

# 32" SNOWBLOWER OPERATORS MANUAL

FORM NO: 40699 (8-85) PART NO: 40694 PRINTED IN USA

# NOTE

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

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

INSTRUCTIONS FOR MALE OPERATION

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 part, requesting service, or making inquiries.

SNOWBLOWER	SERIAL	NUMBER	



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

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INSTRUCTIONS FOR SAFE OPERATION

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## Instructions for Safe Operation

Improper use of this snowblower can injure people and damage the equipment. People using or servicing this snowblower 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 all possible dangers in operating and servicing the equipment.

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

# 1.1 Preparations:

- Read the tractor and snowblower operator's manuals. Be familiar with all controls and follow the safety precautions outlined in these manuals. Know how to STOP the tractor and snowblower quickly in an emergency.
- 2. Inspect and clear the work area (prior to snow) of rocks, glass, metal, bones, and any other foreign objects that might be picked up and thrown or tangled in the snowblower. Stay alert for holes and other hidden hazards. Mark obstacles that will be hidden by snow.
- 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.
- Do not allow children to operate the equipment, nor allow adults to operate it without their having knowledge of safe operating practices.
- Operate the snowblower from the operator's position just behind the handle bars.
- Keep safety devices, interlocks, and shields in place at all times.
- 8. Put the PTO in the "OFF" position when the snowblower is not in use or is being transported.
- 9. Disengage power to the snowblower and STOP the engine before clearing the unit. NEVER CLEAN THE SNOWBLOWER WHILE THE ENGINE IS RUNNING.

- 10. After striking a foreign object, STOP the engine, 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 tractor.
- 12. Do not use the equipment in the dark without adequate lighting.
  - 13. Maintain the snowblower in good condition. Keep the machine as directed in this manual.
- 14. Follow instructions listed on decals and in the operator's manuals.
- 15. Adjust the snowblower skids to lift the snowblower above gravel so that it does not get into the snowblower and is discharged.

## 1.2 Operation:

- 1. Read the tractor operator's manual for safety and operating instructions to engage and disengage the snow-blower. Know how to STOP the snowblower quickly in an emergency.
- 2. Put the PTO control in the "OFF" position, turn the ignition switch to the "OFF" position, and wait until the engine and other moving parts have stopped before leaving the operator's position at the handle bars.
  - 3. Keep away from discharge chute.
- 4. Direct snowblower discharge away from windows, cars, buildings, and people which could be struck by objects thrown with the snow.
  - 5. Operate tractor engine inside only to move the equipment into or out of storage.
  - 6. Go slowly on slick surfaces. Travel across slopes.
  - 7. Use low gear, high engine speed and put the PTO in the "ON" position before moving into the snow.
- 8. Allow the snowblower to clear of snow before placing the PTO control in the "OFF" position. Stop the engine and remove remaining snow and ice before putting the equipment in storage.
  - 9. Always look behind before backing.

#### SECTION 2

## Operating Instructions

### 2.1 Preparation:

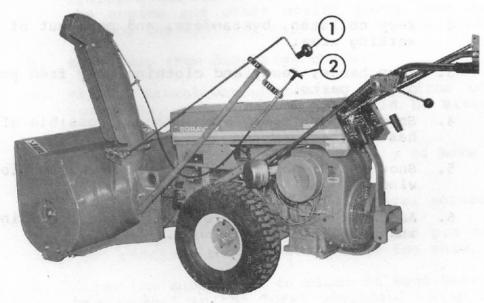
- Read the tractor and snowblower operator's manuals. Be familiar with all controls and follow the safety precautions outlined in these manuals. Know how to STOP the tractor and snowblower quickly in an emergency. See Figure 1.
- Check the oil level in the gear case. Add oil to maintain level with fill hole. See Section 3.
- Service tractor as described in the tractor operator's manual.

ACAUTION: Moving parts can amputate finger, toes, and cause serious injury.

- Before servicing any attachment:
  - a. Disengage power to attachment.
  - b. Shut off engine.
  - c. Make sure attachment parts have stopped revolving.
  - d. Disconnect engine spark plug cable to prevent accidental restart.
- Keep children, bystanders, and pets out of the working area.
- Keep hands, feet, and clothing away from power driven parts.
- 4. Snow is best removed as soon as possible after it has fallen.
- Snow should be discharged with the direction of the wind.
- Adjust the skids and scraper blade according to the instructions in Section 3.

