



NOTE

GRASS BLOWER CATCHER



GRAVELLY

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.

GRASS BLOWER CATCHER

SERIAL NUMBER _____



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

CONTENTS

1. INSTRUCTIONS FOR SAFE OPERATION
2. OPERATING INSTRUCTIONS
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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.
8. As the vac basket fills with material, weight is removed from the front wheels. Limit the amount collected or add front weight to prevent loss of steering control.

Operating Instructions

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.
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. Check the mounting hardware for the blade frequently.
25. 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. When the liners are full, they may be tied up while in the basket, then lifted from the baskets for disposal. It may be easier to remove the liners from the baskets by laying the basket on its side and removing the liner.
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.
3. To maintain steering control, mount wheel weights on the front wheels.

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 Vac Removal:

1. Loosen the four pan head cross machine screws which hold the belt cover to the belt guide. Remove the belt cover.
2. Put the handle in the "OFF" (right) position. Remove the drive belt.
3. Disconnect the hose from the blower inlet.
4. Remove the rod.
5. Remove the hair pin cotters and clevis pins which retain the tube support plate (left side of rear hitch). Remove the tube support plate.
6. Remove the hair pin cotter and washers which retain the frame weldment (right side of the rear hitch). Remove the vac.
7. Remove the mower boot.
8. Put the discharge chute on the deck and retain with two 3/8-16x1 carriage bolts (from under the deck), two 3/8 flat washers, and two 3/8-16 lock nuts.

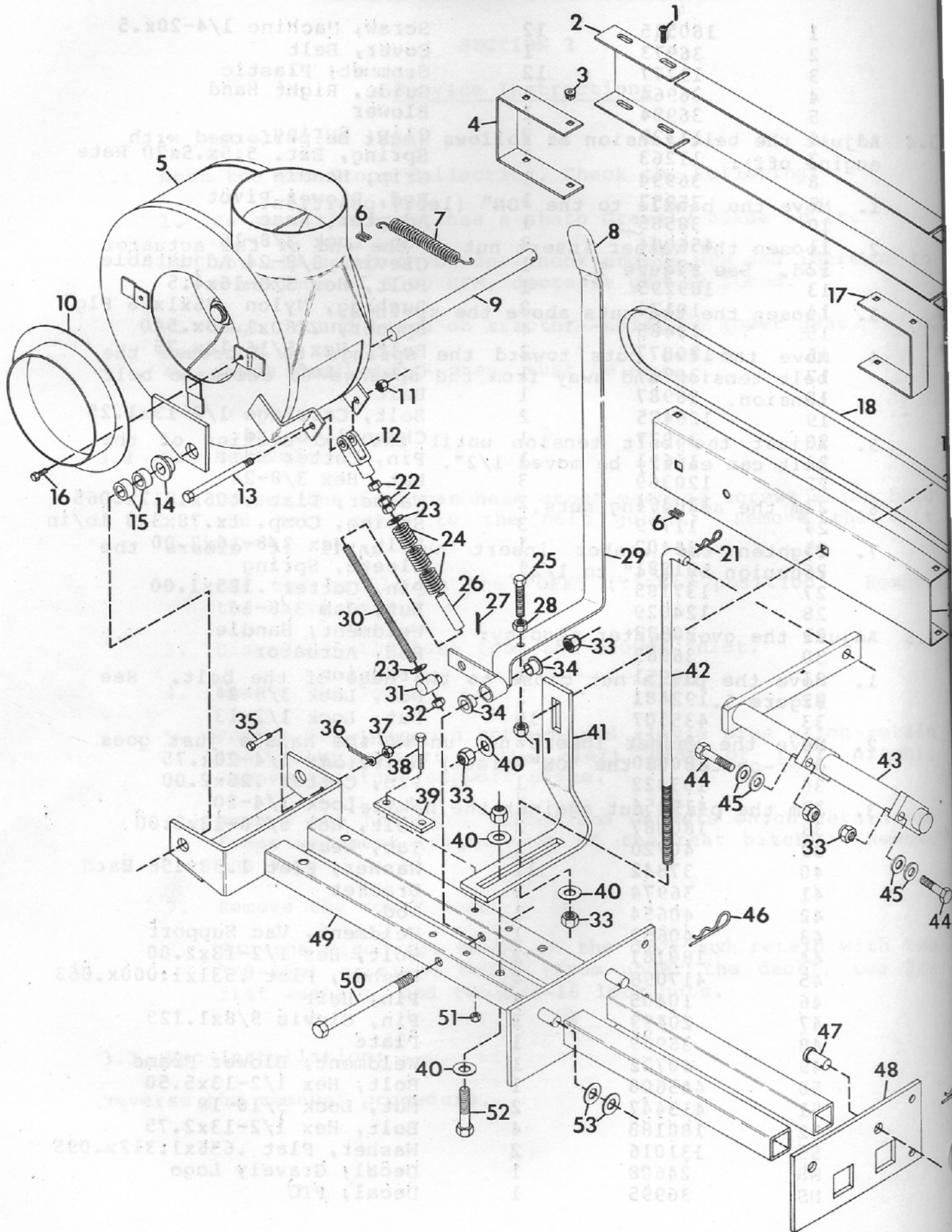
3.3 Vac Installation:

