

SHAVER

POST HOLE

FILL GEARBOX WITH

SAE 90

301 - 1 Qt.

601 - 2 Qt.

901 - 3 Qt.

DIGGER

CAUTION Does Not Contain Oil Fill Before Operating

OPERATOR'S MANUAL MODEL 301, 601, 901

SAFETY INSTRUCTION

Keep all shields and safety decals in place: PTO shield MUST be installed before operating:

DO NOT wear loose clothing while operating machine.

DO NOT exceed PTO operating speed of 540 RPM.

DO NOT operate implement with PTO angle in excess of 45. Shut off tractor engine, set brakes, leaving tractor seat.

Keep spectators clear of implement when in operation. Check drive shaft set screw before each use.

DO NOT move trace ging hole.

Use only shear bolts ot available use Grade 2 bolts

Wear safety goggles will Stay completely away from

TO PREVENT SERIOUS INJURY OR DEATH: Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted

- Head and understand Owner's Manual before operating
- Operate only from tractor seal
- Stay away from rotating parts. Keep others away
- Do not dig around underground utility lines without checking with authorities.

TO PREVENT SERIOUS INJURY OR DEATH:

Coxtast dester, anke sure your machine has all permanent granda and shieldash place.

- Copyet operate without all guards and shields in place.
- Exercises when auger is higher than 12 inches above ground sevel. Exists so may cause driveline to bind, resulting in equipment iesel 13089 so may cause dansge or operator injury.

860 auger rotation before manuevering, relocating or transporting.



DANGER



- Do not use body weight to force augus into the ground or to locate augus point whith augus is
- Keep away from auger, cutting head, and driveline when entitle is running.



DO NOT OPERATE



KEEP CLEAR!

Keep Others Away! ENTANGLEMENT HAZARD can cause Serious Injury or Death

a entionse ingles, se prefiere que busque a alguien que interprete las instrucciones para usted de manually position the auger or manually force the auger into the ground. machine is designed to be operated ONLY from the tractor seat.
p everyone clear of all moving parts of the digger while in operation.

IMPORTANT

TO PREVENT PTO SHAFT OR GEAR DAMAGE, USE ONLY 3/8-16 X 2-1/2" GRADE 2 SHEAR BOLTS.







NOT THIS! NOT THIS!



DANGER

DO NOT ATTACH THIS IMPLEMENT OR ATTEMPT TO OPERATE UNTIL YOU HAVE READ AND UNDERSTOOD ALL INSTRUCTIONS IN THE OWNER'S MANUAL. IF AN OWNER'S MANUAL IS NOT AVAILABLE CONTACT:

SHAVER MANUFACTURING CO. GRAETTINGER, IOWA 51342

(712) 859-3293





THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY WARNING MESSAGES. CAREFULLY READ EACH WARNING MESSAGE THAT FOLLOWS. FAILURE TO UNDERSTAND AND OBEY A SAFETY WARNING, OR RECOGNIZE A SAFETY HAZARD, COULD RESULT IN AN INJURY OR DEATH TO YOU OR OTHERS AROUND YOU. THE OPERATOR IS ULTIMATELY RESPONSIBLE FOR THE SAFETY OF HIMSELF, AS WELL AS OTHERS, IN THE OPERATING AREA OF THE POST HOLE DIGGER.

IMPORTANT!

Working with unfamiliar equipment can lead to careless injuries. Read this manual, and the manual for your tractor, before assembly or operating, to acquaint yourself with the machines. It is The Post Hole Digger Owner's Responsibility, If This Machine Is Used By Any Person Other Than Himself, Is Loaned Or Rented, To Make Certain That The Operator, Prior To Operating:

- 1. Reads And Understands The Operator's Manuals.
- 2. Is Instructed In Safe And Proper Use.

The majority of accidents involve entanglement on the driveline or auger. This entanglement risk becomes greater when you replace our shear bolts or auger retaining bolts with bolts longer than those specified by the manufacturer. This improper replacement occurs most often on machines that are loaned or rented to someone who has not read the owner's manual and is not familiar with a Post Hole Digger.

- This Post Hole Digger was designed for one-man operation from the tractor seat. It is the responsibility of the operator to see that no one is within twenty-five feet (25') of the digger when it is started. Do not operate the digger with another person near, or in contact with, any part of the digger, PTO driveline, or auger. Serious personal injury or death may result if any attempt is made to assist digger operation by hand.
- The use of this equipment is subject to certain hazards which cannot be protected against by mechanical means or product design. All operators of this equipment must read and understand this entire manual, paying particular attention to safety and operating instructions prior to using. If there is something in this manual you do not understand, ask your supervisor, or your dealer, to explain it to you.
- Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders twenty-five (25') away from an operating digger. Only properly trained people should operate this machine. It is recommended the tractor be equipped with a Rollover Protection System (ROPS) and a seat belt that is used. Always stop the PTO, set brake, shut off the tractor engine, remove the tractor key, and allow auger to come to a complete stop before dismounting tractor. Never leave equipment unattended with the tractor running.