#### 2.2 Operation:

- 1. Adjust the deflector angle using the "T" handle, at the operator's left. Raising the deflector will cause snow to be thrown further. Lowering the deflector will shorten the distance that the snow is thrown. Turn the "T" handle to adjust the deflector; PUSH to lower the deflector; PULL to raise the deflector. A quarter turn of the handle will lock the deflector in position.
- 2. Rotate the chute crank to turn the discharge chute, so that the snow will be thrown in the desired direction.
  - ACAUTION: The auger and gearcase are protected by a slip clutch designed to slip if a solid object enters the auger. The auger will start running when the obstruction is cleared if the PTO control is in the "ON" position.
- 3. For maximum snow removal and discharge, operate the engine at full throttle and regulate the travel speed with the Gear Control Lever. Put the range control in the "Lo" position.



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#### Service Instructions

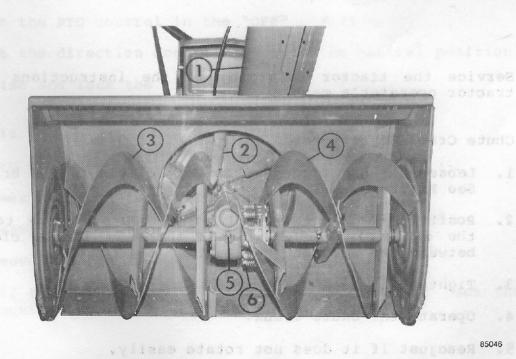
- 3.1 Check gear case oil level periodically. Position snowblower on a flat surface. Oil level must be up to oil fill hole. Change oil every 25 hours or once each season whichever comes first. Use SAE 80W-90 gear oil. See Figure 2.
- Oil the discharge chute base shown in Figure 3 approximately once a season.

#### 3.3 Skid Adjustment:

- 1. When operating on a rough surface or over gravel, lower the skids so that the snowblower will be raised above the gravel or ground.
- 2. Adjust by loosening the mounting bolts, sliding to the desired position, and retightening the bolts.

#### 3.4 Scraper Blade Adjustment:

When the scraper blade has worn near the brace, loosen the mounting bolts and advance the blade and retighten the bolts. Replace the blade when all the adjustment has been used.

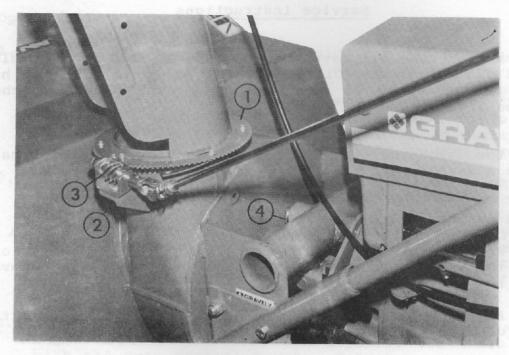


- 1 Discharge Chute 4 Left Auger
- 2 Fan
- 3 Right Auger

5 - Oil Fill Plug

6 - Slip Clutch

FIGURE 2



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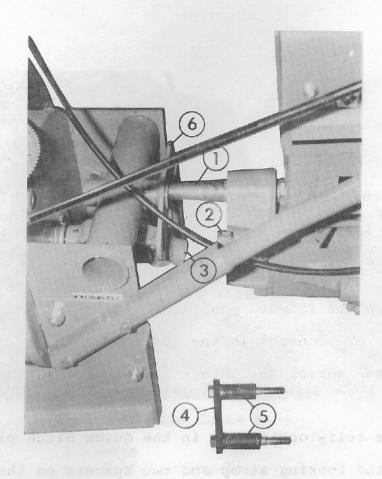
- 1 Discharge Chute Base
- 2 Nut
- 3 Worm
- 4 Self-Locking Pin
  FIGURE 3
- 3.5 Service the tractor according to the instructions in the tractor operator's manual.
- 3.6 Chute Crank Adjustment:
  - Loosen the nut securing the worm clevis to the bracket. See Figure 3.
  - 2. Position the worm so that it aligns with the teeth on the discharge chute so that there is little clearance between the worm and the teeth.
  - Tighten the nut.
  - 4. Operate the chute crank.
  - 5. Readjust if it does not rotate easily.