Reverse the removal procedure.

ITEM NO.	PART NO.	QTY.	DESCRIPTION
	1	12	Screw, Machine 1/4-20x.5
	2	1	Cover, Belt
	3	12	Grommet, Plastic
	4	1	Guide, Right Hand
	5	1	Blower
3.4	Adjust the belt tension as follows (with engine off):		1. Push Spring formed with Spring, Ext. 5.5x.5x20 Rate
	7	1	Spring, Ext. 5.5x.5x20 Rate
	8	1	Grip, Handle
1.	Move the handle to the "ON" (left) position.		2. Red, Blower Pivot Adapter, Hose
	9	1	Red, Blower Pivot Adapter, Hose
2.	Loosen the washer insert nut on the end of the actuator rod. See Figure 5.		3. Nut, Lock 3/8-16
	10	1	Nut, Lock 3/8-16
	11	1	Clevis, 3/8-24 Adjustable
	12	1	Bolt, Hex 3/8-16x4.5
3.	Loosen the nuts above the springs.		4. Bushing, Nylon .76x1x.6 Flg.
	13	1	Bushing, Nylon .76x1x.6 Flg.
	14	4	Spacer, .760x1.00x.540
4.	Move the nuts toward the springs to increase the belt tension and away from the springs to decrease belt tension.		5. Bolt, Hex 5/16-18x.75
	15	1	Bolt, Hex 5/16-18x.75
	16	1	Guide, Left Hand
	17	1	Belt
5.	Adjust the belt tension until the mid section of the belt can easily be moved 1/2".		6. Bolt, Carriage 1/2-13x1.25
	18	2	Bolt, Carriage 1/2-13x1.25
	19	1	Channel, Guard
	20	1	Pin, Cotter Hair
	21	3	Nut, Hex 3/8-24
6.	Tighten the adjusting nuts.		7. Washer, Flat .406x.812x.065
	22	3	Washer, Flat .406x.812x.065
	23	3	Spring, Comp. 1x.78x338 lb/in
	24	3	Spring, Comp. 1x.78x338 lb/in
7.	Tighten the washer insert nut until it clears the gunnion by 1/4" to 1/2".		8. Bolt, Hex 3/8-16x2.00
	25	1	Bolt, Hex 3/8-16x2.00
	26	1	Sleeve, Spring
	27	1	Pin, Cotter .125x1.00
	28	1	Nut, Jam 3/8-16
3.5	Adjust the overwater stop by:		9. Weldment, Handle
	29	1	Weldment, Handle
	30	1	Rod, Actuator
1.	Move the plain nut close to the head of the bolt. See Figure 5.		10. Nut, Lock 3/8-24
	31	1	Nut, Lock 3/8-24
	32	10	Nut, Lock 1/2-13
2.	Move the washer insert nut until pushing handle just goes over-center of the "ON" (left) position.		11. Bushing
	33	2	Bushing
	34	1	Bolt, Hex 1/4-20x.75
	35	1	Pin, Cotter .25x2.00
3.	Tighten the plain nut against the handle.		12. Nut, Lock 1/4-20
	36	2	Nut, Lock 1/4-20
	37	2	Bolt, Hex 5/16-18x2.00
	38	1	Bolt, Hex 5/16-18x2.00
	39	1	Tab, Wear
	40	11	Washer, Flat 1.38x.56 Hard
	41	2	Washer, Flat 1.38x.56 Hard
	42	2	Bracket
	43	1	Rod
	44	1	Weldment, Vac Support
	45	2	Weldment, Vac Support
	46	2	Bolt, Hex 1/2-13x2.00
	47	4	Bolt, Hex 1/2-13x2.00
	48	4	Washer, Flat .531x1.000x.063
	49	4	Washer, Flat .531x1.000x.063
	50	4	Pin, Hair
	51	2	Pin, Clevis 5/8x1.125
	52	2	Pin, Clevis 5/8x1.125
	53	1	Plate
NS	24608	1	Plate
NS	36995	1	Weldment, Blower Frame
	54	1	Weldment, Blower Frame
	55	1	Bolt, Hex 1/2-13x5.50
	56	2	Bolt, Hex 1/2-13x5.50
	57	2	Nut, Lock 5/16-18
	58	4	Nut, Lock 5/16-18
	59	4	Bolt, Hex 1/2-13x2.75
	60	2	Bolt, Hex 1/2-13x2.75
	61	2	Washer, Flat .656x1.312x.095
	62	2	Washer, Flat .656x1.312x.095
NS	24608	1	Decal, Gravely Logo
NS	36995	1	Decal, PTO

