

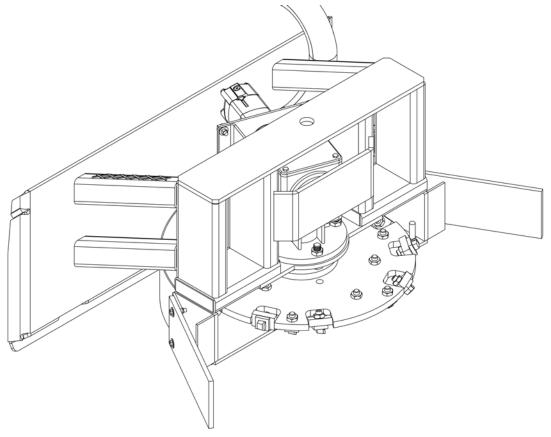
# Operation and Parts Manual

**Hydraulic** 

**Stump Busters** 

Models: SC-30H Safety
Operation
Maintenance
Repair
Troubleshooting

Parts



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#### Introduction

The Shaver Manufacturing Company would like to congratulate you on your purchase of the Shaver Stumpbuster™. You have selected the best Stump Buster in its class. The clean design and uncomplicated working principle have made Shaver the largest selling Stump Buster in the country.

Shaver manufacturers five models of stump busters. Three of the models are hydraulically powered. All the models are a durable piece of equipment that, with regular maintenance, will provide many years of service.

This manual provides information regarding assembly, operation, and maintenance. It is important to read and become familiar with this manual before assembling or operating the Shaver Stumpbuster $^{TM}$ .

**Note:** For other valuable information on farm equipment operation and safety, refer to the following resources.

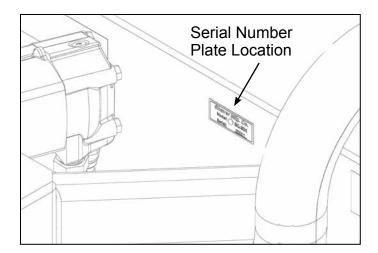
- Farm Equipment Manufacturers Association (FEMA) http://www.farmequip.org/home
- National Ag Safety Database http://www.cdc.gov/nasd

#### **Product Information**

The SC-30H Hydraulic Stumpbuster<sup>™</sup> is shipped in one piece ready to mount to a skidsteer loader with a standard universal mounting bracket.

Record the Shaver product information here. The model number and serial number are found on the metal tag attached to the stump buster.

**Note:** For the operation of this stump buster, references to direction (right, left, forward, and rearward) are determined from the operator's position in the tractor seat.





#### General

Safety of the operator and bystanders is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur, which could have been avoided by a few seconds of thought and a more careful approach to handling the equipment.

Improper operation and maintenance of this unit could result in a dangerous situation that could cause injury or death.

If you have any questions not answered in this manual or require additional copies or the manual is damaged, please contact your dealer or

Shaver Manufacturing Company 103 South Washington Avenue P.O. Box 358 Graettinger, Iowa 51342

Phone: (712) 859-3293 Fax: (712) 859-3294 www.shavermfg.com

# **AWARNING**



Do not use the unit until you read and understand the information contained in this manual.



Safety precautions and warnings are provided in this manual and on the unit. If these hazard warnings are not heeded, bodily injury or death could occur to you or to other persons.

Shaver Manufacturing Company cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the unit are, therefore, not all-inclusive. If a method of installation or operation not specifically recommended by us is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that the unit will not be damaged or be made unsafe by the methods that you choose.

The information, specifications, and illustrations in this manual are based on the information that was available at the time this material was written and can change at any time without notice.

# **Safety Alert Symbols**



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This manual contains DANGERS, SAFETY INSTRUCTIONS, CAUTIONS, IMPORTANT NOTICES, and NOTES which must be followed to prevent the possibility of improper service, damage to the equipment, personal injury, or death. The following key words call the readers' attention to potential hazards.

Hazards are identified by the "Safety Alert Symbol" and followed by a signal word such as "DANGER", "WARNING", or "CAUTION".

