



Electronic Service Manuals

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You may contact Michco through the following methods:

Phone (517) 484-9312 or (800) 331-3339

2011 N. High St. -- Lansing, Michigan -- 48906

Fax: (517) 484-9836

Email: CustServe@Michco.com

Web site: www.Michco.Com

Parts Web site: www.FloorMachineParts.Com

Order Parts on Line at:

www.FloorMachineParts.Com

Directly to Parts & Service:

By Email: **Shop@Michco.com**

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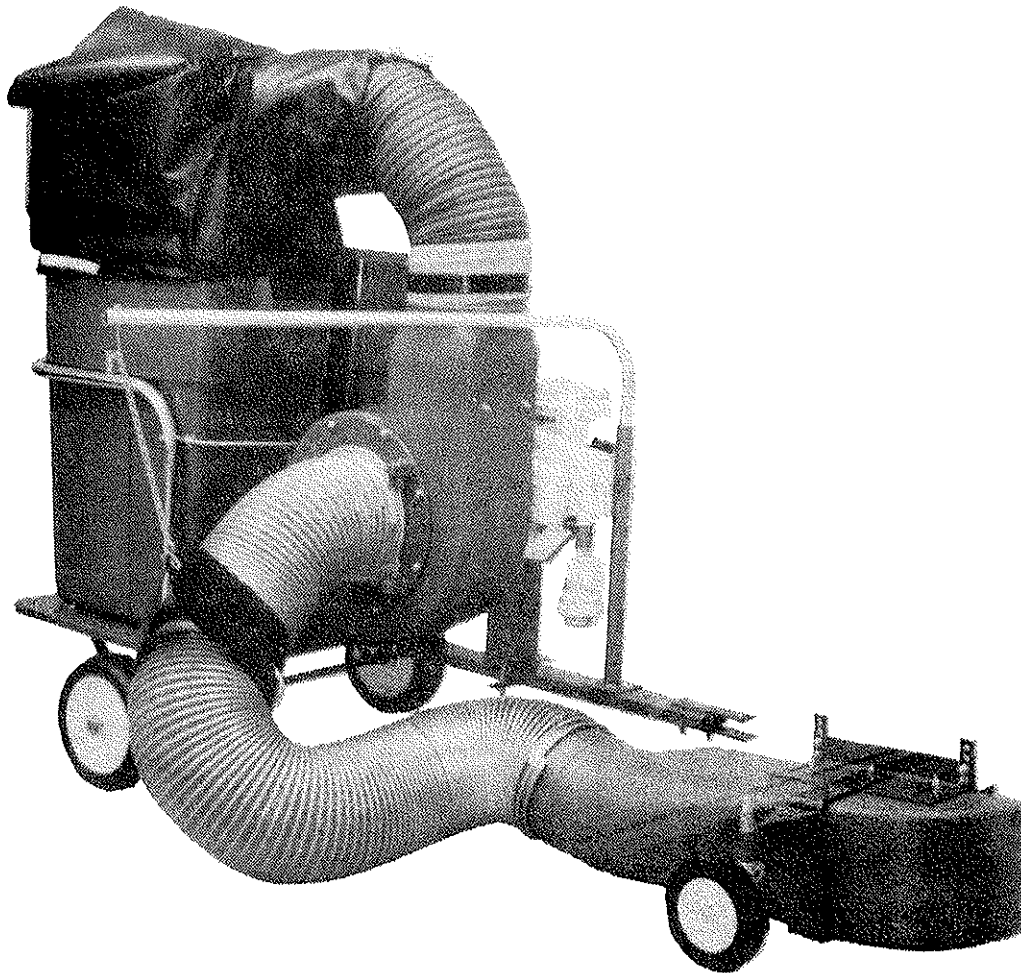
OWNER'S GUIDE



CONESTOGA™ TRAIL VAC

PATENT PENDING

MODEL NO. TV-8818



AF-797

PARKER SWEEPER COMPANY

Box 1728

Springfield, Ohio 45501-1728

Plate No. 1374

88-66-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 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.