SECTION 4

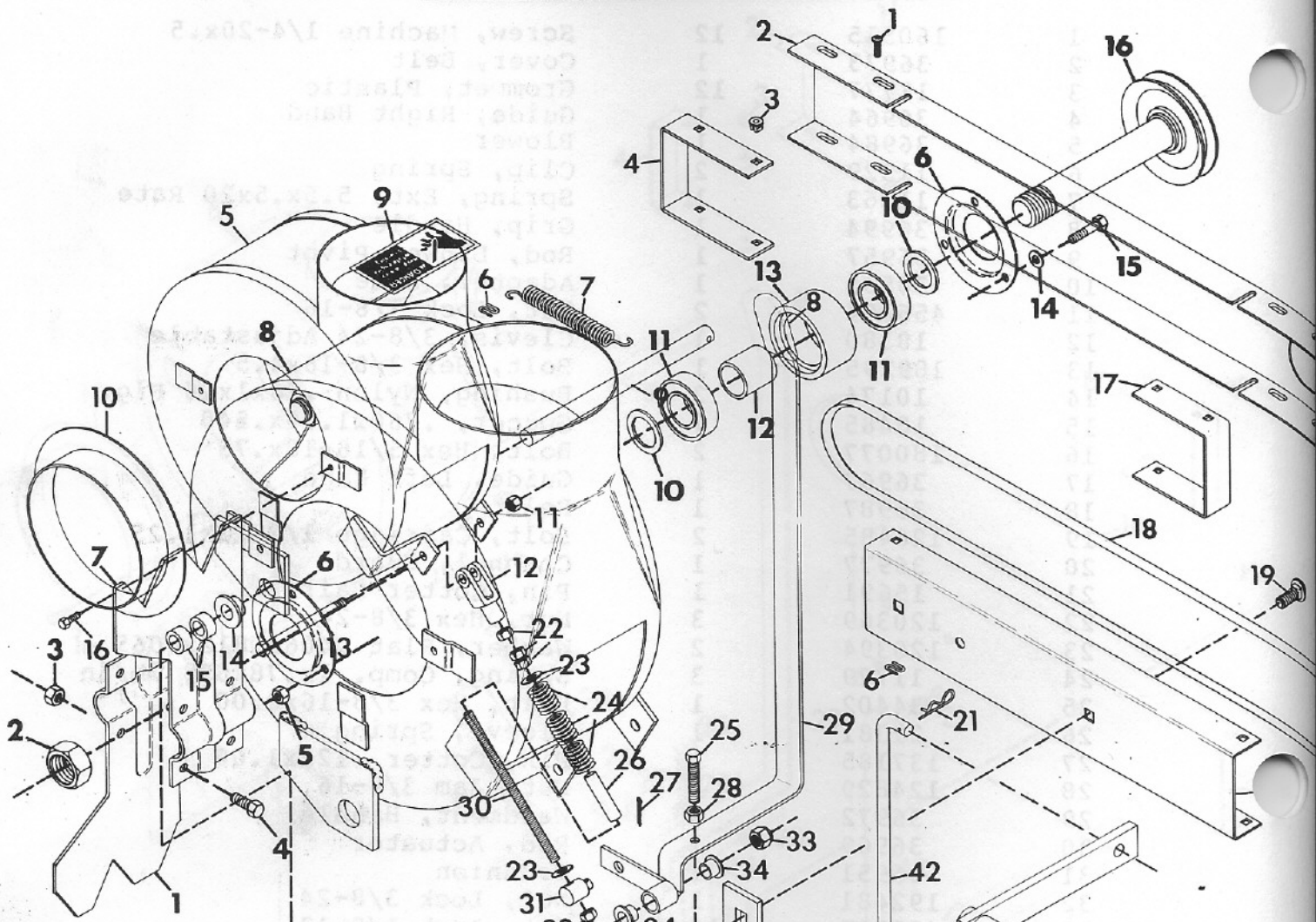
Illustrated Parts and Parts List



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	160515	12	Screw, Machine 1/4-20x.5
2	36973	1	Cover, Belt
3	11777	12	Grommet, Plastic
4	36964	1	Guide, Right Hand
5	36984	1	Blower
6	11329	2	Clip, Spring
7	11263	1	Spring, Ext. 5.5x.5x20 Rate
8	36994	1	Grip, Handle
9	36957	1	Rod, Blower Pivot
10	38585	1	Adapter, Hose
11	456004	2	Nut, Lock 3/8-16
12	18380	1	Clevis, 3/8-24 Adjustable
13	189295	1	Bolt, Hex 3/8-16x4.5
14	10174	2	Bushing, Nylon .76x1x.6 Flg.
15	18485	4	Spacer, .760x1.00x.540
16	180077	2	Bolt, Hex 5/16-18x.75
17	36967	1	Guide, Left Hand
18	36987	1	Belt
19	126485	2	Bolt, Carriage 1/2-13x1.25
20	36977	1	Channel, Guard
21	15691	1	Pin, Cotter Hair
22	120369	3	Nut, Hex 3/8-24
23	120394	2	Washer, Flat .406x.812x.065
24	11779	3	Spring, Comp. 1x.78x338 lb/in
25	34402	1	Bolt, Hex 3/8-16x2.00
26	21381	1	Sleeve, Spring