# **A DANGER**

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

# **AWARNING**

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

# **ACAUTION**

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

## NOTICE

Indicates that equipment or property damage can result if instructions are not followed.

#### SAFETY INSTRUCTIONS

Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

**Note:** Contains additional information important to a procedure.



# Safety Instructions

BEFORE OPERATING THE STUMPBUSTER: PAY ATTENTION! STAY ALERT! YOUR SAFETY IS INVOLVED!

Safety is a primary concern in the design and manufacturing of our products. Unfortunately our efforts to provide safe equipment can be wiped out by an operator's single careless act.

In addition to the design and configuration of equipment, hazard control and accident prevention are dependent upon the awareness, concern, judgement, and proper training of personnel involved in the operation, transport, maintenance, and storage of equipment.

It has been said "The best safety device is an informed, careful operator." We ask you to be that kind of operator.

#### Training

# **AWARNING**

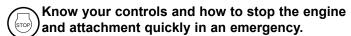
**Read And Understand Manual** Safety instructions are important! To prevent personal injury or even death, be sure you read and understand all of the instructions in this manual and other related OEM equipment manuals! safety sign (decal) information. follow

This unit was designed for a specific application; removing stumps from the ground. DO NOT modify or use this stump buster for any application other than which it was designed.

Stump busters that are operated improperly or by untrained personnel can be dangerous; exposing themselves and/or bystanders to possible serious injury or death.

Replacement manuals are available from your dealer, online at www.shavermfg.com, or if you live in the United States or Canada, you can call (712) 859-3293.

If you do not understand any part of this manual and need assistance, see your dealer.



Operators must be instructed in and be capable of safely operating this equipment, its attachments, and all controls. Do not allow anyone to operate this equipment without proper instructions.

# **A** WARNING

Keep hands and body away from pressurized lines. Use paper or cardboard, not hands or other body parts, to check for leaks. Wear safety goggles. Hydraulic fluid under pressure can easily penetrate skin and will cause serious injury or death.

Make sure that all operating and service personnel know that if hydraulic fluid penetrates the skin, it must be surgically removed as soon as possible by a doctor familiar with this form of injury or gangrene, serious injury, or death will result. CONTACT A PHYSICIAN IMMEDIATELY IF FLUID ENTERS THE SKIN OR EYES. DO NOT DELAY.



Never allow children or untrained persons to operate equipment.

#### **Preparation**

# **A** WARNING

To prevent possible injury or death:







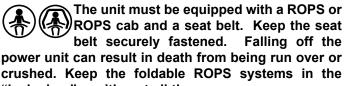
Always wear relatively tight and belted clothing to avoid entanglement in moving

parts. Wear sturdy, rough-soled work shoes and protective equipment for eyes, hair, hands, hearing, and head.



Make sure shields and guards are properly installed and in good condition. Replace if Make sure the stump buster is damaged. properly attached to the unit, adjusted properly, and in good

operating condition.



"locked up" position at all times. Inspect the area and remove stones, branches, or other hard objects that might be thrown,

causing injury or damage.



Consult the local utilities before digging. Know the location of and avoid contracting all underground cables, pipelines, overhead wires, and other hazards in the digging area.



#### SAFETY INSTRUCTIONS



Check all lubrication points and grease, as instructed in the Lubrication Information section.

ON SC-30H make sure the skid loader bracket is secured by the locking levers in the down position.



Make sure all safety decals are installed and understood. Replace if damaged.



Check the condition of the stump buster teeth before operation.

#### Operation

# **AWARNING**



Do not allow bystanders in the area when operating, attaching, removing, assembling or servicing the equipment.



Never allow children or untrained persons to operate the equipment.



Consult the local utilities before working. Know the location of all underground cables, pipelines, overhead wires, and other hazards in the working area and avoid contact.



Avoid contact with the electrical wires.



Do not put the stump buster into service unless the cutting teeth edges are intact and in good condition.



Do not put the stumpbuster into service unless all the shields and guards are in place and in good condition. Replace if damaged.





Do not operate the equipment while under the influence of alcohol or drugs.