#### 3.7 Installation:

- Drive the tractor to the rear of the snowblower. The tractor must be fitted with a quick hitch pin. See Figure 3 and Figure 4.
- Turn the engine off.
- Put the tractor in gear and place the direction control lever in the forward position.
- 4. Put the PTO control in the "ON" position.
- Slide the snowblower onto the quick hitch pin and at the same time, guide the U-joint assembly onto the PTO shaft.
- 6. Put the self-locking pin in the quick hitch pin.
- 7. Mount the locking strap and two spacers on the left side of the quick hitch adaptor with two 1/2-13x4-1/2" bolts. The top spacer goes through the lock strap to keep the snowblower from rotating.
- 8. Put the PTO control in the "OFF" position.
- 9. Put the direction control lever in the neutral position.
- 10. Raise and lock the kick stand.

#### 3.8 Removal:

- 1. Turn off the engine.
- 2. Lower and lock the kick stand.
- Remove the locking strap and spacers.
- 4. Remove the pin in the quick hitch pin.
- 5. Pull the snowblower off the quick hitch pin or back the tractor away from the snowblower.



1 - Quick Hitch Pin 4 - Locking Strap

3 - U-Joint Assembly 6 - Lock Strap

2 - PTO Shaft 5 - Spacers

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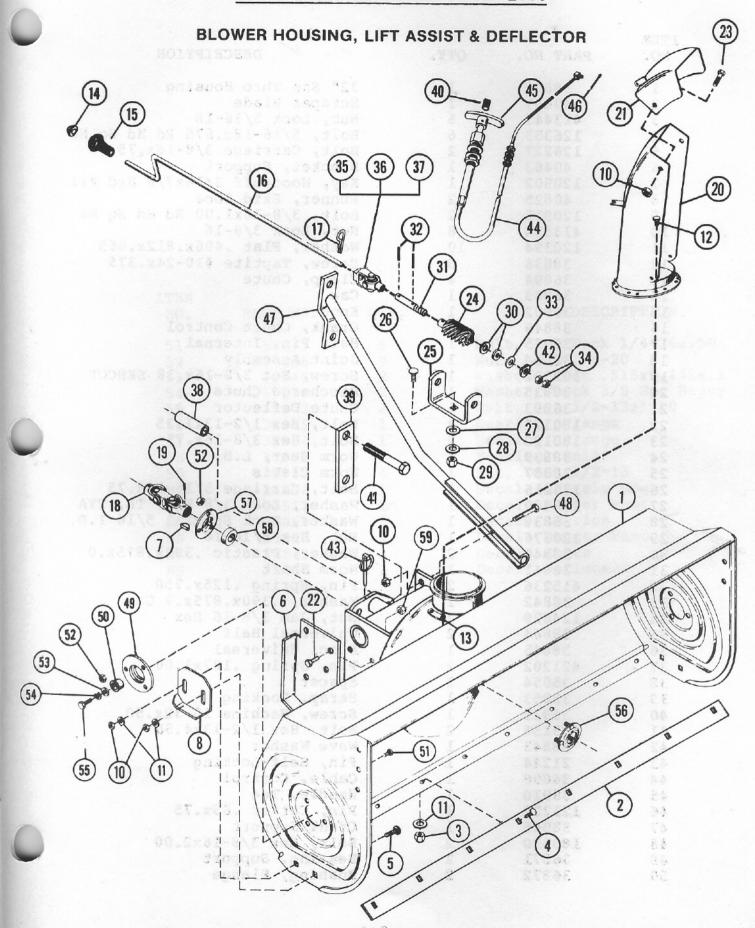
SECTION 4

# Storage ... militaria de successiva

- Clean and lubricate the snowblower as directed in Section 3.
- Inspect parts for damage and wear. 4.2
- 4.3 Touch up unpainted areas with paint.
- 4.4 Place in a cool, dry area.