27	137185	1	Pin, Cotter .125x1.00
28	124829	1	Nut, Jam 3/8-16
29	36972	1	Weldment, Handle
30	36969	1	Rod, Actuator
31	36951	1	Trunnion
32	192481	1	Nut, Lock 3/8-24
33	435507	10	Nut, Lock 1/2-13
34	36960	2	Bushing
35	180020	1	Bolt, Hex 1/4-20x.75
36	103422	1	Pin, Cotter .25x2.00
37	419454	1	Nut, Lock 1/4-20
38	180087	2	Bolt, Hex 5/16-18x2.00
39	40720	1	Tab, Wear
40	37842	11	Washer, Flat 1.38x.56 Hard
41	36974	2	Bracket
42	40654	1	Rod
43	40653	1	Weldment, Vac Support
44	180181	2	Bolt, Hex 1/2-13x2.00
45	417098	4	Washer, Flat .531x1.000x.063
46	10405	4	Pin, Hair
47	20499	2	Pin, Clevis 5/8x1.125
48	36989	1	Plate
49	40722	1	Weldment, Blower Frame
50	445608	1	Bolt, Hex 1/2-13x5.50
51	413447	2	Nut, Lock 5/16-18
52	180188	4	Bolt, Hex 1/2-13x2.75
53	131016	2	Washer, Flat .656x1.312x.095
NS	24608	1	Decal, Gravely Logo
NS	36995	1	Decal, PTO

SECTION 4

Illustrated Parts and Parts List



ITEM NO.

PART NO.

