

SCAG®

HARD COVER VACUUM GRASS CATCHER TECHNICAL MANUAL

MODEL

GCV/HD-44/5

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SCAG POWER EQUIPMENT, INC.
SUBSIDIARY OF METALCRAFT OF MAVILLE

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TABLE OF CONTENTS

SUBJECT	PAGE
Introduction and Safety Instructions -----	2
Assembly Instructions	
Chute -----	3
Frame -----	3 - 5
Blower -----	5
Important Information -----	5
Illustrated Parts Listing -----	6 - 7
Warranty -----	8

INTRODUCTION

This manual has been prepared to provide the information you need to correctly assemble, operate, and maintain this attachment. Read it carefully and keep it for future reference. Should you ever need repair parts or service, contact your Scag authorized parts and service dealer.

To avoid personal injury, it is imperative that all safety instructions be observed.

Any reference made in this manual concerning the RH or LH sides are determined with the operator in the normal operating position.

The replacement of any part on this product by other than the manufacturer's authorized replacement part may adversely affect the performance, durability or safety of this product.

The manufacturer reserves the right to make changes on, or add improvement to, its product at any time without prior notice or obligation. The manufacturer also reserves the right to decide, upon its discretion and at any time, to discontinue a product.

SAFETY/OPERATING INSTRUCTIONS

1. Read this technical manual and the technical manual that is supplied with the machine this attachment is used on. A replacement manual is available by sending complete model and serial number information to:
Scag Power Equipment, Inc.
1000 Metalcraft Drive
P.O. Box 152
Mayville WI, 53050

2. When operating the mower without the grass catcher attachment, the discharge chute extension must be installed in the normal, full down position.
3. Never operate your mower without either the complete grass catcher or discharge chute extension properly installed.
4. Before removing grass bucket, disengage mower, stop engine on both the mower and auxiliary engine, and wait for all movement to stop.
5. Always turn engine off, remove key and wait for all movement to stop before servicing or cleaning the mower or grass catcher.
6. Do not modify or alter any component of the grass catcher attachment.
7. Do not allow anyone to ride on the grass catcher attachment or on the mower.

ASSEMBLY INSTRUCTIONS

NOTICE: Any instructions concerning item numbers refer to the illustrated parts breakdown on pages 6 and 7. Use this illustrated parts list as a reference when following the assembly instructions.

CHUTE ASSEMBLY

1. Place the catcher boot (item ~~14~~⁷) on the cutter deck. Firmly tap into place with front of boot snug against cutter deck front. Using the boot as a template, mark the two hole locations on the cutter deck. Drill holes, first using a 1/8" drill bit, then finishing with a 13/32" drill bit.
2. Install boot using (2) 3/8-16 x 1" bolts, (2) 3/8" flat washers, and (2) 3/8-16 wing nuts.