# **A** WARNING



Operate only in daylight or good artificial light.



Keep hands, feet, hair, and clothing away from the equipment while the engine is running. Stay clear of all moving parts.



Always comply with all state and local lighting and marking requirements.



Never allow riders on the power unit or attachment.



Always sit in the power unit seat when operating the controls or starting the engine. Securely fasten the seat belt, place the transmission in neutral, engage the brake, and ensure all other controls are disengaged before starting the power unit engine.



NEVER WORK UNDERNEATH EQUIPMENT. Never place any part of the body underneath the equipment or between moveable parts even when the engine has been turned off. Hydraulic system leak down, hydraulic system failures, mechanical failures, or movement of the control levers can cause the equipment to drop or rotate unexpectedly and cause severe injury or death.



## Operation (continued)

# **A** WARNING





For Models SC-30H, put the skid loader into park or neutral and set the brake before engaging the hydraulics.



Do not operate on steep slopes. Do not stop, start, change directions suddenly, or use excessive speed on steep slopes.



Look in ALL directions to make sure the area is clear and safe before operating the equipment.

#### Maintenance

# **A** WARNING



Service and maintenance work not covered in OWNER SERVICE must be done by a qualified dealership. Special skills, tools, and safety procedures may be required. Failure to follow these instructions can result in serious injury or death.







Before you or the dealer performs service or maintenance, lower the equipment to the ground and

block securely. Turn the engine off and remove the key. On SC-30H, disconnect the two hydraulic hoses from the skid loader.



Before servicing, make sure the unit is properly attached to the tractor.



Keep all persons away from the operator control area while performing adjustments, service, or maintenance.



Never perform service or maintenance with the engine running.



Do not modify or alter, or permit anyone else to modify or alter, the equipment or any of its components in any way. This will void the warranty.



Do not allow bystanders in the area when operating or servicing the equipment.



After servicing, make sure the shields and quards are properly reinstalled and in good condition. Replace if damaged.

#### SAFETY INSTRUCTIONS



Tighten all bolts, nuts, and screws to torque chart specifications in this manual.

#### Storage

# **AWARNING**



Block the equipment securely for storage.



Do not climb or lean on equipment stored on a stand.



Keep children and bystanders away from the storage area.

# **Specifications**

SC-30H HYDRAULIC STUMPBUSTER				
Description	Specification			
Weight	650 lbs			
Cutting Wheel Diameter	24 inches			
Cutting Wheel Speed	1200 rpm			
Hub Torque	140 ft lbs			
Required Power Source	16 Min 30 GPM			
Cutting Teeth	23 carbide steel teeth			
Maximum Cutting Depth	10 inches			



# **Safety Signs and Informational Labels**

#### **General Information**

The types of safety signs (hazard labels) and instructional labels are shown in the following illustrations. Good safety practices require that you familiarize yourself with the various safety signs, the type of warning, and the area or particular operation related to that area that requires your SAFETY AWARENESS.



#### Think SAFETY!

**Work SAFELY!** 

#### SAFETY INSTRUCTIONS



#### Safety and Instructional Signs

- 1. Keep safety or instructional signs clean and legible at all times.
- 2. Replace any missing or hard-to-read safety or instructional signs.
- 3. Locations for the signs and replacement part numbers are shown in this section.

#### **How to Install Replacement Safety Signs**

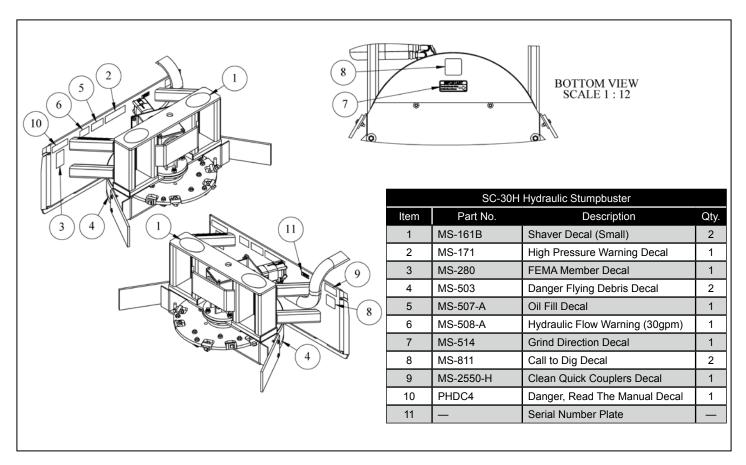
1. Clean and dry the installation area.