QTY

DESCRIPTION

1
2
3
4
5
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7
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9
10
11
12
13
14
15
16

39018
39019
413447
180075
424215
36874
39020
39021
33926
39022
39023
39024
39025
39026
180044
39027

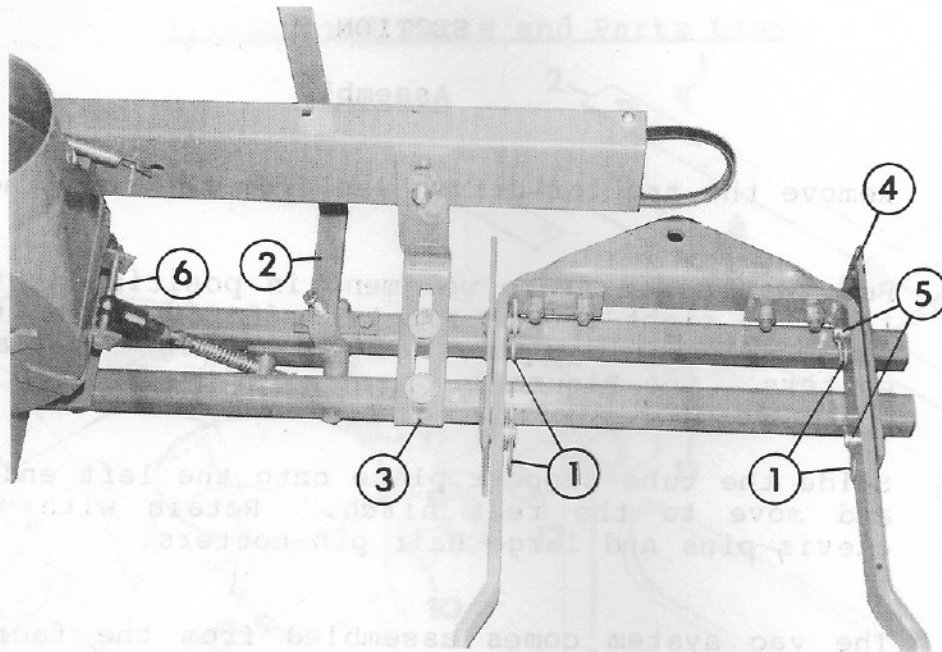
1
1
4
4
3
2
1
1
1
2
1
1
1
3
3
1

Blade, Fan
Nut, Hex 1-14 Jam Lock
Nut, Lock 5/16-18
Bolt, Hex 5/16-18x.625
Nut, Lock 1-20
Bearing, Ball
Blade, Fan
Housing, Fan
Decal, Danger Hand
Washer, 1.000/1.031x1.500x.125
Bearing, Ball
Spacer
Housing
Washer, .263/.273x.562x.046
Bolt, Hex 1/4-20x2.00
Weldment, Spindle