SECTION 5

# Illustrated Parts and Parts List

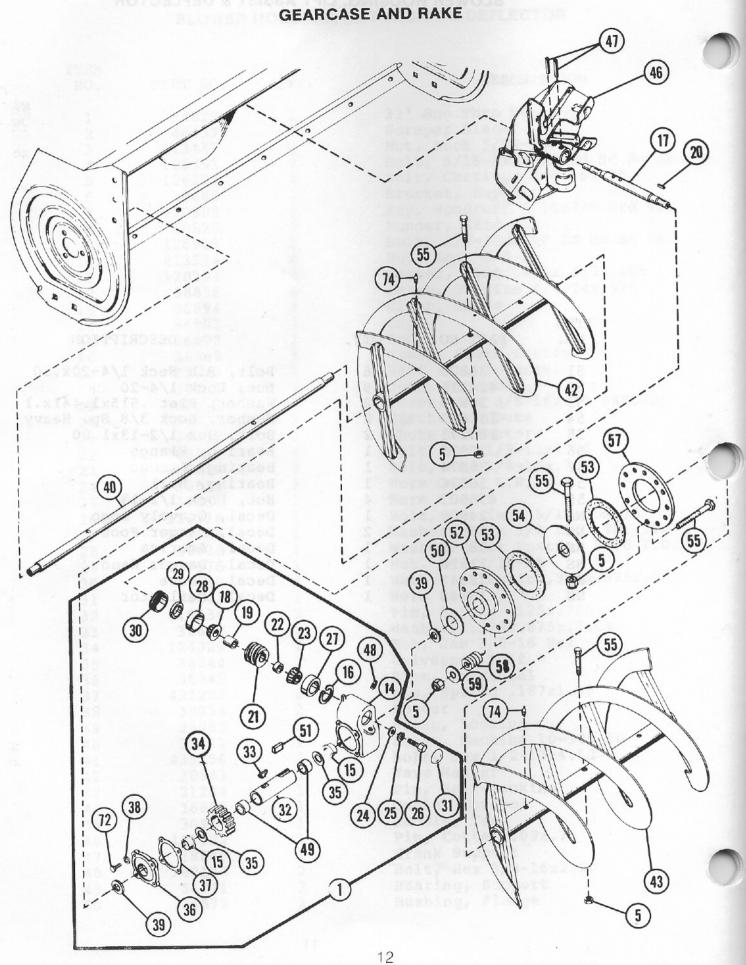


## **BLOWER HOUSING, LIFT ASSIST & DEFLECTOR**

ITEM	DARM NO		DECEDEDATOR
NO.	PART NO.	QTY.	DESCRIPTION
1	38829	1	32" Sno Thro Housing
2	40457	1	Scraper Blade
2 3	413447	6	Nut, Lock 5/16-18
4	126353	6	Bolt, 5/16-18x.875 Rd Hd Sq Nk
5	126227	2	Bolt, Carriage 3/8-16x.75
6	40463	1	Bracket, Support
7	120502	1	Key, Woodruff 3/16x7/8 Hrd #11
8	40825	2	Runner, Skid Shoe
9	120915	2	Bolt, 3/8-16x1.00 Rd Hd Sq Nk
10	413534	8	Nut, Lock 3/8-16
11	120394	10	Washer, Flat .406x.812x.065
12	38836	8	Screw, Taptite #10-24x.375
13	36894	4	Clamp, Chute
14	36903	1	Cap
15	36902	1	Knob
16	38849	1	Crank, Chute Control
17	36075	1 /	Hair Pin, Internal
18	38834	1	Joint Assembly
19	102592	1	Screw, Set 3/8-16x.38 SKHCUP
20	38835	1	Discharge Chute
21	36893	1	Chute Deflector
22	180175	4	Bolt, Hex $1/2-13x1.25$
23	180120	2	Bolt, Hex 3/8-16x.75
24	38839		Worm Gear, L.H.
25	38837	1	Worm Clevis
26	126216	1	Bolt, Carriage 5/16-18x.75
27	138489	1	Washer, Lock 3/8 Ext. Th. TYA
28	38838	1	Washer, Lock Special 5/16 I.D.
29 30	120376 38840	1 2	Nut, Hex 5/16-18
31	38841	1	Washer, Plastic .390x.875x.0 Worm Shaft
32	415236	2	Pin, Spring .125x.750
33	38842	1	Washer, .390x.875x.7 Ga.
34	124829	2	Nut, Jam 3/8-16 Hex
35	38844	2	Universal Half
36	38845	ī	Bloc, Universal
37	421202		Pin, Spring .187x1.00
38	35054	2 2	Spacer
39	35053	1	Strap, Locking
40	36911	1	Screw, Machine 10-32x.50
41	433156	2	Bolt, Hex 1/2-13x4.50
42	38843	1	Wave Washer
43	21244	1	Pin, Self-Locking
44	36898	1	Cable, Control
45	36910	1	Handle, Tee
46	121222	1	Pin, Cotter .09x.75
47	38846	1 2	Crank Support
48	180130	2	Bolt, Hex 3/8-16x2.00
49	36871	2	Bearing, Support
50	36872	2	Bushing, Flange