**Note:** Do not install the signs if the temperature is below 50°F (10°C).

- Determine the exact position before you remove the backing paper.
- 3. Remove the backing paper.
- 4. Align the sign over the specified area and carefully press the sign to the part/frame.

**Note:** Small air pockets can be pierced with a pin and smoothed out using the piece of backing paper.





1. MS-161B – Shaver Decal (small)



2. MS-171 - High-Pressure Warning Decal



3. MS-280 - FEMA Member Decal



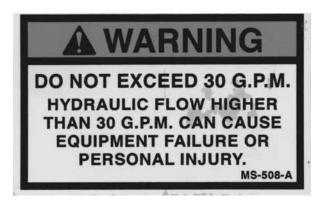
4. MS-503 - Danger Flying Debris Decal



5. MS-507-A - Oil Fill Decal



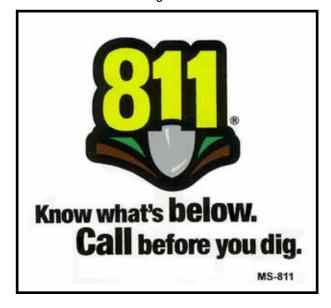
6. MS-508-A – Hydraulic Flow Warning Decal



7. MS-514 - Grind Direction Decal



8. MS-811 - Call to Dig Decal



9. MS-2550-H - Clean Quick Couplers Decal



PHDC4 – Danger, Read the Manual Decal



# Attaching SC-30H Hydraulic Stumpbuster to a Skid Steer Loader



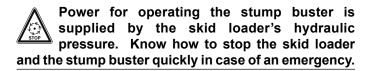




- Attach the stumpbuster to the skid loader with the quick attach bracket by mounting the plate on the boom and moving the boom levers into the down position. Make sure the levers are locked and secure.
- Locate the hose connected to the valve port marked "P". This is the pressure hose. Attach a quick coupler to its end and then connect to the skid loaders hydraulic pressure source.
- 3. Locate the hose connected to the valve port marked "R". This is the hose for the oil to return to the skid loader. Connect a quick coupler to the end and then connect it to the skid loader return outlet.

# Operation

# **AWARNING**

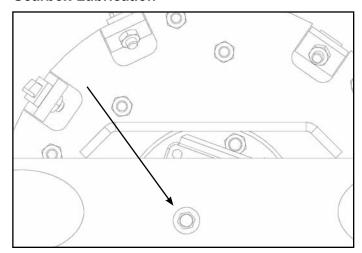


- Engage the hydraulic pressure. StumpBuster will operate between 16-30 GPM. Do not operate skid loader over 30 GPM.
- 2. Lower the skid loader boom arms onto the stump until the wheel is at the desired cutting depth.
- Once the stump is removed, disengage the skid loader hydraulics. Raise the stump buster off the ground.



## **Maintenance**

#### **Gearbox Lubrication**



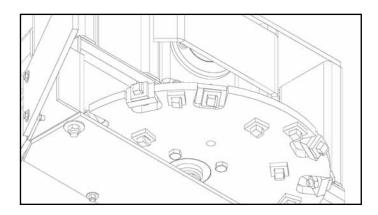
- The gearbox does not contain oil. Fill before operating. Failure to do so will void the one year warranty.
- 2. Fill the gearbox with three pints of SAE 90 oil.
- 3. For the gearbox, use a high quality gear oil with a viscosity index of 80W or 90W and an API service rating of GL-4 or 5 in the gearboxes.