SECTION 5

Assembly

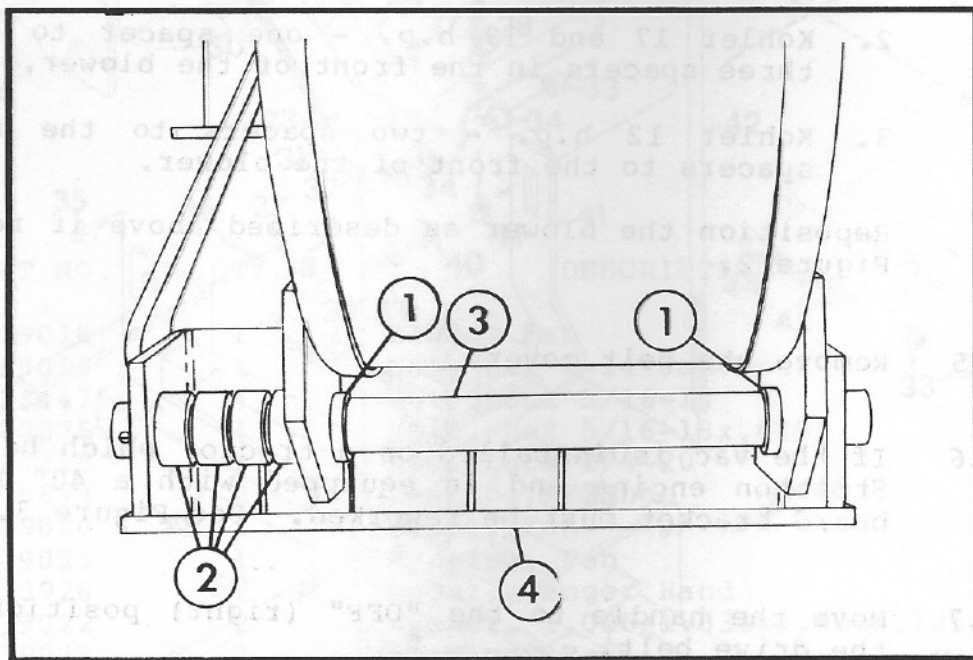
- 5.1 Remove the tractor-driven vac from the shipping container.
- 5.2 Put the blower frame weldment in position in the rear hitch from the right side. Put two .656 I.D. flat washers on the forward mounting pin. Retain with two large hair pin cotters. See Figure 1.
- 5.3 Slide the tube support plate onto the left end of the tubes and move to the rear hitch. Retain with two 5/8x1-1/8 clevis pins and large hair pin cotters.
- 5.4 The vac system comes assembled from the factory with the blower positioned for Kohler 17 and 19 h.p. twin cylinder engines. If your tractor is equipped with an engine other than a Kohler twin, it will be necessary to remove the blower from the frame and reassemble it with the spacers positioned as follows:
 1. Briggs and Stratton - four spacers to the rear of the blower.
 2. Kohler 17 and 19 h.p. - one spacer to the rear and three spacers in the front of the blower.
 3. Kohler 12 h.p. - two spacers to the rear and two spacers to the front of the blower.Reposition the blower as described above if required. See Figure 2.
- 5.5 Remove the belt cover.
- 5.6 If the vac is installed on a tractor which has a Briggs and Stratton engine and is equipped with a 40" mower, the in-board bracket must be reworked. See Figure 3.
- 5.7 Move the handle to the "OFF" (right) position and install the drive belt.



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|---------------------------|--------------------------|
| 1 - Large Hair Pin Cotter | 4 - Tube Support Plate |
| 2 - Handle Assembly | 5 - 5/8x1-1/8 Clevis Pin |
| 3 - Bracket | 6 - 3/8-16x4.50 Bolt |

FIGURE 1



- | |
|--------------------|
| 1 - Bushings |
| 2 - Spacers |
| 3 - Rod |
| 4 - Blower Support |

