

# VAC CART KIT

SERIAL NUMBER

NOTE

Read this manual carefully and learn to operate and service your grass catcher before using it.

To keep the warranty, the grass catcher must be maintained and operated as directed in this manual.

All references to "left-side", "right-side", "front", and "back" are given from the operator's position.

Use the serial number to ensure prompt and correct service when ordering parts, requesting service, or making inquiries.

SERIAL NUMBER \_\_\_\_\_



Look for this symbol to point out important safety precautions. It means -- ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.

SECTION I

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## SECTION 1

### Instructions for Safe Operation

Improper use of this grass vacuum can injure people and damage the equipment. People using or servicing this grass catcher must read and follow the instructions in this manual.

It is important to understand that this manual and any other Gravely instruction manuals do not cover every possible danger. It is impossible for Gravely to know of all possible dangers in operating and servicing the tractor and attachments.

The purchaser must give these instructions to the people operating and maintaining this grass catcher. These people must use eye and foot protection.

#### 1.1 Preparation:

1. Read the tractor and the vac operator's manuals carefully.
2. Learn the location and function of all tractor and attachment controls.
3. Learn how to use the controls to stop the tractor and attachment.
4. Use caution with gasoline. Gasoline is very flammable. Keep it in a clean and tight container away from flames or hot items. Never put gasoline in the fuel tank while the engine is running or hot. Clean up spilled gasoline before starting engine.
5. Be certain that all shields, guards, and interlock switches are in the correct positions.
6. When hauling the tractor, connect the chassis and rear hitch to the transporting vehicle. Never connect from control levers, rods, or like items that could be damaged.
7. Operate the equipment only when discharge chute is in place or the complete grass catcher with collector boot and tube is in place.

## 1.2 Operation:

1. Wear foot and eye protection. Do not wear loose clothing.
2. Do not use the equipment in the dark without adequate lighting.
3. Keep the grass catcher in good condition. Maintain it as directed in this manual.
4. Replace all parts that become damaged or lost.
5. USE ONLY GRAVELY ACCESSORIES AND ATTACHMENT OR ATTACHMENTS GRAVELY HAS APPROVED FOR USE WITH THIS TRACTOR.
6. Do not overspeed the engine. Do not override the governor.
7. Keep away from moving parts.
8. Keep people and animals away from the operating area.
9. Do not let people other than the operator ride on the tractor.
10. Use a slow speed and engage the direction control lever slowly when operating on slopes.
11. Look for and keep away from hazards.
12. Shut engine off, move the PTO control to "OFF", and remove ignition key before unclogging chute or removing grass catcher.
13. Look behind when operating in reverse.
14. After hitting an object with the equipment, stop the engine and check for damage. Repair any damage before continuing operation.
15. Operate the tractor only from the seat.
16. Travel up and down, not across slopes.
17. Never permit children to operate the tractor.
18. Before leaving the tractor, move the PTO control to "OFF", lower mower, lock the brake, and remove the ignition key.
19. If there is a sudden change in the sound or vibration of the equipment, stop the engine and check for damage. Repair any damage or failure before continuing operation.

1. Wear foot and eye protection. Do not wear loose clothing.

2. Do not use the equipment in the dark without adequate lighting.

3. Keep the grass catcher in good condition. Maintain it as designed in this manual.

4. Do not operate the engine indoors. Exhaust fumes are dangerous.

5. USE ONLY GRAVEL ACCESSORIES AND ATTACHMENTS RECOMMENDED BY THE MANUFACTURER. ALWAYS USE THE GRAVEL ACCESSORIES AND ATTACHMENTS WITH THIS TRACTOR.

6. Do not overuse the engine. Do not operate the tractor for more than 1 hour at a time.

- 20. Never run the engine indoors except to move it outside. Exhaust fumes are dangerous.
- 21. Go slow on slick surfaces.
- 22. Follow traffic laws when operating on or near a road.
- 23. Before making adjustments or servicing, move the PTO to "OFF", turn the ignition switch to "OFF", and wait until all moving parts completely stop.
- 24. Keep the PTO control in the "OFF" position when transporting.