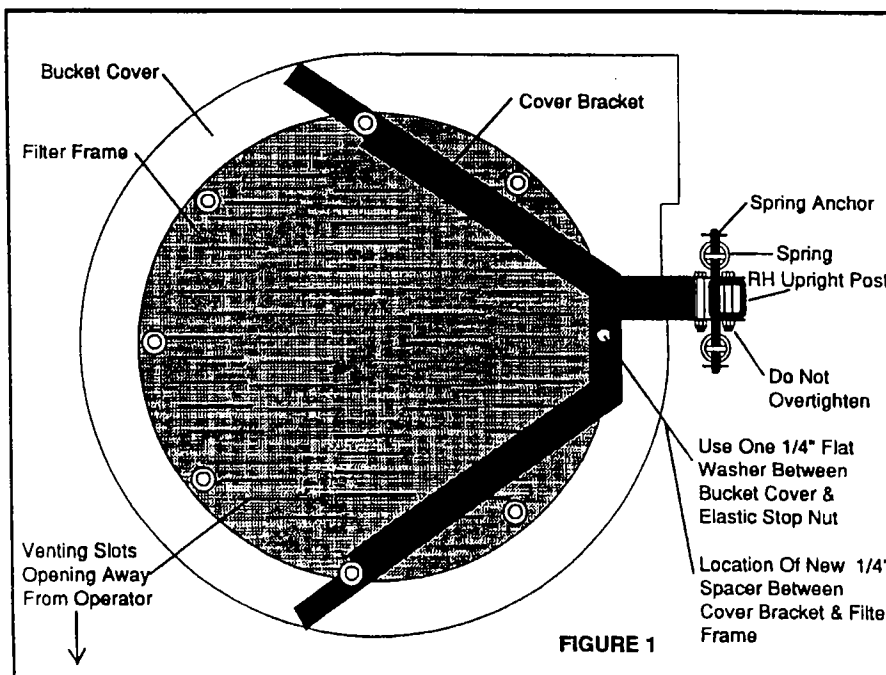
FRAME ASSEMBLY

1. Place main frame (item 32) on tractor.
2. Install (1) 3/8-16 x 2-1/2" bolt at rear of main frame (beneath tractor seat) with a 3/8" flat washer on top and bottom. Secure loosely with (1) 3/8-16 elastic stop nut.
3. Install (1) 3/8-16 x 4-1/2" bolt and (1) 3/8" flat washer, through the front LH side of the frame and rider yoke. Secure using (1) 3/8" flat washer and (1) 3/8-16 elastic stop nut.
4. Bolt the ballast support plate (item 39) under the main frame using (2) 3/8-16 x 2-1/2" bolts, (2) 3/8" flat washers, and (2) 3/8-16 elastic stop nuts.
5. Place engine mounting frame (item 35) on main frame. Place engine frame brace (item 44) on top of engine frame at bolt hole on RH side. Secure using (1) 3/8-16 x 4" bolt on LH side and (1) 3/8-16 x 4-1/2" bolt on RH side, (4) 3/8 x 1-1/2 x 7 ga. flat washers and (2) 3/8-16 elastic stop nuts. Secure loosely.
6. Remove the bolt securing the front of the winch assembly to the steering frame. Position the other end of the engine frame brace at the bolt hole and reconnect the winch mounting bolt using the 3/8-16 x 1-3/4" bolt and 3/8" flat washer supplied in the hardware package.
7. Fasten the front of the engine frame to the tractor yoke using a 3/8-16 x 3-1/4" bolt, a 3/8 x 1-1/2 x 7 gauge flat washer, and a 3/8-16 elastic stop nut.
8. Tighten the engine frame bolts and the center main frame mounting bolt.
9. Slide the bucket support frame (item 31) into the main frame. Secure using (2) 3/8-16 x 2-1/2" bolts, (4) 3/8" flat washers, and (2) 3/8-16 wing nuts.
10. Install the RH bucket brace (item 28, with bent tube) onto the bucket frame using (2) 3/8-16 x 2-1/4" bolts, (2) 3/8" flat washers, and (2) 3/8-16 elastic stop nuts.
11. Repeat with the LH bucket brace. (item 27)
12. Install (1) 5/16-18 nut on the eyebolt. (item 25)
13. Install the eyebolt through LH bucket brace and secure with (1) 5/16-18 elastic stop nut.
14. Install bucket (item 22) with handles resting against the vertical braces and secure with rubber strap (item 24).

15. Remove the back bolt securing the catcher main frame to the steering frame. This is the bolt located directly below the seat.
16. Position one end of the brace (item 56) for the RH upright post at the bolt hole directly below the seat and tighten the (1) 3/8-16 x 2-1/2" bolt, (2) 3/8" flat washers, and 3/8-16 elastic stop nut.
17. Position the other end of the brace to the bolt hole on the RH upright post. Secure using the 5/16-18 x 2-1/2" bolt and the 5/16-18 elastic stop nut.
18. Tighten the bolts securing the RH upright post to the barrel support frame, the bolt securing the brace to the catcher main frame/steering frame, and the bolt securing the brace to the RH upright post.
19. Install the filter frame (item 49) onto the moulded top (item 23), making sure the venting slots are pointed away from the operator. (see figure 1)

20. Install the cover bracket on top of the filter frame and moulded top. Position the 1/4" spacer (item 52) between the cover bracket and the filter frame at the bolt hole closest to the RH upright post.
21. Secure the cover bracket, filter frame, and bucket cover together using the (8) 1/4-20 x 1" bolts, (15) 1/4" flat washers, and (8) 1/4-20 elastic stop nuts. One 1/4" flat washer should be installed by the head of each bolt and by each elastic stop nut, except the bolt that secures the 1/4" spacer between the cover bracket and filter frame. Only one 1/4" washer will be used between the bucket cover and the elastic stop nut.
22. Install the grass filter around the filter frame. The elastic in the filter will go around the lip that circles the filter frame located inside the moulded top.
23. Mount the cover bracket onto the RH upright post using (1) 3/8-16 x 2-1/2" bolts, (2) 3/8" flat washers and 3/8-16 elastic stop nut. Tighten the bolt snugly but do not overtighten, allowing the cover bracket to pivot on the upright post. (see figure 1)

24. Pivot the moulded top up and back allowing the two spring anchors to become close enough to install the two new springs onto their anchors. Place springs on the outside edge of the anchors, so the bolts do not interfere. Pivot moulded top down onto the catcher bucket.



