

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

To keep the renovator safe, the renovator 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 part number to ensure proper and correct service when ordering parts.

## RENOVATOR KIT



Look for this symbol to point out important safety precautions. It means ATTENTION! BECAUSE SAFETY IS INVOLVED.

Instructions for Operation

NOTE

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

To keep the warranty, the renovator 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 part number to ensure prompt and correct service when ordering part, requesting service, or making inquiries.



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

7. Keep safety devices, interlocks, and shields in place at all times.

NOTE

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

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

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

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Use the part number to ensure proper and correct service.

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when ordering parts, requesting service, or making inquiries.

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



## SECTION 1

### Instructions for Safe Operation

Improper use of this renovator can injure people and damage the equipment. People using or servicing this renovator must read and follow the instructions in this manual, the tractor manual, and cultivator 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 all possible dangers in operating and servicing the equipment.

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

#### 1.1 Preparations:

1. Read the tractor Operator's Manual. Be familiar with all controls and follow the safety precautions outlined in the manual. Know how to STOP the tractor and renovator quickly in an emergency.
2. Inspect and clear the work area (prior to renovating) of rocks, glass, metal, bones, and any other foreign objects that might be picked up and thrown or tangled in the tines. Stay alert for holes and other hidden hazards.
3. Do not wear loose fitting clothing or accessories that might get caught in moving parts or on the controls. Keep hands, feet, hair, clothing, etc., away from moving parts.
4. Keep bystanders and pets removed from the work area, and a safe distance away.
5. Do not allow children to operate the equipment, nor allow adults to operate it without their having knowledge of safe operating practices.
6. Operate the renovator from the operator's position on the seat of the Gravely.
7. Keep safety devices, interlocks, and shields in place at all times.

8. Put the PTO in the "OFF" position when the renovator is not in use or is being transported.
9. Disengage power to the renovator and STOP the engine before clearing the unit.
10. After striking a foreign object, STOP the engine, and put the PTO in the "OFF" position before inspecting for damage. Any damage must be repaired before restarting the equipment.
11. Never leave the equipment running when unattended-- always STOP engine and put the PTO in the "OFF" position before leaving the machine.
12. Do not use the equipment in the dark without adequate lighting.
13. Maintain the renovator in good condition. Keep the machine as directed in this manual.
14. Follow instructions listed on decals.

#### 1.2 Operation:

1. Read the tractor Operator's Manual for safety and operating instructions to engage and disengage the renovator. Know how to STOP the renovator quickly in an emergency.
2. Use caution when transporting renovator. Be careful when crossing dips in terrain. Keep PTO in "OFF" position.
3. Observe ground to be renovated. Plan a route (for operation).
4. Always operate slowly over rough ground and on hillsides. Operate at speeds slow enough to insure your safety. Be alert for holes, ditches, and other irregularities that may cause the tractor to overturn.
5. Always look behind you when backing up.
6. Operate across the slope.

SECTION 2

Operating Instructions

- 2.1 Adjust the gauge wheels to provide the desired depth of cut.
- 2.2 Read the tractor Operator's Manual and the cultivator Operator's Manual. Know the function and operation of the controls.
- 2.3 Put the tractor in the slowest gear. Higher gears may be used as conditions permit.
- 2.4 Move the throttle to slow.
- 2.5 Move the hi-lo gear control to neutral.
- 2.6 Engage the PTO and move the throttle to 1/2 or higher position.
- 2.7 Move the hi-lo gear control to the "lo" position.
- 2.8 Move the direction control lever to the direction desired.
- 2.9 Move the PTO control to the "OFF" position to stop the tines.
- 2.10 See the cultivator Operator's Manual for mounting, removal, and tine replacement procedures.