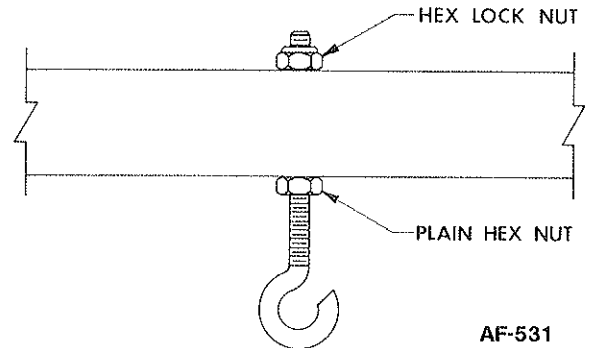
OBSERVE ALL SAFETY RULES. YOUR INJURIES MAY BE THE ONES YOU PREVENT.

ASSEMBLY INSTRUCTIONS

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.

1. Remove all items from the carton.
2. Place Wheels (21) of Deck and Wheel Assembly on floor with Deck (11) "up".
3. Put Tow Bar Assembly (18) under Deck (11) and match four holes in Deck (11) with those in the Tow Bar (18).
4. Secure by placing 5/16-18 x 2 1/4 long Hex Head Bolt (37) thru Special Washer (25), thru top of Deck (11) and thru hole in Tow Bar Assembly (18) and Hex Lock Nut (31), four places.
NOTE: Tighten, but do not over-tighten to damage Deck (11).
5. Stack 2 x 4's or other material under the Tow Bar (18) to set it approximately level.
6. Set Engine and Housing Assembly Base (2) on the Tow Bar Assembly (18) with the exhaust and air cleaner toward the front of the Tow Bar Assembly [away from the Deck (11).]
NOTE: This set-up is for right hand discharge mower applications.
7. Remove two Mounting Plates (21), four 3/8-16 x 2 long Hex Head Bolts (33) and four 3/8 Lock Nuts (43) from the Hardware package.
8. Assemble Bolts (33) thru Engine and Housing Assembly Base (2), around the outside of the Tow Bar Assembly (18), thru the Mounting Plates (21) and secure with Lock Nuts (43).
NOTE: The Base (2) of the Engine & Housing Assembly should be moved to within one inch of the Deck (11) on the Tow Bar Assembly (18), before tightening Bolts (33). DO NOT OVERTIGHTEN BOLTS, as Mounting Plates (21) may be bent.
9. Place the Arm Stand Weldment (15) base over the two holes in the Tow Bar Assembly (18). Insert two 5/16-18 x 1 3/4 long Hex Head Bolts (36) thru the base of the Arm Stand Weldment, thru the Tow Bar Assembly and secure with Hex Lock Nuts (31).
10. Determine the right length of the Hose Support Arm (12) for the mower application. The arm may be placed in the Arm Stand Weldment (15) to attain a lower, longer support or a higher, shorter support, dependant upon which end of the Hose Support Arm (12) is inserted into the Arm Stand Weldment (15).

11. After inserting the Arm (12) into the Stand (15), determine how far away from the unit to support Hose.
12. Attach the Eyebolt (24) to the Arm (12) using Hex Lock Nut (30) and Plain Hex Nut (29), as shown in AF-531, below.



13. Place the end with the small hole, of the Rail Tubing (Female) L.H. (8), into the opening on the left side of the Deck (11).
14. Insert the reduced diameter end of the Rail Tubing (Male) R.H. (9) into the open end of the Rail Tubing (Female) L.H. (8).
15. Place the end with the small hole, of the Rail Tubing (Male) R.H. (9), into the opening on the right side of the Deck (11).
NOTE: Beneath the Deck (11), on both sides, are Hitch Pins (22) thru the Rail Supports (23). If the Rail Tubing (8) & (9) are to be removed [when using containers (2)], Rail Tubing (8) & (9) should sit on top of the Hitch Pins (22). When using the large Bag (accessory), Hitch Pins should be inserted thru the holes in the bottom of Rail Tubing (8) & (9), to prevent lifting Tubing out of the Rail Supports (23).
16. Place the Bonnet Assembly (1) on the Container (2) directly behind the Housing Assembly (4).
NOTE: The neck of the Bonnet (1) is assembled toward the Housing Assembly (4) with the Bonnet Skirts (black plastic strips) inside the Container (2) and the Bonnet with strap, around the outside of the Container (2).
17. Be sure strap is fully under the Containers lip before tightening strap. Pull strap snugly to assure Bonnet (1) will not lift off Container (2).