25. Install the other 3/8-16 x 2-1/2" bolt and 3/8-16 elastic stop nut through the bolt holes in the cover bracket located next to the pivot bolt. **Caution: Be sure to install stop bolt to prevent bucket cover from flipping over.**
26. Install the bucket cover latch onto the moulded top. There are two bolt holes drilled in the bucket cover on the LH side. Secure using the (2) 1/4-20 x 1" bolts, (4) 1/4" flat washers, and (2) 1/4-20 elastic stop nuts. The latch will secure the cover by clipping under one of the handles on the catcher bucket. The latch can be adjusted up or down to insure that it securely contacts the catcher bucket.
27. Install the intake nozzle through the hole in the bucket cover and secure it by clamping the 6" hose to the intake nozzle using a hose clamp.
28. Clamp the other end of the 6" hose to the blower housing using a hose clamp.
4. Install fan assembly (item 3) with key (item 5) and secure onto the crankshaft with a 3/8-24 x 2" fine thread bolt, a 3/8" lock washer, and a 3/8" flat washer.
5. Using a rubber mallet, tap, then tighten the blower fan hub onto the crankshaft.
6. Install inlet adaptor (item 4) using (6) 5/16-18 wing nuts.
7. The 8" inlet hose (item 16) should be cut to give the best fit at the approximate length shown below.
Note: Measure hose on machine before actually cutting.

SM-72	37"
SM-61	29"
SM-52	28"
SM-48	26-3/4"
8. Install the 8" inlet hose onto boot and inlet adaptor using two hose clamps. Make sure hose clears drive tire.
9. Install the 6" outlet hose (item 18) onto the blower housing and hose support using two hose clamps.

BLOWER ASSEMBLY

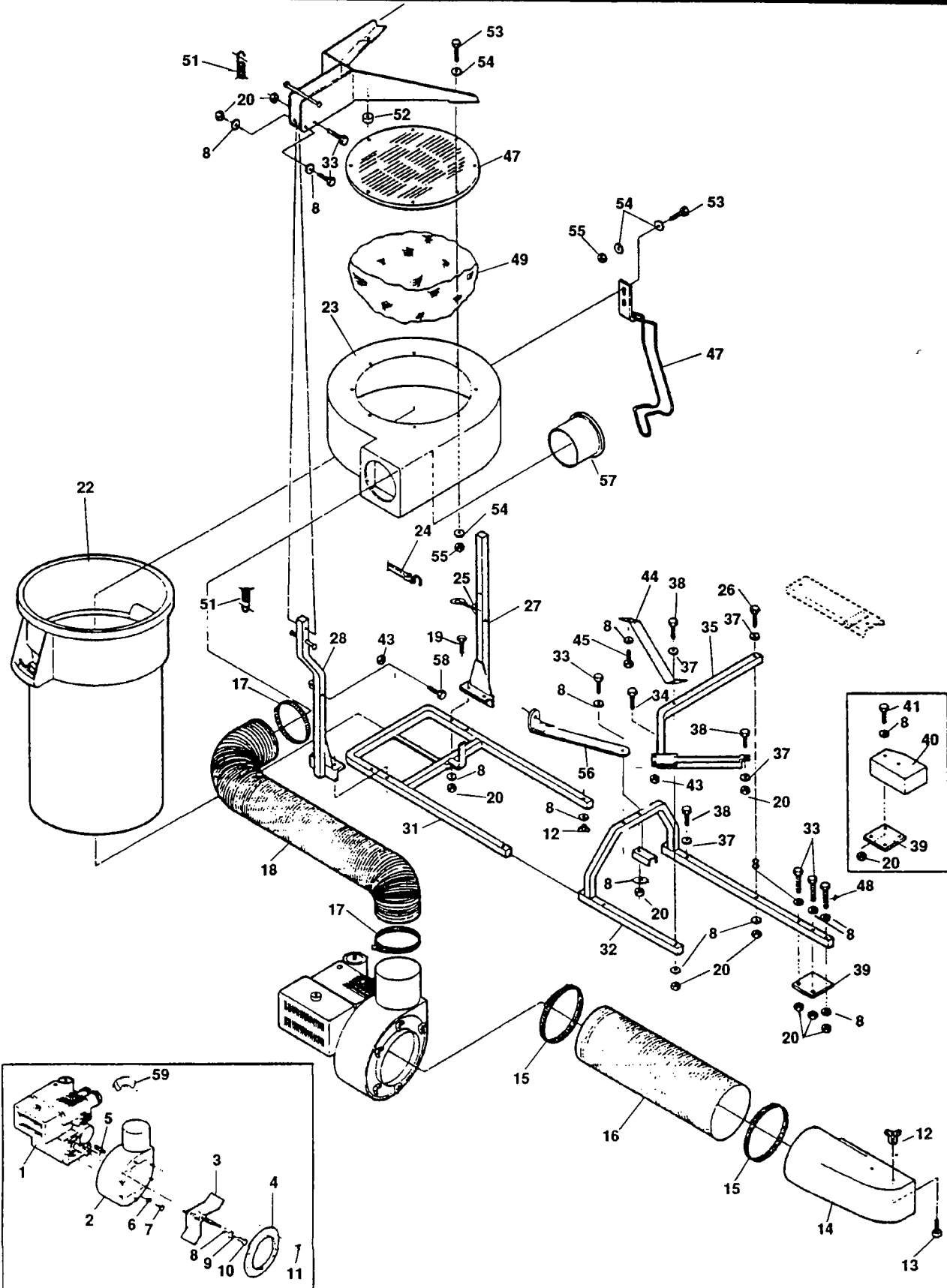
1. Mount engine (item 1) onto the engine plate using (4) 5/16-18 x 1-1/2" bolts and (4) 5/16-18 elastic stop nuts.
2. Attach engine exhaust deflector with the screw provided, so that exhaust is deflected downward.
3. Mount the rear blower housing assembly (item 2) using (4) 5/16-24 x 1" fine thread bolts and (4) 5/16" lock washers. Install into tapped engine holes.
10. Install ballast (item 40) on LH ballast support using (2) 3/8-16 x 5" bolts, (2) 3/8" flat washers, and (2) 3/8-16 elastic stop nuts.