## SECTION 2

### Operating Instructions

#### 2.1 General:

1. When starting to cut grass with the vac in place, start at a slower than normal ground speed but with throttle set for high engine speed. Use the Gear Selector Lever to control speed. Select the gear for the best cutting and vac action. The heavier and wetter the grass, the slower the ground speed.
2. With lush, extra heavy or wet grass, it may be necessary to make two passes. First, cut at maximum cutting height from ground surface, then recut at the lower setting.
3. If the hose plugs, momentarily stop ground travel and allow it to clear. IF THE HOSE DOES NOT CLEAR, PUT THE PTO IN THE "OFF" POSITION AND STOP THE TRACTOR ENGINE BEFORE ATTEMPTING TO CLEAR THE HOSE.
4. Successful operation results from the thoughtful management of several variables:
  - a. Catcher will work best in dry grass. Between 10 a.m. and 6 p.m. would be an ideal time, after dampness has left in the morning but before evening dew.
  - b. Use fast throttle setting on the tractor at all times, since this gives better air flow in the basket or cart.
  - c. Try different travel speeds. Generally, third to fifth speeds are best.

#### 2.2 CAUTION:

1. Be sure the boot, hoses, and blower drive are properly assembled and secured prior to operating the vac and mower.
2. Always move the PTO to "OFF", turn the ignition switch to "OFF" and wait until all parts have stopped moving before unplugging the hoses.

SECTION 2

Operating Instructions

2.3 Empty the cart

2.3 Empty the cart as follows:

1. Transport the cart to the dumping area.
2. Loosen the knob on the hose connecting tube and disconnect the hose at the cart.
3. Loosen the knobs on the rear gate.
4. Swing the rear gate up and secure with the hold down strap.
5. Remove the cart tail gate.
6. Unlatch the handle and dump the cart.

2.4 Use the hold down strap to keep the rear gate open for dumping the cart or servicing. The hold down strap will stretch if left connected to the rear gate for a long period of time.

2.5 Clean the cart thoroughly before storage.

2.6 Empty the cart before parking. Damp grass clippings can ferment and possibly catch fire.

CAUTION

1. Be sure the foot, wiper, and power drive are properly adjusted and locked prior to operating the vac and motor.

2. Always wear the P.D. belt, and never drive with the ignition switch to "OFF" and your hands on the controls after stopping moving before engaging the hoist.



SECTION 3

Service Instructions

3.1 When the vac stops collecting, check the following:

1. Be sure the mower has a sharp Gravely blade on it.
2. Low tip speed on blade--check engine RPM and increase to a maximum of 3300 RPM, decrease ground speed.
3. High ground speed on tractor--shift to lower gear.
4. Grass conditions--grass must be dry.