**SAFETY IS IMPORTANT!
DO NOT IGNORE IT — OBSERVE IT!
BE SAFE!**

ASSEMBLY INSTRUCTIONS (Cont.)

18. Place collar (smooth) end of 30 inch long x 8 inch diameter Hose (4) over the top of the Housing Assembly (4), against shoulder of Housing Assembly (4).
19. Secure with Clamp (3) around collar.
20. Attach Deflector (5) to the other end of Hose (4) with Clamp (3). Approximately six inches of the Deflector (5) should be upon the Hose (4).
21. Insert the Deflector (5) to the other end of Hose (4) into the neck of the Bonnet (1).
22. Adjust the Bonnet neck until the strap is past the end of the Deflector and tighten against the Hose.
23. NOTE: Second Container should be placed along side first container on the Deck.
24. Slide the open loop of the Retainer Assembly (10) over the Rail Tubing (Female) L.H. Position just below the bend in the Tubing.
25. Take the Hook of the Retainer Assembly across to the Rail Tubing (Male) R.H. and attach Hook to Tubing just below the bend in the Tubing.
NOTE: The Retainer Assembly (10) will keep the Container (2) in place when the Trail Vac is being operated over rough terrain.
26. Place Collar (7) into Hinge of Casting on the Impeller opening of the Front Cover Assembly (8).
27. Swing the adjusting Knob and Washer over the Collar (7) Flange and tighten the Knob to secure Collar.
28. Place one end of the 8 foot long 8 inch diameter Hose (7) over the Collar (7) and secure with Step Clamp (6).

INSTRUCTIONS FOR PREPARING AND ATTACHING BOOT TO MOWER DECK

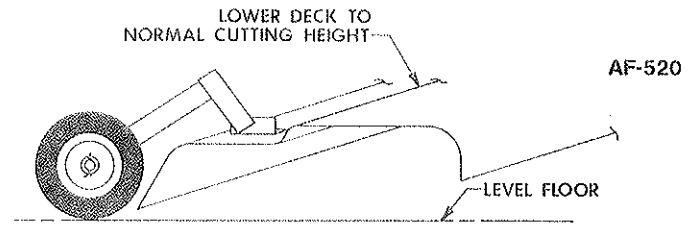
These instructions are designed to be used for right hand mower discharge **only**. A Boot Conversion Kit, MA-575-B is available for left hand mower discharge application, engine mounting, and hose attachment.

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

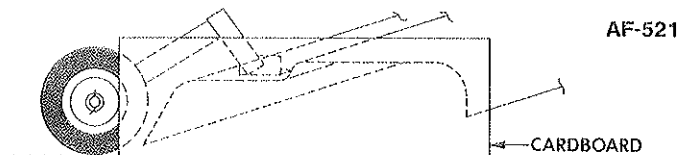
CAUTION

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.

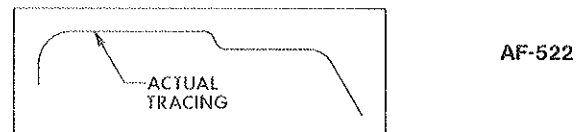
1. Lower mowing deck (on a level floor) to the normal cutting height.



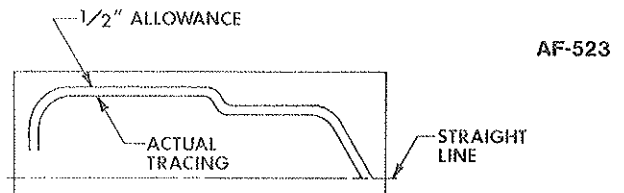
2. Make a template from a flap of the shipping carton. Place the straight edge on the floor so that the cardboard fully covers the discharge area of the mowing deck.