84010

FIGURE 2

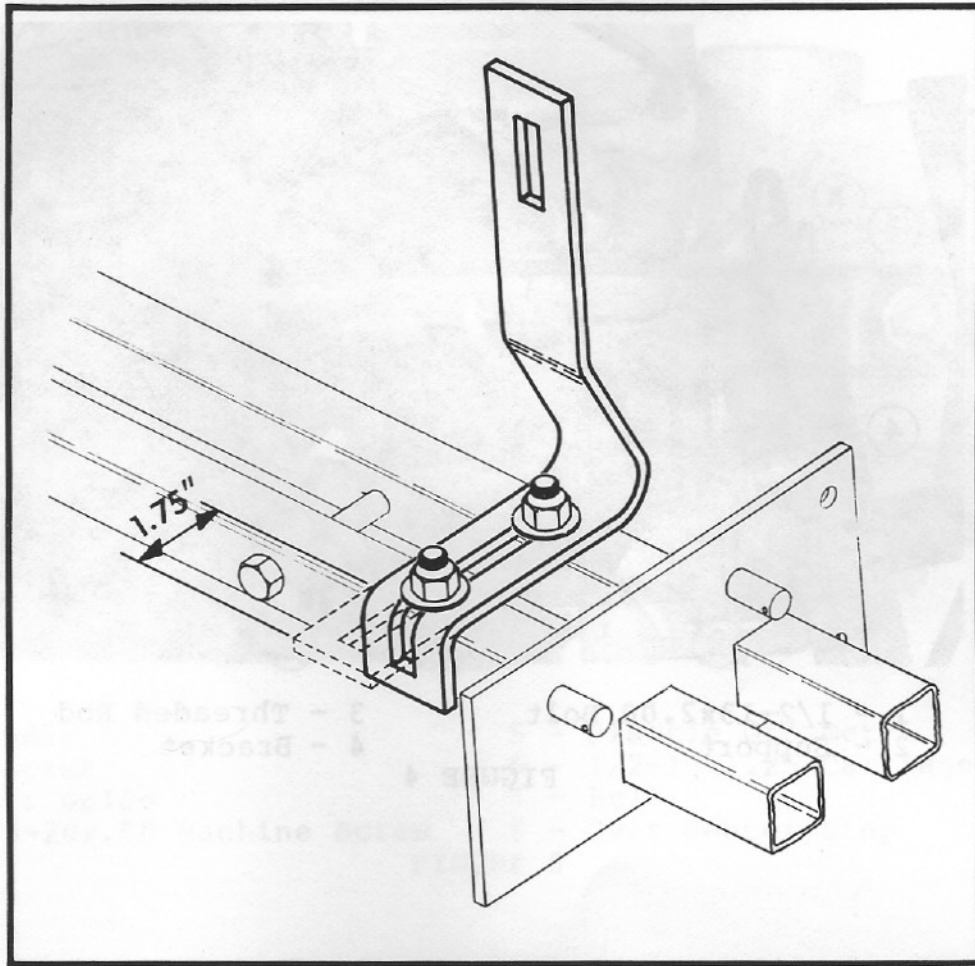
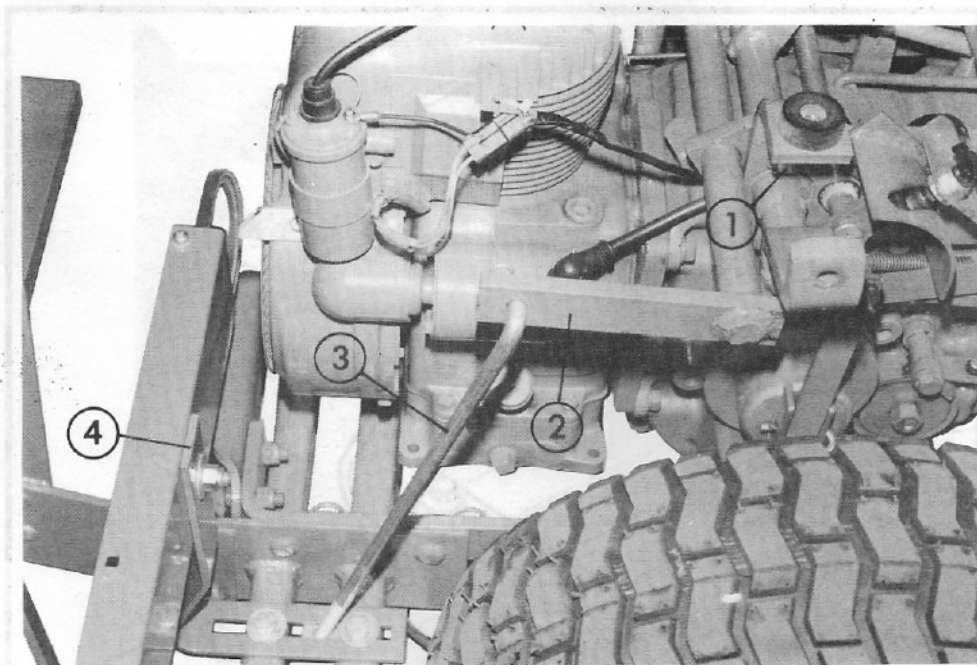


FIGURE 3

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- 5.8 Remove the top 1/2" bolt which mounts the rear hitch bracket (item 18, page 18, 8000-G Series IPL) to the transmission. See Figure 4.
- 5.9 put the vac support weldment on the tractor and secure with two 1/2-13x2 bolts, four flat washers, and two washer insert nuts.
- 5.10 put the threaded rod through the slot in the left bracket and hook the top end in the support. Secure with a small hair pin cotter. On the 17 h.p. and 19 h.p. tractors, it may be necessary to cut 1/2" off the muffler outlet to allow clearance for the rod.
- 5.11 Install a flat washer and washer insert nut on the lower end of the rod. Tighten until the frame is not loose in the hitch. Do not overtighten as it will cause difficult operation of the direction control lever.