3.2 Removal:

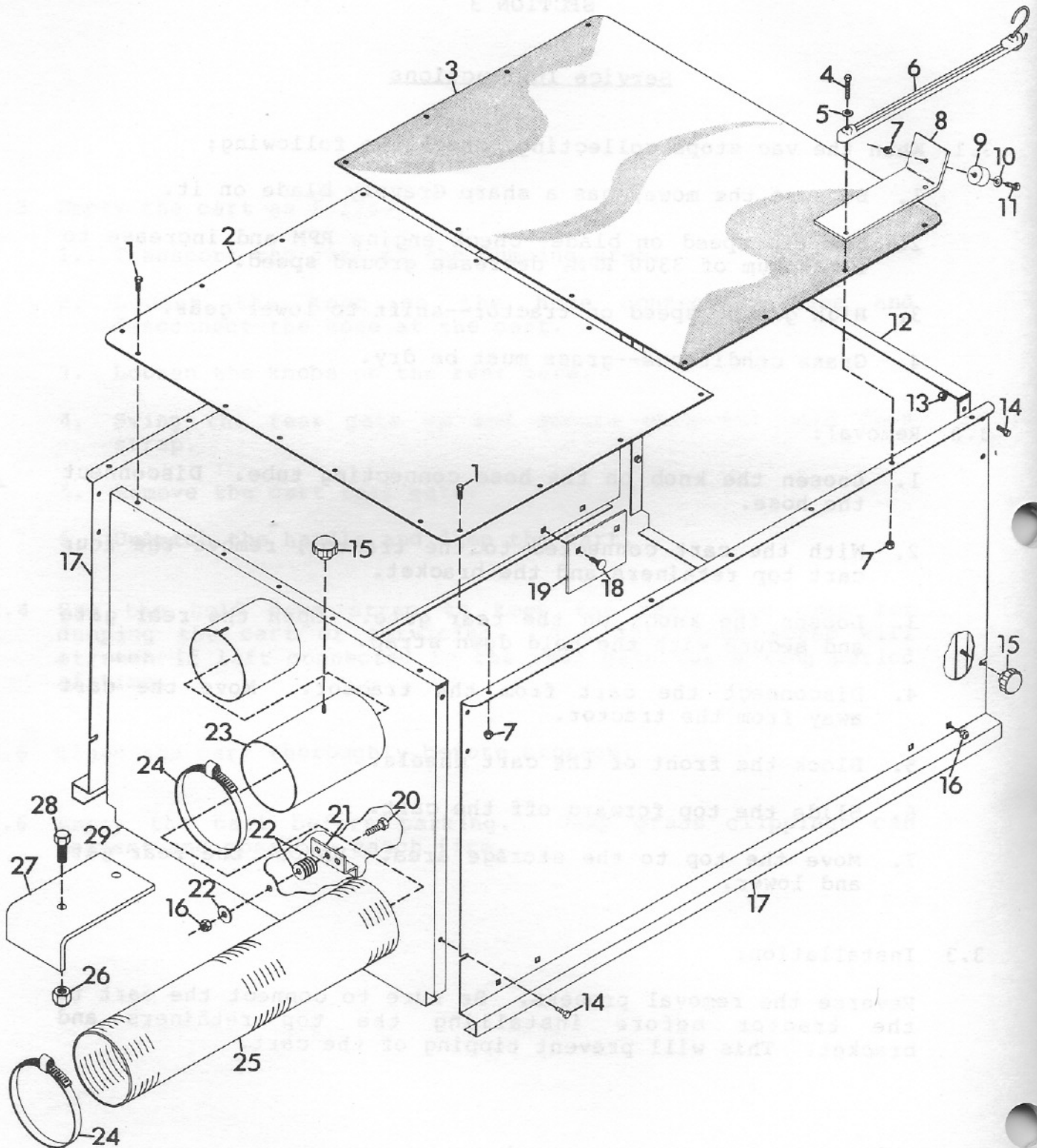
1. Loosen the knob on the hose connecting tube. Disconnect the hose.
2. With the cart connected to the tractor, remove the four cart top retainers and the bracket.
3. Loosen the knobs on the rear gate. Open the rear gate and secure with the hold down strap.
4. Disconnect the cart from the tractor. Move the cart away from the tractor.
5. Block the front of the cart wheels.
6. Slide the top forward off the cart.
7. Move the top to the storage area. Unhook the rear gate and lower.

3.3 Installation:

Reverse the removal process. Be sure to connect the cart to the tractor before installing the top retainers and bracket. This will prevent tipping of the cart.