IMPORTANT

Properly service engine with oil and fuel. Note that this is a fixed throttle engine.

Never run mower blades with blower engine shut off. Boot will plug severely.

When cleaning out boot, always disengage cutter drive belt and shut off mower engine.



GCV/HD-44/5 PARTS LIST

Ref. No.	Part Number	Description	Ref. No.	Part Number	Description
1	48173	Engine, 5 HP I.C. (1" Crankshaft)	31	45039	Bucket Support Frame
2	45080	Blower Housing Assembly	32	45038	Main Frame
3	45077	Fan Assembly (1" Bore)	33	*	Bolt, 3/8-16 x 2-1/2"
4	45081	Inlet Adaptor	34	*	Bolt, 5/16-18 x 1-3/4"
5	04063-06	Key 1/4 x 1/4 x 1-1/2" (for 1" crankshaft only)	35	45040	Engine Mounting Frame
6	*	Lockwasher, 5/16"	36	*	Bolt, 3/8-16 x 4"
7	04001-56	Bolt, 5/16-24 x 1"	37	04041-11	Washer, 3/8 x 1-1/2 x 7 ga.
8	04041-07	Washer, 3/8 (15/16 x 25/64 x 12ga)	38	*	Bolt, 3/8-16 x 3-1/4"
9	*	Lockwasher, 3/8"	39	42130	Ballast Support
10	*	Bolt, 3/8-24 x 2"	40	42134	Ballast
11	04022-02	Wing Nut, 5/16-18	41	*	Bolt, 3/8-16 x 5"
12	04029-03	Wing Nut, 3/8-16	42	*	Bolt, 3/8-16 x 4-1/2"
13	*	Bolt, 3/8-16 x 1"	43	*	Nut, 5/16-18 elastic stop
14	48132	Boot	44	42932	Engine Frame Brace
15	48136-02	Clamp 8"	45	*	Bolt, 3/8-16 x 1-3/4"
16	48135-05	Hose 8"	46	45136	Frame extension for adapting GCV - 44/5 to mount on STH-13KH, STH-13BV (must be ordered separately)
17	48136-01	Clamp 6"	47	48737	Container Latch
18	48135-06	Hose 6"	48	48738	Mesh Filter
19	*	Bolt, 3/8-16 x 2-1/4"	49	48739	Filter Support
20	*	Nut, 3/8-16 elastic stop	50	45429	Cover Bracket
21	48736	Intake Nozzle	51	48734	Spring
22	48133	Bucket	52	43063	Spacer
23	48735	Moulded Top	53	*	Bolt, 1/4-20 x 1"
24	48137	Rubber Strap	54	*	Washer, 1/4"
25	04070-04	Eyebolt, 5/16-18 x 2-3/4"	55	*	Nut, 1/4-20
26	*	Nut, 5/16-18	56	421134	Upright Post Brace
27	45372	Bucket Brace-LH	57	48736	Intake Nozzle
28	45428	Bucket Brace-RH	58	*	Bolt, 5/16-18 x 2-1/2"
29	*	Bolt, 5/16-18 x 2"	59	*	Exhaust Deflector w/Screw
30	*	Washer, 5/16"			