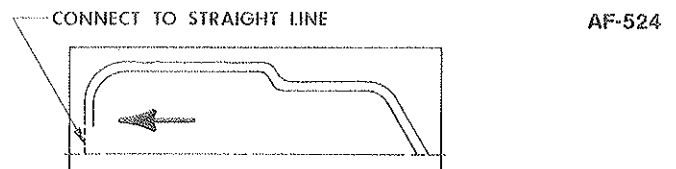
3. Trace the metal outline of the deck on the cardboard.



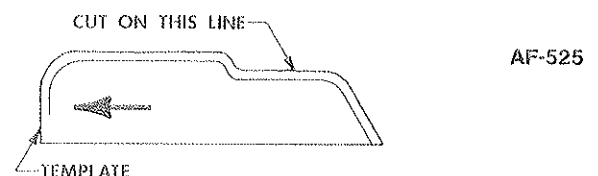
4. The opening in the boot should be approximately 1/2" larger than the deck to allow for proper fit and operation. To accomplish this, retrace the outline 1/2" larger on the cardboard. Draw a line parallel to the bottom straight edge of the cardboard from the lowest point of the deck.



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



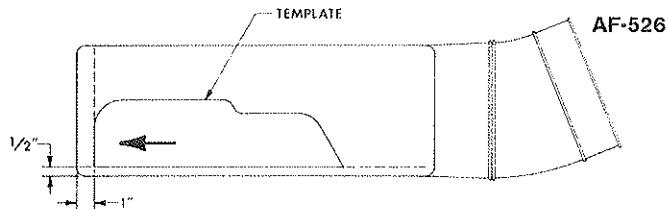
6. Cut out template with a sharp knife.



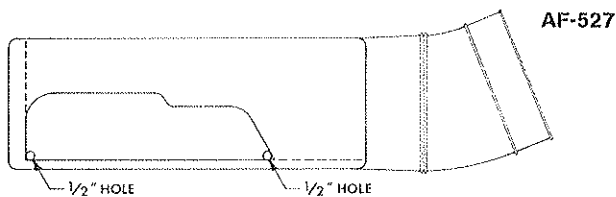
**BE SAFE. PROTECT YOUR FAMILY, YOUR FRIENDS, YOURSELF.
OBSERVE ALL SAFETY INSTRUCTIONS.**

ASSEMBLY INSTRUCTIONS (Cont.)

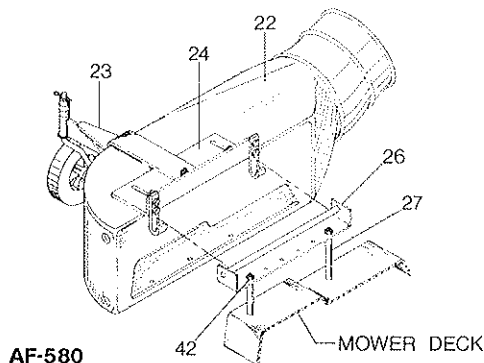
7. Place the template on the boot, adjusting it so that the template is approximately 1" back from the front edge and 1/2" from the bottom edge. With a black marking pen trace the outline on the boot. Before proceeding further, hold boot against deck opening to be sure that the opening corresponds.



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

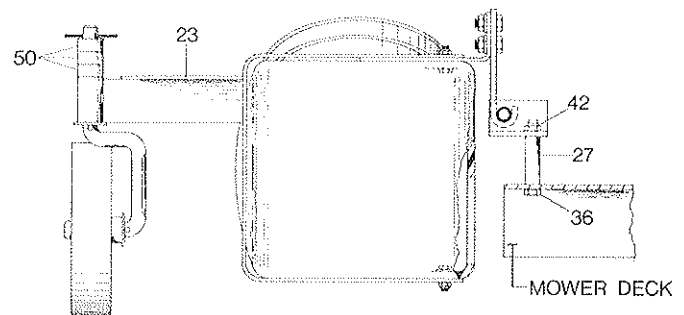


9. Use a saber saw with a medium cut blade 1/2" wide to cut the outline of the template from the boot. **NOTE:** This will cause each corner to have a 1/4" radius.
10. Use a file to remove the rough edges.