## **BLOWER HOUSING, LIFT ASSIST & DEFLECTOR**

ITEM			
NO.	PART NO.	QTY.	DESCRIPTION
51	36873	6	Bolt, Rib Neck 1/4-20x.50
52	424215	9	Nut, Lock 1/4-20
53	36840		Washer, Flat .515x1.441x.1
54	131099	2 2 2	Washer, Lock 3/8 Sp. Heavy
55	180173	2	Bolt, Hex 1/2-13x1.00
56	36875	1	Bearing, Flange
57	36874	1	Bearing, Flange
58	36876	1	Bearing, Ball
59	435507	4	Nut, Lock 1/2-13
NS	24608	1	Decal, Gravely Logo
NS	33927	2	Decal, Danger Foot
NS	38056	1	Decal, America
NS	33926	1	Decal, Danger Hand
NS	38847	1	Decal, Chute
NS	38848	1	Decal, Deflector



## GEAR CASE AND RAKE

ITEM			
NO.	PART NO.	QTY.	DESCRIPTION
1	37978	1	Gearcase Assembly
5	413447	15	Nut, Lock 5/16-18
14	37524	1	Gear Case
15	36860	2	Bushing, Flange 1.62x1.87x11
16	36921	1	Ring, Snap Internal 1.781
17	38817	1	Worm Shaft
18	37526	1	Bearing Cone
19	36352	1 101	Bearing Spacer
20	36230	1	Key, Straight SAE 1035
21	36853	1	Worm
22	36852	1	Spacer, Bearing
23	18446	1	Bearing Cone
24	120393	99111	Washer, Flat .344x.688x.065
25	131099	1	Washer, Lock 3/8 SP Heavy
26	180077	1	Bolt, Hex 5/16-18x.75
27	18445	1 1018	Bearing Cup
28	37527	1 1943	Bearing Cup
29	37528	1	Seal
30	37529	1	Adjustment Plug
31	36856	1 ostp	Cap, Dust
32	37530	1	Gearcase Shaft
33	38820	1	Key, Feather
34	36858	o mel see	Gear, Worm
35	36859	2	Washer, 1.625x2.50x.012
36	36861	1	Cover, Gear Case
37	36862	old ledd	Gasket
38	121753	4	Washer, Lock 1/4 Ext Th TYA
39	36863	2	Seal
40	38831	1	32" Rake Shaft
42	38832	1	Right Rake
43	38833	1	Left Rake
46	37542	1	Fan
47	36869	2	Pin, Roll 5/16x1.75
48	35945	201	Pipe Plug
49	37532	2	Bushing, Sleeve
50	37535	1	Washer
51	37536	1	Key, Straight
52	37537	1	Driver
53	37538	2	Friction Disc
54	37539	1	Driver Plate
55	180087	15	Bolt, Hex $5/16-18x2.00$
57	37540	1	Pressure Plate
58	12871	12	Spring, Compression
59	120386	12	Washer, Flat
72	180021	4	Bolt, Hex $1/4-20x.875$
74	36160	4	Spin Drive Zerk Fitting

## SECTION 6

## Set-Up Instructions

- 6.1 Remove the snowblower from the shipping container.
- 6.2 Mount the mast to the left side of the snowblower frame with 3/8-16x2 bolts, 3/8 lock washers, and 3/8-16 nuts.
- 6.3 Remove the clamps from the discharge chute.
- 6.4 Put a film of grease on the bottom of the discharge chute.
- 6.5 Set the discharge chute on the blower outlet aligning the teeth with the worm. Replace the clamps.
- 6.6 Slide the chute crank from the rear through the top hole in the mast support.
- 6.7 Slide the front end of the crank into the U-joint of the worm gear assembly and secure with a hair pin cotter.

#### LIMITED FIVE-YEAR WARRANTY

- 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.
- 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.
- 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.

- To obtain Warranty Service on a Gravely Product (including any battery or other component not manufactured by Gravely), use this procedure:
  - 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.
  - Make arrangements to have the equipment delivered to the dealer (refer to paragraph 6 a., below).
  - 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

 Warranty service on Gravely Products must be performed by an authorized Gravely dealer.

- 6. This Warranty does not cover the following:
  - 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.
  - 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.
- 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.
- 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.
  - 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.