SECTION 4

Illustrated Parts and Parts List



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	180020	19	Bolt, Hex 1/4-20x.75
2	37875	1	Cover, Top Front
3	37874	1	Cover, Top Rear
4	180033	1	Bolt, Hex 1/4-20x1.375
5	422845	1	Washer, Flat .281x.625x.065
6	38089	1	Strap, Hold Down
7	419454	21	Nut, Lock 1/4-20
8	41617	1	Bracket
9	24357	1	Bumper, Seat
10	120386	1	Washer, Flat .312x.734x.065
11	180021	1	Bolt, Hex 1/4-20x.875
12	37869	1	Weldment, Rear Gate
13	419455	8	Nut, Lock 5/16-18
14	180077	8	Bolt, Hex 5/16-18x.75
15	37884	3	Knob
16	456004	9	Nut, Lock 3/8-16
17	37868	2	Panel, Side
18	126227	8	Bolt, Carriage 3/8-16x.75
19	37877	4	Retainer, Cart Top
20	180124	1	Bolt, Hex 3/8-16x1.25
21	41640	1	Bracket
22	446470	6	Washer, Flat .375x1.125x.065
23	37879	1	Weldment, Connector Tube
24	36996	2	Clamp
25	37876	1	Hose, Blower to Cart
26	418692	1	Nut, Lock 5/8-11
27	37878	1	Extension, Tongue
28	271547	1	Bolt, Hex 5/8-11x1.50
29	41633	1	Gate, Front Weldment
NS	24608	2	Decal, Gravely Logo

## SECTION 5

### Assembly

- 5.1 Remove the vac cart kit from the shipping container.
- 5.2 Install the tongue extension on the tractor rear hitch with the 5/8-11x1-1/2 bolt and 5/8-11 lock nut.
- 5.3 Connect the cart to the tractor.
- 5.4 Set the side panels on the cart and install the four cart top retainers with two 3/8-16x3/4 carriage bolts and two 3/8-16 lock nuts each.
- 5.5 Using six 5/16-18x3/4 bolts and six lock nuts, fasten the front gate weldment to the side panels. The hose tube is outside toward the front.
- 5.6 Put the top front cover in position (rounded corners forward). Put eight 1/4-20x3/4 bolts in the forward holes. (No hardware is used in the hole above the hose tube.) Secure with eight 1/4-20 lock nuts. NOTE: Tighten the hardware in the front four holes by reaching through the hose tube to hold the nut while applying torque to the bolt.
- 5.7 Put the top rear cover in position, aligning the holes with the rounded corners to the rear. Remove one hook from the hold down strap. Put the 1/4-20x1-3/8 bolt through the washer, strap, the gate stop bracket, and the second hole from the rear on the left side. Retain with a 1/4-20 lock nut. Put eleven 1/4-20x3/4 bolts in the holes. Secure with eleven 1/4-20 lock nuts. Mount the bumper to the gate stop bracket with the washer, 1/4-20x.875 bolt and 1/4-20 lock nut.
- 5.8 Put the connecting tube in place in the front of the cover and secure with a knob.
- 5.9 Put a clamp on each end of the hose.
- 5.10 Put one end of the hose on the blower outlet and the other end on the connecting tube. Tighten the clamps.
- 5.11 Put the rear gate in position. Insert two 5/16-18x3/4 bolts and start two 5/16-18 lock nuts. Swing the rear gate up and connect the hold down strap over the left stud. Tighten the bolts so that the rear gate can pivot.

- 5.12 Place the 3/8-16x1.25 bolt through the middle hole of the bracket and place five .375x1.125x.065 flat washers on the bolt. Put the bolt through the hole in the front gate weldment from inside the cart. Retain with another washer and a 3/8-16 lock nut from the outside.
- 5.13 Unhook the hold down strap. Lower the rear gate. Secure with two knobs. Put the hold down strap hook in the hole near the pivot bolt.