11. Attach Boot Plate (24) by the two outside holes to top of Boot (22) using Hex Hd. Bolts and Flatwashers against inside of Boot and Flatwashers and Lock Nuts on top of Boot Plate (24). Do not assemble Bolt to middle hole at this point.
12. Slide Boot Wheel Assembly (23) over Boot and Boot Plate. Secure top and bottom with hardware provided. **NOTE:** Boot Plate (24) should be moved as close to the Boot as possible before tightening hardware.
13. Attach Hinge Weldment (26) to Boot Plate (24).
14. Remove Nuts (42), Bolts (36) and Spacers (27) from Hinge Weldment (26).

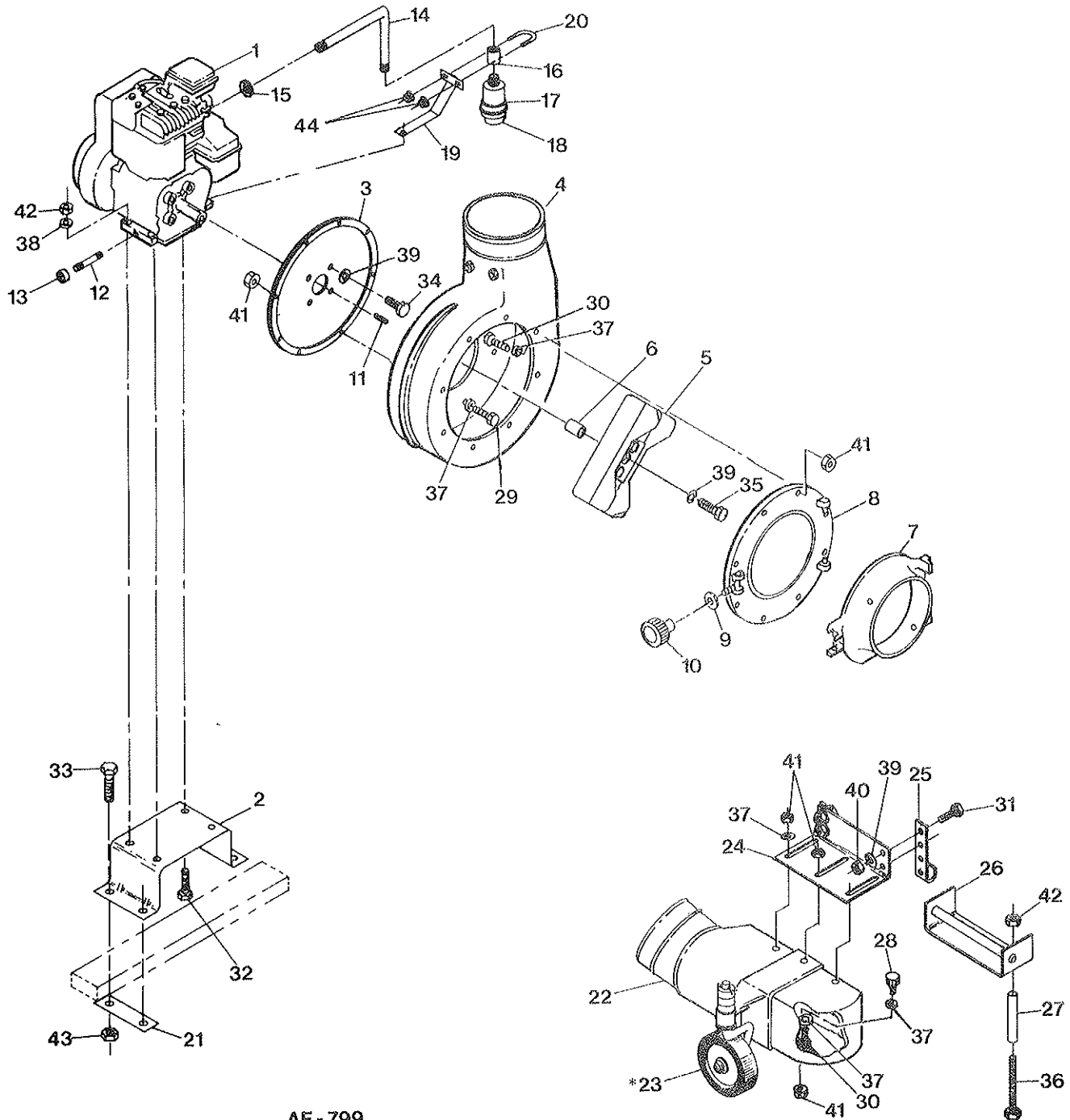
15. Position Boot (22) flush with end of mower discharge opening and mark location of outside Hinge Weldment bolt holes and drill two 5/16 diameter holes through mower deck.
16. Mount Hinge Weldment on the top of the mower deck keeping the boot opening concentric with the deck opening. Cut off Spacers (27) to fit between Hinge Weldment (26) and mower deck to keep Boot level. This may require Spacer (27) to be cut at an angle to match deck contour.
17. Attach Hinge Weldment to mower deck using Bolts (36), Spacers (27) and Nuts (42).
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 (50) 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.
21. Place free end of 8 foot Hose (7) over neck of Boot (22) and secure with Step Clamp (6).
22. 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.
23. Place Sling (14) around Hose (7) and tighten, with strap thru the buckle, around the Hose (7).
24. Attach "S" Hook of Chain Assembly (13) thru both eyelets of Sling (14).
25. Attach other end of Chain (13) to Eye Bolt (24). **NOTE:** Adjust height as required.