85064

1 - 1/2-13x2.00 Bolt
2 - Support

3 - Threaded Rod
4 - Bracket

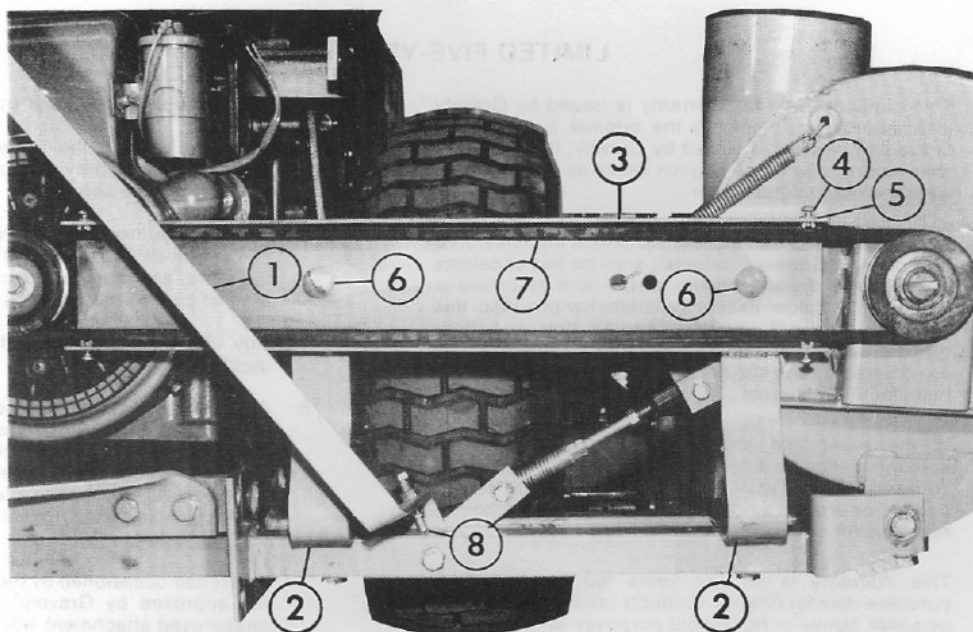
FIGURE 4

5.12 Move the handle to the "ON" (left) position. Adjust the guide channel fore and aft so that the belt is midway between the plastic grommet and the wall of the guide channel. Tighten bottom four bolts. See Figure 5.

5.13 With the handle in the "ON" position (left position--belt tight), adjust the guide channel up and down until the belt is midway in the guide channel. Tighten two carriage bolts.

5.14 Adjust the belt tension as follows:

1. Move the handle to the "ON" (left) position.
2. Compress the springs on the actuator rod with the two nuts until the first nut makes light contact with the spring sleeve.
3. Jam the adjusting nuts.



84011

- | | |
|------------------------------|--------------------------------|
| 1 - Handle | 5 - Plastic Grommet |
| 2 - Bracket | 6 - 1/2-13x1.25 Carriage Bolts |
| 3 - Belt Guide | 7 - Belt |
| 4 - 1/4-20x.50 Machine Screw | 8 - Over-Center Stop |

FIGURE 5

5.15 Adjust the over-center stop by:

1. Move the plain nut close to the head of the bolt. See Figure 5.
2. Move the washer insert nut until the handle just goes over-center to the "ON" (left) position.
3. Jam the plain nut against the handle.

5.16 Put the handle in the "ON" (left) position.

- #### 5.17 Put the belt cover in position on the guide channel. Tighten the four mounting screws. Move the right end guide until it is about 1/8" from the belt and tighten the mounting screws. Move the left guide until it is about 1/2" from the belt and tighten the mounting screws.

- #### 5.18 Run in for 10 minutes and check belt declutching. Readjust if necessary to stop blower.

SECTION 6

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). 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 repair or replacement exceeds \$50.00.)

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.

 **GRAVELY**
One Gravely Lane, Clemmons, NC 27012