it will close. As the front of the canopy fills, the front louver will begin to close. The filling process should be terminated before the front louver is completely closed to prevent clogging the hose and fan housing.

## CAUTION

If it is desired to mow with the Trail Vac removed, the discharge extension or shield must be replaced on the mower deck. Never operate the mower without the Trail Vac boot or original equipment in place.

The Trail Vac is **not** supplied with a spark arrester muffler. If the Trail Vac is used in the state of California, the state law requires spark arrester mufflers be used to comply with Section 4442 of the California Public Resources Code. Contact your service center and have this muffler installed.

## EMPTYING

Optional containers are available for easy removal of debris from unit. The containers break up compaction of grass and are easily emptied. Bagging liners can be used with the containers. When full, the liner is removed from the container, tied off, and set at the curb.

If containers are not used, cart may be dumped by tipping. To accomplish this, it is necessary to release the quick disconnect clamp that connects the hose to the canopy. Remove the back door and tailgate and release the cart latch.

## CAUTION

Do not touch the muffler if it is hot.

Never remove Canopy Tailgate unless the power package is shut off. Serious personal injury may result if this caution is ignored.

## LEAVES

The Conestoga™ Trail Vac was designed to vacuum grass clippings and leaves while mowing.

## PICK-UP HOSES

Optional pick-up hoses are available. This allows pick up of large piles of leaves and to clean up around shrubs and foundations. Four-inch hose kit is No. 64-193-D or six-inch hose kit is No. MA-589-D. See your dealer for complete details.

If desired to remove the towbar extension from the cart tongue, remove the two 3/8-16 bolts that hold them together and install the clevis on top of cart tongue.

## REMOVAL OF POWER PACKAGE

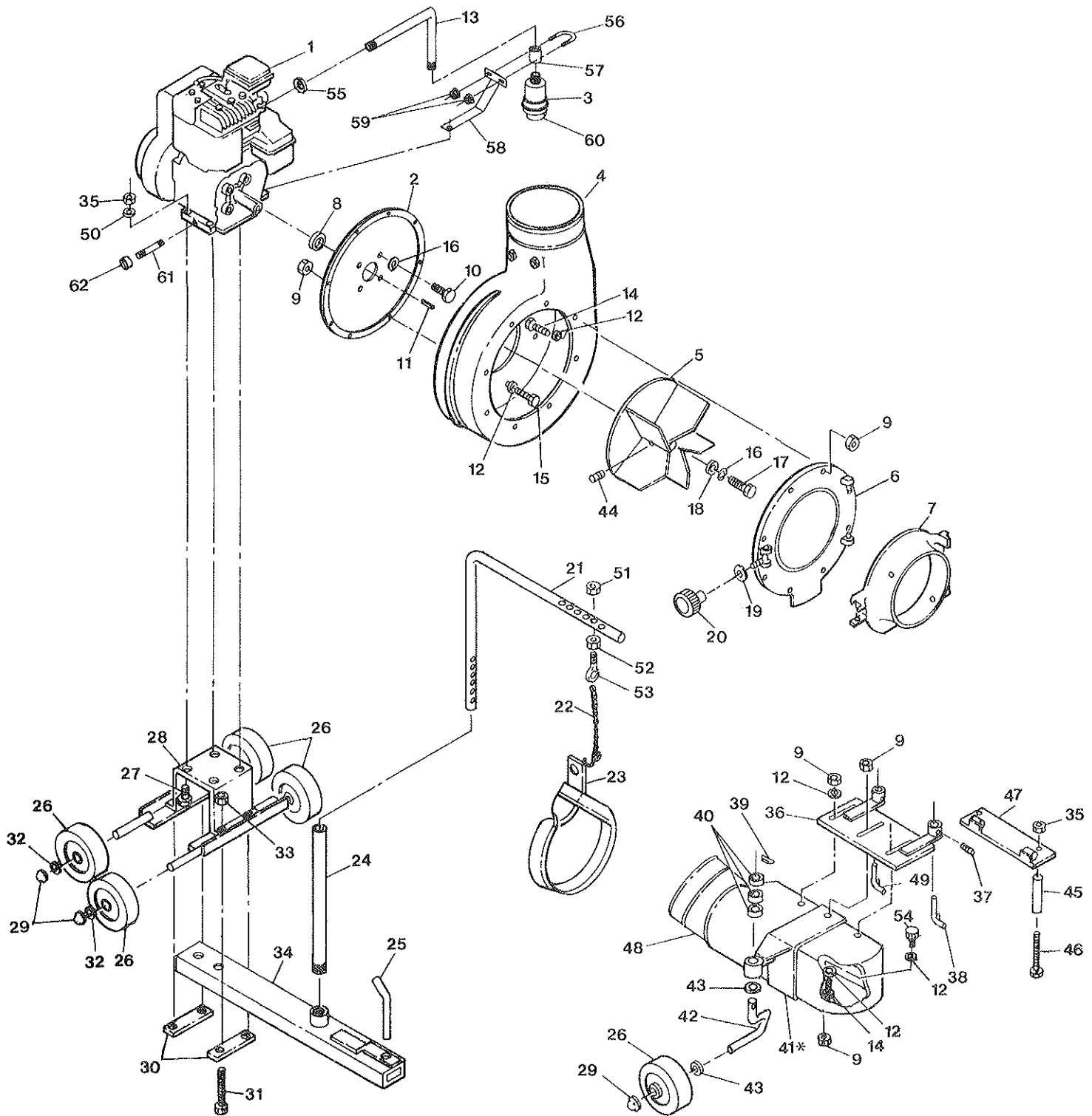
The power package can be removed from the Conestoga™ Cart by removing the boot and hose assembly at the blower housing and releasing the quick disconnect hose clamp at the canopy. Remove the four 3/8-16 x 3 bolts holding the Mounting Plates that secure the power package to the towbar. Roll the power package on its own wheels, off the towbar, to a storage area.