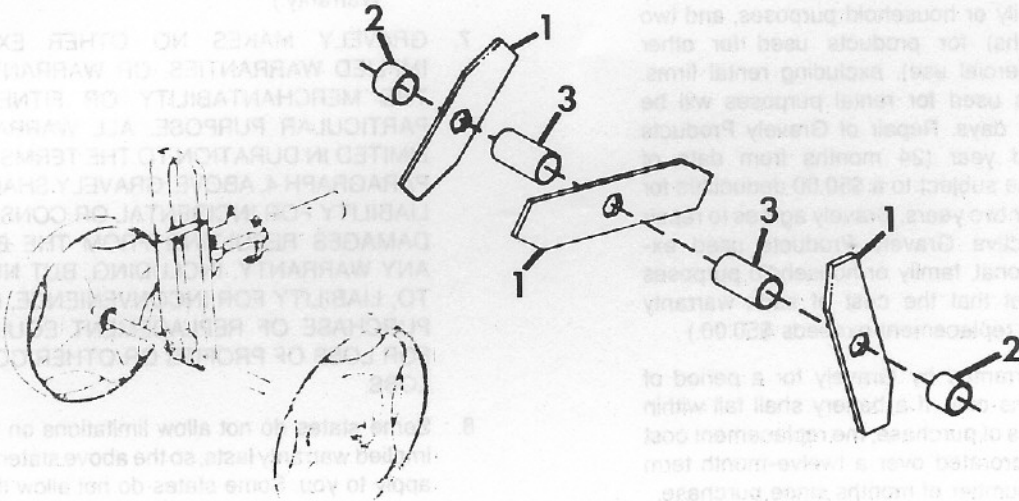
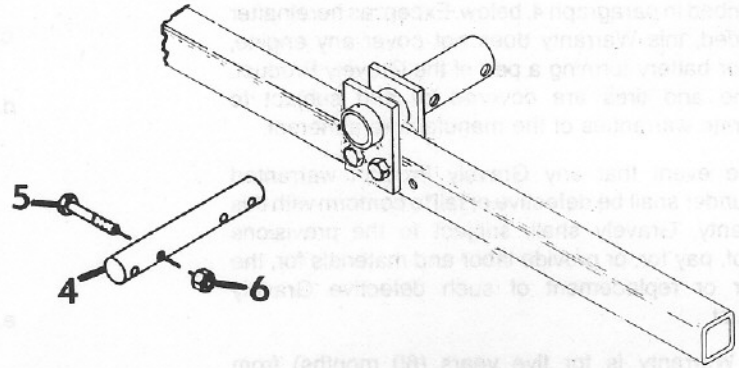
37022	14	Tine, Curved
37024	2	Spacer, Tine
37024	13	Spacer, Tine
37033	1	Bar, Extension
180186	2	Solt, Hex 1/2-13x2.75
435507	2	Wot, Lock 1/2-13

## SECTION 3

### Assembly

- 3.1 Remove cultivator tines as outlined in Section 8.0, "Procedure for Replacing the Tines" in cultivator Operator's Manual.
- 3.2 Place one short tine spacer (item 2) on hexagon shaft, then a cutter tine. (Install the tines with the cutting edge leading in the direction of rotation which is counterclockwise as seen from the left side.) Install a long tine spacer (item 3). Install the next cutter tine one position farther around the shaft than the one just installed. Follow this procedure until all of the cutter tines and long spacers have been installed with the other short spacer on the end.
- 3.3 Reinstall the support plate and the tine shaft nut. Torque the shaft nut to 125 ft./lbs.
- 3.4 Remove two bolts holding the plow drive to the cultivator frame. Insert extension bar, line up holes, and reinstall bolts.
- 3.5 Attach rotary plow gauge wheel assembly to extension bar.

Illustrated Parts and Parts List



ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	37022	14	Tine, Cutter
2	37023	2	Spacer, Tine
3	37024	13	Spacer, Tine
4	37033	1	Bar, Extension
5	180188	2	Bolt, Hex 1/2-13x2.75
6	435507	2	Nut, Lock 1/2-13



SECTION 5

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.)

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.