# **Carbide Teeth Replacement**

**Note:** Replace teeth whenever they become damaged, broken, or excessively worn. Excessively worn cutting edges greatly decrease cutting efficiency. Teeth are not a "warranty" part.

# NOTICE

Never operate the stumpbuster that has missing teeth.



- 1. Remove the hex nut from the tooth.
- 2. Remove the tooth.
- 3. Insert the new tooth and secure with the hex nut.
- 4. Torque the nut to 170 ft lbs.



# Cleaning and Storage

## Cleaning

#### After Each Use

- 1. Remove large debris, such as clumps of dirt, grass, crop residue, etc., from the machine.
- Inspect the machine and replace worn or damaged parts.
- Replace any safety decals that are missing or not readable.

#### **Periodically or Before Extended Storage**

- Clean large debris, such as clumps of dirt, grass, crop residue, etc., from the stump buster.
- Remove the remainder using a low pressure water spray.
  - a. Be careful when spraying near scratched or torn safety decals or near the edges of the decals, as water spray can peel the decal off the surface.
  - b. Be careful when spraying near chipped or scratched paint as water spray can lift the paint.
  - c. If a pressure washer is used, follow the advice of the pressure washer manufacturer.
- Inspect the stump buster and replace worn or damaged parts.
- Sand down scratches and the edges of areas of missing paint and coat with spray paint of matching color.
- Replace any safety decals that are missing or not readable (supplied free by dealer). See Safety Signs section for the installation location.

#### Storage

- 1. Lower the stump buster onto a flat, dry surface.
- 2. Disconnect the hydraulic hoses from the skid loader.
- 3. Disconnect the stump buster from the skid loader.

## Removing from Storage

- 1. Remove all protective coverings.
- Tighten all loose bolts, nuts, and/or deterioration and replace if necessary.
- 3. Check hydraulic hoses for deterioration and replace if necessary.



# **Bolt Torque Chart**

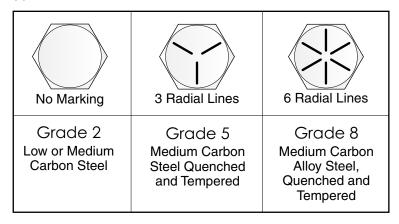
Always tighten hardware to these values unless a different torque value or tightening procedure is listed for a specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for metric hardware.

Make sure the fastener threads are clean and start the thread engagement properly.

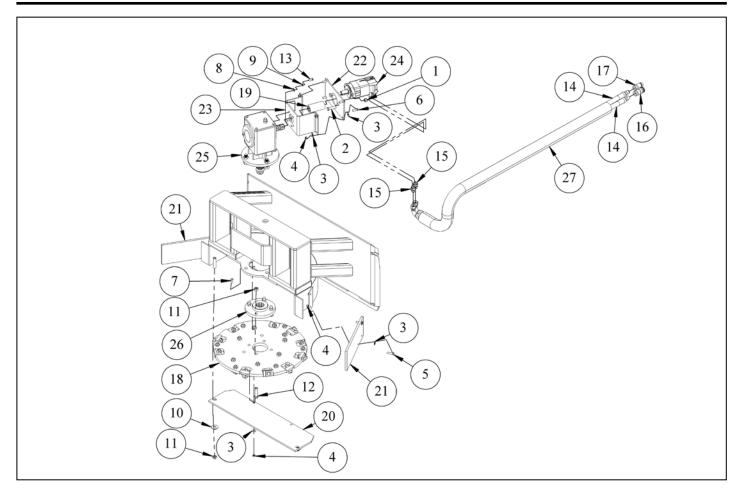
All torque values are given to specifications used on hardware defined by SAE J1701 MAR 99 & J1701M JUL 96.