NOTE: FAILURE TO OBSERVE SAFETY INSTRUCTIONS MAY RESULT IN SERIOUS INJURY.

POWER PACKAGE



*NOTE: Boot Wheel Assembly (23) mounts in center holes over Boot Hanger (24).

POWER PACKAGE PARTS LIST

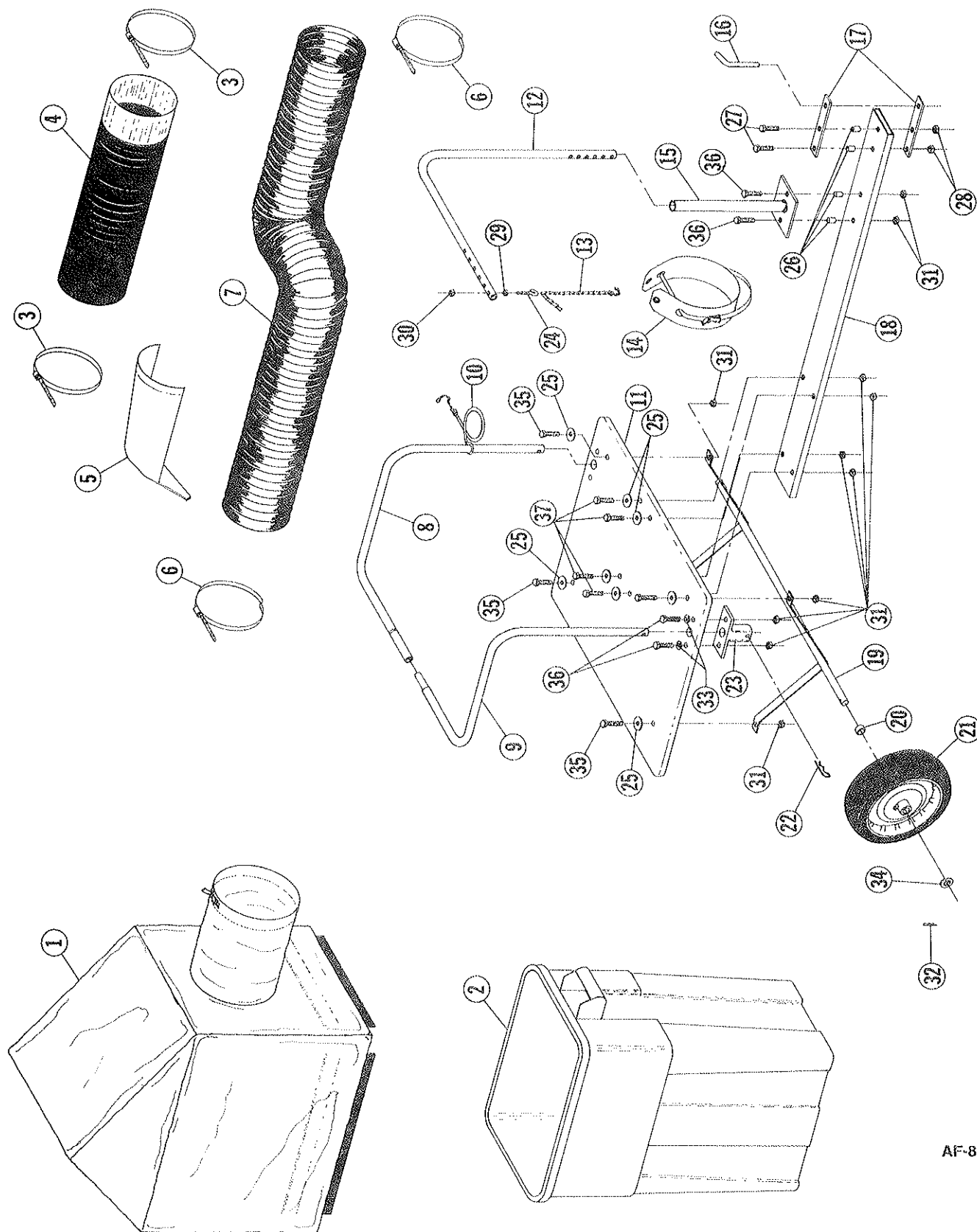
Ref. No.	Part No.	Qty. Per Unit	Description	Ref. No.	Part No.	Qty. Per Unit	Description
1	***	1	Engine	23	SA-1310-B	1	Boot Wheel Assembly
2	84-322-D	1	Engine Base	24	85-146-C	1	Boot Plate
3	84-239-C	1	Back Cover & Gasket	25	85-147-B	2	Boot Hanger
4	SA-1304-C	1	Blower Housing & Liner Assy.	26	85-145-B	1	Hinge Weldment
5	SA-701-B	1	Fan Assembly	27	84-135-A	2	Spacer
6	78-05-A	1	Spacer	28	65-416-12	1	Bolt, Hex Hd. 1/4-20 x 3/4
7	63-195-D	1	Collar	29	65-416-14	8	Bolt, Hex Hd. 1/4-20 x 7/8
8	SA-1336-D	1	Front Cover Assembly	30	65-416-16	11	Bolt, Hex Hd. 1/4-20 x 1
9*	945-816	1	• Flatwasher, Plain 1/2	31	65-516-12	4	Bolt, Hex Hd. 5/16-18 x 3/4
10*	80-29-A	1	• Adjusting Knob	32	65-516-28	4	Bolt, Hex Hd. 5/16-18 x 1 3/4