## LUBRICATION

The wheels on the cart should be checked periodically to assure proper lubrication is maintained. Grease fittings are located on the hubs when lubrication is needed.

A few drops of oil on the boot wheel spindle and boot hinge assembly will help keep them operating smoothly.

POWER PACKAGE



AF-532

\*NOTE: Boot Wheel Assembly (41) mounts in center holes over Boot Plate Weldment (36).

## POWER PACKAGE PARTS LIST

Ref. No.	Part No.	Qty. Per Unit	Description
1	85-03-D***	1	Engine
2	84-239-C	1	Back Cover & Gasket
3	****	1	Muffler (supplied with engine)
4	SA-1304-C	1	Blower Housing & Liner Assy.
5	61-14-E	1	Fan Wheel
6	SA-1336-D	1	Front Cover Assembly
7	63-195-D	1	Collar
8	73-20-A	1	Spacer
9	365-416	20	Nut Hex Lock 1/4-20
10	60-516-10	4	Bolt Hex Head 5/16-24 x 5/8
11	61-65-A	1	Key, Engine
12	945-416	22	Flatwasher Plain 1/4
13	85-24-B	1	Muffler Pipe
14	65-416-16	11	Bolt Hex Head 1/4-20 x 1
15	65-416-14	8	Bolt Hex Head 1/4-20 x 7/8
16	935-516	5	Lockwasher Spring 5/16
17	60-516-20	1	Bolt Hex Head 5/16-24 x 1 1/4
18	82-138-B-1	1	Special Washer
19	945-816*	1	Flatwasher Plain 1/2
20	80-29-A*	1	Adjusting Knob
21	84-343-C	1	Arm
22	84-253-A	1	Chain Assembly
23	84-251-B	1	Sling
24	84-295-A	1	Arm Stand
25	84-228-B	2	Hitch Pin
26	83-177-C	5	Wheel
27	65-516-28	4	Bolt Hex Head 5/16-18 x 1 3/4
28	84-324-C	1	Engine Base Weldment
29	76-254-A	5	Cap-End
30	84-320-A	2	Mounting Plate
31	65-616-48	4	Bolt Hex Head 3/8-16 x 3
32	46-81-A	4	Washer Special
33	365-616	4	Nut Hex Lock 3/8-16
34	84-357-C	1	Towbar Extension Weldment
35	365-516	6	Nut Hex Lock 5/16-18
36	84-115-C	1	Boot Plate Weldment
37	560-C-516-10	2	Screw Sq. Head Set 5/16-18 x 5/8
38	84-109-A	1	Hinge Front Weldment
39	81-106-A	1	Cotter Hair Pin
40	79-16-A	3	Spacer
41	84-275-B	1	Wheel Support Weldment
42	83-209-B	1	Axle
43	945-816	2	Flatwasher, Plain 1/2
44	564-C-516-16	1	Screw Allen Head Set 5/16-18 x 1
45	84-135-A	2	Spacer
46	72-516-72	2	Bolt Hex Head 5/16-18 x 4 1/2
47	84-233-B	1	Plate Deck Weldment
48	84-131-D	1	Boot
49	84-107-A	1	Hinge Rear Weldment
50	945-516	4	Flatwasher Plain 5/16
51	365-10	1	Nut Hex Lock 10-24
52	335-10	1	Nut Hex Plain 10-24
53	84-197-A	1	Eye Bolt
54	65-416-12	1	Bolt Hex Head 1/2-20 x 3/4
55	63-262-A	1	Conduit Locknut 3/4
56	73-238-A	1	"U" Bolt 1/4-20
57	66-231-A	1	Coupling 3/4 x 1 5/8
58	85-27-B	1	Bracket Weldment
59	362-416	2	Nut, Hex Lock Serrated Flange 1/4-20
60	****	1	Side Out Deflector (supplied with engine)
61	85-28-A	1	Nipple 1/4 x 1 1/2
62	85-29-A	1	1/4 Cap

\*Supplied with item 6, but can be purchased separately.

\*\*\*B & S Model No. 130212, Spec. 2141-01

\*\*\*\*Supplied with engine, Muffler No. 393010, Deflector No. 222261

## WARRANTY INFORMATION

Parker Sweeper Company warrants each new piece of equipment manufactured under its name except the engine, to be free of defects in materials and workmanship under normal use and service. Parker Sweeper Company's obligation is limited to repair or replacement at its option for one (1) year (ninety (90) days for commercial service) from date of purchase.

If trouble should occur with the engine, please contact the manufacturer listed below, giving them all information: Name of unit purchased from company (Parker Trail Vac 8528, etc.), problem with engine, model no. of engine etc.; when unit was purchased; and your complete return address complete with zip code. Failure to provide complete information will result in unnecessary delay of repair and return of unit.

Proper assembly of replacement parts is the responsibility of the owner or mechanic doing the work. Parker Sweeper Company warranty only applies to the original purchased unit and/or replacement parts if assembled correctly by a qualified mechanic. Under no circumstances does the warranty extend beyond the original time specified from date of purchase.

### ENGINE:

Briggs & Stratton Company  
P.O. Box 702  
Milwaukee, Wisconsin 53201

## SAFETY CHECK LIST

BEFORE USING THIS UNIT CHECK ALL OF THE FOLLOWING ITEMS EACH TIME:

1. Is the engine oil level correct on both units?
2. Do the wheels of the cart have grease?
3. Are all bolts tight on all parts of the unit?
4. Are all hoses secure?
5. Is the rear gate of the cart and tailgate of the canopy in place correctly and secured with latch and pins?
6. Has the area to be mowed or cleaned been policed for obstacles?

Your safety is our concern. Read all safety rules and operating instructions before attempting to operate this equipment. Failure to follow safety rules and operating instructions may result in serious injury.