	Wrench	MARKING ON HEAD						
Diameter		SAE 2		SAE 5		SAE 8		
(Inches)	Size	lbs-ft	N-m	lbs-ft	N-m	lbs-ft	N-m	
1/4"	7/16"	6	8	10	13	14	18	
5/16"	1/2"	12	17	19	26	27	37	
3/8"	9/16"	23	31	35	47	49	67	
7/16"	5/8"	36	48	55	75	78	106	
1/2"	3/4"	55	75	85	115	120	163	
9/16"	13/16"	78	106	121	164	171	232	
5/8"	15/16"	110	149	170	230	240	325	
3/4"	1-1/8"	192	261	297	403	420	569	
7/8"	1-5/16"	306	416	474	642	669	907	
1"	1-1/2"	467	634	722	979	1020	1383	



# **Parts**

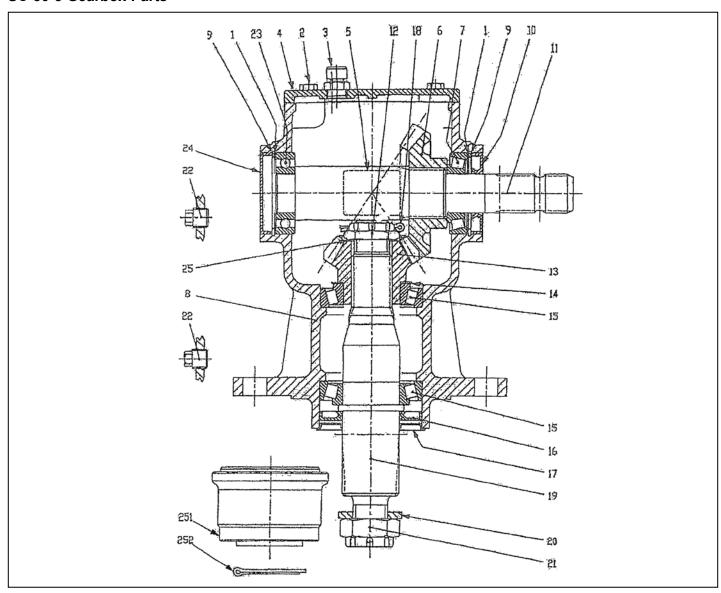


Item	Qty	Part No.	DESCRIPTION
1	2	300124	NYLON LOCKNUT 1/2 COURSE
2	2	300131	CAP SCREW 1/2 X 2 HH
3	14	300178	FLATWASHER 3/8
4	10	300181	LOCKNUT 3/8
5	4	300184	CAP SCREW 3/8 X 1-1/2 HH
6	4	300186	CAP SCREW 3/8 X 1-1/4 HH
7	2	300189	TAP BOLT - 3/8 X 1
8	4	300202	FLATWASHER 5/16
9	4	300204	WASHER, LOCK 5/16 ZN
10	2	300213	FLAT WASHER 5/8
11	6	300214	NUT, LOCK 5/8-11 HEX CONE ZN
12	4	300220	CAP SCREW 5/8 X 1/2 HH
13	4	300362	BOLT, HHCS M8-1.25 X 25 G8.8 ZN
14	2	700103	HOSE ASSY, HYD 3/4" x 87"

Item	Qty	Part No.	DESCRIPTION
15	2	700108	ADAPTOR, SAE #12 MJIC-#10 MORB
16	1	CT-832-FC	1/2 FEMALE FLAT FACE COUPLER
17	1	CT-832-MC	1/2 MALE FLAT FACE COUPLER
18	1	SC-25-9	WHEEL ASSY, CUTTING, W/TEETH
19	1	SC-25-H7	COUPLER, 1-3/8-6 SPL x 1 DIA 1/4 KW
20	1	SC-30-2M	PLATE, HOUSING COVER
21	2	SC-30-2N	FLAP, RUBBER DEFLECTOR
22	1	SC-30-2Q-PR	PLATE, HYD MOTOR MNT
23	1	SC-30-2R-PR	BRACKET, HYD MOTOR MNT
24	1	SC-30-2S-PR	MOTOR, HYD 6.2 CID
25	1	SC-30-5	GEAR BOX ASSY, RED W/BOLTS
26	1	SC-50-53	GEAR BOX HUB/WHEEL ATTACH
27	1	SC-127	COVER, HOSE 2.86" BLACK