11	61-65-A	1	Engine Key	33	65-516-32	4	Bolt, Hex Hd. 3/8-16 x 2
12	85-28-A	1	Nipple 1/4 x 1 1/2	34	60-516-10	4	Bolt, Hex Hd. 5/16-24 x 5/8
13	85-29-A	1	Cap 1/4	35	60-516-32	1	Bolt, Hex Hd. 5/16-24 x 2
14	85-24-B	1	Muffler Pipe	36	67-516-80	2	Bolt, Hex Hd. 5/16-18 x 5
15	63-262-A	1	Conduit Locknut 3/4	37	945-416	22	Flatwasher, Plain 1/4
16	66-231-A	1	Coupling 3/4 x 1 5/8	38	945-516	4	Flatwasher, Plain 5/16
17	****	1	Muffler (supplied with engine)	39	935-516	9	Lockwasher, Spring 5/16
18	****	1	Side Out Deflector (supplied with engine)	40	335-516	4	Nut, Plain Hex 5/16-18
19	85-27-B	1	Bracket Weldment	41	365-416	20	Nut, Hex Lock 1/4-20
20	73-238-A	1	"U" Bolt 1/4-20	42	365-516	6	Nut, Hex Lock 5/16-18
21	84-320-A	2	Mounting Plate	43	365-616	4	Nut, Hex Lock 3/8-16
22	84-131-D	1	Boot	44	362-416	2	Nut, Hex Lock Serrated Flange 1/4-20

* Supplied with item 8 but can be purchased separately.