## LIMITED FIVE-YEAR WARRANTY

1. This Limited Five-Year Warranty is issued by Gravely International, Inc., only to the original purchaser. If Gravely equipment is leased by Gravely, this Warranty shall extend also to the original lessee as if such lessee were the original purchaser.
2. Gravely warrants that all new equipment manufactured by Gravely ("Gravely Products") shall be free of defects in material and workmanship for the term described in paragraph 4, below. Except as hereinafter provided, this Warranty does not cover any engine, tires or battery forming a part of the Gravely Product. Engine and tires are covered by and subject to separate warranties of the manufacturers thereof.
3. In the event that any Gravely Product warranted hereunder shall be defective or fail to conform with this Warranty, Gravely shall, subject to the provisions hereof, pay for, or provide labor and materials for, the repair or replacement of such defective Gravely Product.
4. This Warranty is for five years (60 months) from purchase date for Gravely Products used exclusively for personal, family or household purposes, and two years (24 months) for products used for other purposes (commercial use), excluding rental firms. Gravely products used for rental purposes will be warranted for 90 days. Repair of Gravely Products after the second year (24 months from date of purchase) shall be subject to a \$50.00 deductible for each repair. (After two years, Gravely agrees to repair or replace defective Gravely Products used exclusively for personal, family or household purposes only to the extent that the cost of such warranty covered repair or replacement exceeds \$50.00.)

A limited one-year (12 months) warranty will apply to hydrostratic axles and transmission, hydraulic lift valve, and electric clutches.

Batteries are warranted by Gravely for a period of twelve (12) months only. If a battery shall fail within twelve (12) months of purchase, the replacement cost thereof shall be prorated over a twelve-month term based upon the number of months since purchase.
5. To obtain Warranty Service on a Gravely Product (including any battery or other component not manufactured by Gravely), use this procedure:
  - a. Notify the Gravely dealer from whom you purchased the equipment.
  - b. If you have moved and it is not convenient to notify the selling dealer, notify the nearest Gravely dealer. You should supply this dealer with a copy of the bill of sale as proof of the date of purchase.
  - c. Make arrangements to have the equipment delivered to the dealer (refer to paragraph 6 a., below).
  - d. If you have any questions concerning the Gravely Limited Warranty, they should be referred to:

Gravely International, Inc.  
One Gravely Lane  
Clemmons, NC 27012  
Attn: Customer Service Department
  - e. Warranty service on Gravely Products must be performed by an authorized Gravely dealer.
6. This Warranty does not cover the following:
  - a. Transportation to the Gravely dealership. (If the Gravely dealer provides transportation, he will charge for such service.)
  - b. Normal maintenance services and normal replacement of items such as spark plugs, belts, oil, oil filters, air filters, and mower, plow or cultivator blades, gauge wheels, skids and other wear items.
  - c. Any Gravely Product which has been altered or modified in any way.
  - d. Any repair or replacement occasioned by customer neglect or lack of proper maintenance. (The purchaser is responsible for making sure that Gravely Products are operated and serviced as directed in the applicable manual or service instruction. Incorrect use or maintenance will void this Warranty.)
  - e. Any repair occasioned by the use of any attachment not approved by Gravely. (The use of any such unapproved attachment will void this Warranty.)
7. GRAVELY MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, OR WARRANTIES AS TO THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALL WARRANTIES ARE LIMITED IN DURATION TO THE TERMS SET OUT IN PARAGRAPH 4, ABOVE. GRAVELY SHALL HAVE NO LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE BREACH OF ANY WARRANTY, INCLUDING, BUT NOT LIMITED TO, LIABILITY FOR INCONVENIENCE, RENTAL OR PURCHASE OF REPLACEMENT EQUIPMENT, OR FOR LOSS OF PROFITS OR OTHER COMMERCIAL LOSS.
8. Some states do not allow limitations on how long an implied warranty lasts, so the above statement may not apply to you. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
9. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.
10. A Gravely product registration card is supplied with each Gravely Product. Please complete the card and return it to Gravely at the address listed on the card. The equipment registration card will be used by Gravely for:
  - a. Recording date of purchase.
  - b. Notification of owners in compliance with the Consumer Product Safety Act, should any notification be necessary.

The return of such card is necessary for your warranty to be effective.
11. This Warranty is not subject to change or modification by anyone, including Gravely dealers and no Gravely dealer is authorized to make any representations or promises on Gravely's behalf.



One Gravely Lane, Clemmons, NC 27012