* Common hardware which should be purchased locally. All bolts Grade 5 plated, all other fasteners zinc plated.



WARNING

If incorrectly used, this machine can cause severe injury. Those who use and maintain the machine should be trained in its proper use, warned of its dangers, and should read the entire manual before attempting to set up, operate, adjust or service the machine.

LIMITED WARRANTY-COMMERCIAL EQUIPMENT

Any part of the Scag commercial catcher manufactured by Scag and found, in the reasonable judgment of Scag, to be defective in material or workmanship, will be repaired or replaced by an Authorized Scag Service Dealer without charge for parts and labor.

The Scag machine, including any defective part, must be returned to an Authorized Scag Service Dealer within the warranty period. The expense of delivering the machine to the dealer for warranty work and the expense of returning it back to the owner after repair or replacement will be paid for by the owner. Scag's responsibility in respect to claims is limited to making the required repairs or replacements, and no claim of breach of warranty shall be cause for cancellation or rescission of the contract of sale of any Scag machine. Proof of purchase will be required by the dealer to substantiate any warranty claim. All warranty work must be performed by an Authorized Scag Service Dealer.

This warranty is limited to one year from the date of original retail purchase for any Scag catcher that is used for commercial purposes, or any other income-producing purpose (90 days for rental use).

This warranty does not cover any catcher that has been subject to misuse, neglect, negligence, or accident, or that has been operated in any way contrary to the operating instructions as specified in the Technical Manual. The warranty does not apply to any damage to the catcher that is the result of improper maintenance, or to any catcher or parts that have not been assembled or installed as specified in the Technical Manual.

The warranty does not cover any catcher that has been altered or modified. In addition, the warranty does not extend to repairs made necessary by normal wear, or by the use of parts or accessories which, in the reasonable judgment of Scag, are either incompatible with the Scag mower or adversely affect its operation, performance or durability. This warranty does not cover engines and electric starters, which are warranted separately by their manufacturer.

Scag Power Equipment reserves the right to change or improve the design of any machine without assuming any obligation to modify any mower previously manufactured.

All other implied warranties are limited in duration to the one (1) year warranty period or ninety (90) days for catchers used for rental purpose. Accordingly, any such implied warranties including merchantability, fitness for a particular purpose, or otherwise, are disclaimed in their entirety after the expiration of the appropriate one-year or ninety day warranty period. Scag's obligation under this warranty is strictly and exclusively limited to the repair or replacement of defective parts and Scag does not assume or authorize anyone to assume for them any other obligation. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

Scag assumes no responsibility for incidental, consequential or other damages including, but not limited to, expense for gasoline, expense of delivering the machine to an Authorized Scag Service Dealer and expense of returning it back to the owner, mechanic's travel time, telephone or telegram charges, rental of a like product during the time warranty repairs are being performed, travel, loss or damage to personal property, loss of revenue, loss of use of the mower, loss of time, or inconvenience. 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 also have other rights which vary from state to state.

PLEASE BE CAREFUL

1. Keep all shields in place, especially grass discharge guard.
2. Stop machine and remove spark plug wire to adjust or service.
3. When mechanism becomes clogged, stop engine before cleaning.
4. Keep hands, feet and clothing away from power-driven parts.
5. Keep off implement unless seat or platform is provided.
6. Keep others off of the tractor (only one person at a time).

REMEMBER - YOUR MOWER IS ONLY AS SAFE AS THE OPERATOR!

**FAILURE TO FOLLOW CAUTIOUS OPERATING PRACTICES MAY RESULT
IN SERIOUS BODILY INJURY. WE WANT YOU TO CONTINUE TO ENJOY
AND PROFIT BY USING OUR PRODUCTS.**

OWNER REFERENCE

TRACTOR MODEL _____

TRACTOR SERIAL NUMBER _____

CATCHER MODEL _____

CATCHER SERIAL NUMBER _____