*** B & S Model No. 130212, Spec. 3119-01

**** Supplied with engine, Muffler No. 383010, Deflector No. 222261

DECK ASSEMBLY



AF-800

DECK ASSEMBLY**PARTS LIST**

Ref. No.	Part No.	Qty. Per Unit	Description
1	MA-647	1	Bonnet Assembly
2	85-01-C-18	2	Container
3	84-152-C	2	Clamp
4	84-355-B	1	8" Dia. Hose 30 inches long
5	86-138-D	1	Deflector-Modified
6	84-389-C	2	Hose Step Clamp
7	84-130-B	1	8" Dia. Hose 8 Ft. Long
8	87-233-D	1	Rail Tubing (Female) Weldment
9	87-232-D	1	Rail Tubing (Male) R.H.
10	SA-1509-B	1	Retainer Assembly
11	88-51-D	1	Deck
12	84-343-C	1	Hose Support Arm
13	84-253-A	1	Chain Assembly
14	SA-1498-C	1	Hose Sling & Strap Assembly
15	87-228-C	1	Arm Stand Weldment
16	84-228-B	1	Hitch Pin
17	85-141-A	2	Clevis
18	87-230-C	1	Tow Bar
19	88-58-D	1	Support Bracket & Axle Weldment
20	88-70-A	2	Spacer
21	88-72-C	2	Wheel
22	83-188-A	2	Hitch Pin
23	87-234-B	2	Rail Support
24	84-197-A	1	Eye Bolt
25	82-138-B-1	8	Washer, Special
26	88-71-A	4	Insert
27	65-616-36	2	Bolt, Hex Hd. 3/8-16 x 2 1/4
28	365-616	2	Nut, Hex Lock 3/8-16
29	335-10	1	Nut, Plain Hex 10-24
30	365-10	1	Nut, Hex Lock 10-24
31	365-516	14	Nut, Hex Lock 5/16-18
32	380-632-20	2	Cotter Pin 3/16 x 1/14
33	945-516	4	Flatwasher, Plain 5/16
34	945-1216	2	Flatwasher, Plain 3/4
35	65-516-20	4	Bolt, Hex Hd. 5/16 - 18 x 1 1/4
36	65-516-28	6	Bolt, Hex Hd. 5/16 - 18 x 1 3/4
37	65-516-36	4	Bolt, Hex Hd. 5/16 - 18 x 2 1/4

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. Bonnet must be securely attached under the lip of the Container to prevent lifting off while in operation.

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

1. Best vacuum is obtained by running engine at full throttle.
2. 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.
3. Containers may be used with plastic liners. To remove liners from Containers, remove the Bonnet from the Container. Place Container on its side on the ground after twisting the top of the liner. Pull liner from the Container.
4. Two Containers have been provided to permit the operator to fill the 1st Container and then shift to the second Container without returning to unload until both Containers are full.
5. An optional Leaf Bag MA-655 is available for large volume applications.
6. In very dusty conditions the venting may blind-off, greatly reducing pick-up. Reducing the fan engine RPM will reduce blinding. Occasional idling of the fan engine will allow debris to fall free of the vent, returning pick-up to normal.
7. CAUTION: To prevent possible upsetting of the Conestoga Trail Vac on steep hills, it is recommended travelling up and down, rather than across the hill side.
8. Care must be taken when backing the Trail Vac, to prevent jackknifing or collision with obstacles, children or pets behind the unit.
9. Other optional equipment available for the Trail Vac includes a four inch diameter Hose Kit MA-622 and a six inch diameter Host Kit MA-578.

CAUTION

If it is desired to mow with the Trail Vac removed, the discharge extension or shield must be placed 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.

LUBRICATION

The wheels 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.

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 8818, 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 or 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 deck have grease?
3. Are all bolts tight on all parts of the unit?
4. Are all hoses secure?
5. 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.