# **SC-30-5 Gearbox Parts**



Item	Qty.	Part No.	Description
1	2	SC-25-5H	Shim Kit
2	4	SC-25-5B1	Bolt
3	1	SC-25-5B2	Vent Plug 1/2" Gas
4	1	SC-25-5B3	Cover
5	1	SC-50-5B4	Plate
6	1	SC-25-5C	Crown
7	1	SC-25-5D	Bearing 30207
8	1	SC-25-5B	Casting
9	2	SC-25-5J	Snap Ring For Holes
10	1	SC-25-5E	Oil Seal 35x72x10
11	1	SC-25-5F	Input Shaft
12	1	SC-25-5N	Castle Nut
13	1	SC-25-5V	Pinion
14	1	SC-25-5L	Shim

Item	Qty.	Part No.	Description
15	2	SC-50-5T	Bearing
16	1	SC-25-5R	Oil Seal 50x90x10
17	1	SC-25-5M	Screen Protection
18	1	SC-25-5W	Cotter Pin
19	1	SC-25-5U	Output Shaft
20	1	SC-25-5Q	Flat Washer
21	1	SC-25-SN1	Castle Nut
22	2	SC-50-5Y	Plug 3/8" Gas
23	1	SC-25-5D1	Bearing
24	1	SC-25-5R1	Oil Seal 72x10
25	1	SC-25-5X	Shim
251	1	SC-50-53A	Hub
252	1	SC-25-5B7	Cotter Pin



# Warranty

#### **Limited Warranty**

Shaver Manufacturing Company, LLC warrants each new Shaver product to be free from defects in material and workmanship. This warranty is applicable only for the normal service life expectancy of the product or components, not to exceed 12 consecutive months from the date of delivery of the new Shaver product to the original purchaser.

Genuine Shaver replacement parts and components will be warranted for 90 days from the date of purchase, or the remainder of the original equipment warranty period, whichever is longer.

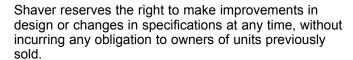
Under no circumstances will it cover any merchandise or components thereof, which, in the opinion of the company, have been subjected to misuse, unauthorized modification, alteration, an accident, or if a repair has been made with parts other than those obtainable through Shaver.

Our obligation under this warranty shall be limited to repairing or replacing any part that, in our judgment, shall show evidence of such defect, provided further that such part shall be returned within thirty (30) days from the date of failure to Shaver, routed through the dealer and distributor from whom the purchase was made. transportation charges prepaid. These are the items that must be returned: gearboxes, valves, base plates, PTO shafts, boom, arch, whole good (ex: driver, stumpbuster). motors, driver cylinders, and short channels. If you are uncertain what to return, please call Shaver. Provide pictures if you are unable to return parts. Include pictures of the serial number of the unit and a copy of the invoice for date-of-purchase proof. All returned items must have an RGA number. Contact Shaver at 712-859-3293 to get authorization to return, file your warranty claim and, if needed, an RGA will be provided.

This warranty shall not be interpreted to render Shaver liable for injury or damages of any kind or nature to person or property. This warranty does not extend to the loss of crops, loss because of delay in harvesting, or any expense or loss incurred for labor, substitute machinery, rental, or for any other reason.

Except as set forth above, Shaver shall have no obligation or liability of any kind on account of any of its equipment and shall not be liable for special or consequential damages. Shaver makes no other warranty, expressed or implied, and specifically, Shaver disclaims any implied warranty of merchantability or fitness for a particular purpose. Some states or provinces do not permit limitations or exclusions of implied warranties or incidental or consequential damages, so the limitations or exclusion in this warranty may not apply.

This warranty is subject to any existing conditions of supply which may directly affect our ability to obtain materials or manufacture replacement parts.



No one is authorized to alter, modify, or enlarge this warranty, nor the exclusion, limitations, and reservations.

Shaver Manufacturing Co., LLC. 103 South Washington Avenue P.O. Box 358 Graettinger, IA 51342

Phone: (712) 859-3293 Fax: (712) 859-3294 sales@shavermfg.com www.shavermfg.com



Notes			