- Please remember it is important that you read and heed the safety signs on the digger and the safety rules set forth. Clean and replace all safety signs if they cannot be clearly read and understood. They are there for your safety, as well as the safety of others. The safe use of this machine is strictly up to you, the operator.
- All things with moving parts are potentially hazardous. There is no substitute for a cautious, safe minded
 operator who recognizes potential hazards and follows reasonable safety practices. The manufacturer
 has designed this digger to be used with all its safety equipment properly attached to minimize the
 chance of accidents. Study this manual to make sure you have all safety equipment attached.
- If a safety shield or guard is removed for any reason, it must be replaced before the machine is again operated. Always use, and maintain in place, all power take off guards furnished with the tractor as well as the power take off guards and shields furnished with the digger.
- This digger is designed for use only on tractors with 540 RPM power take off.
- When the use of hand tools is required to perform any part of assembly, installation, adjustment, maintaining, repairing, removal, or moving the digger, be sure the tools used are designed and recommended by the tool manufacturer for that specific task.
- Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintaining, repairing, removal, or moving the digger. Do not allow long hair, loose fitting clothing, or jewelry to be around moving parts.
- Always use two people to handle heavy, unwieldy components during assembly, installation, removal, or moving the digger.
- Never place any part of your body where it would be in danger if movement should occur during assembly, installation, operation, maintaining, repairing, removal, or moving the digger.
- Never place yourself between the tractor and digger while implement is in operation.
- Do not walk or work under a raised digger or attachment unless it is securely blocked or held in position. Do not depend on the tractor hydraulic system to hold the implement or attachment in place.
- A heavy load can cause instability of the tractor. Use extreme care during travel. Slow down on turns
 and watch out for bumps. The tractor may need front counterweights to counterbalance the weight of
 the digger.
- Never use alcoholic beverages or drugs which can hinder alertness or coordination while operating this equipment. Consult your doctor about operating this machine while taking prescription medications.
- Do not allow riders on the digger or tractor at any time. There is no safe place for riders.
- Before you operate the digger, check over all pins, bolts, and connections to be sure all are securely in place. Replace any damaged or worn parts immediately.
- Consult local utility companies to make certain there are no buried gas lines, electrical cables, etc., in the work area before beginning operation.

- Do not allow anyone who is not familiar with the safety rules and operation instructions to use this Post Hole Digger.
- Never allow children to operate or be around this digger.
- Use stabilizer bars, adjustable sway chains, or sway blocks on your tractor lift arms to keep the Post Hole Digger from swinging side to side.
- Never replace the shear bolt or auger retaining bolt with any length other than what is specified
 in this manual. A longer or protruding fastener is more likely to grab loose clothing or gloves
 which can result in serious injury or death.
- Clear the work area of objects which might be picked up and thrown or entangled in the auger.
- To prevent rapid wear of U-Joints and possible failure of drivelines, never lift auger point more than 12" off the ground with PTO operating.
- To prevent possible instantaneous driveline failure, never move digger from hole-to-hole or trans port while auger is rotating. This could lead to injury from flying pieces of the failed driveline.
- Do not operate digger on steep hillsides. When digging on uneven or hilly terrain, position the tractor with the Post Hole Digger uphill. With the Post Hole Digger downhill, the tractor could tip when attempting to pull the auger from its hole.
- Never position the auger point by hand or with any tool when the tractor is running.
- Never position the auger point by putting your hands on the auger, gearbox, boom or driveline.
- Keep hands, fee, hair, jewelry and clothing, away from all moving and /or rotating parts.
- To prevent entanglement and possible serious injury or death, never use body weight to try to push auger into the ground.
- Worn edges or a slightly rounded point can seriously affect auger penetration. Check for wear before each use. Replace as necessary.
- Do not shovel dirt away from a rotating auger as the shovel can be caught and thrown by the auger.
- Do not operate the Post Hole Digger without all safety shields and guards in place.
- · Always use care when operating a Post Hole Digger.

Safety is a primary concern in the design, manufacture, sale, and use of Post Hole Diggers. As manufacturers of Post Hole Diggers, we want to confirm to you, our customers, our concern for safety.

Our current production machines include, as standard equipment, guards or shields for auger adapters, drivelines, input shafts, and safety signs. Older machines can be retrofitted to add these new guards or shields and, of course, safety signs. If you have an older machine which does not have current standard safety equipment, please contact your dealer about bringing your machine up to the current level of safety.

(

PREPARATION PROCEDURE:

- Thoroughly read and understand your Operator's Manual.
- Before beginning operation, clear area of objects that could wrap around the auger or might be thrown. Contact local utility companies to make certain there are no buried gas lines, electrical cables, etc., in the work area. Check for ditches, stumps, holes, or other obstacles that could cause the tractor to roll.
- Lay out and mark where you want to dig your holes.
- All persons should be at least twenty-five (25') away. Clear the area if helpers, bystanders, especially children.
- Do not allow anyone to stand behind or to the side of a rotating auger.
- To dig properly, your digger must be able to raise or lower through the highest and lowest points
 of your lift arm travel without binding against the tractor frame. Check carefully BEFORE
 attaching the auger. If it does bind, adjust the tractor 3-point linkage so that all the movement
 is free.

If you have any questions regarding the proper assembly or operation of this digger, contact your dealer or the manufacturer.

OPERATION

This Post Hole Digger was designed for one-man operation from the tractor seat. It is the responsibility of the operator to see that no one is within twenty-five feet (25') of the digger when it is started.

- · Set tractor brakes.
- Take tractor out of gear.
- Lower auger point slowly to the ground with the PTO disengaged.
- With the auger point lowered to the ground, set the engine speed to idle, then engage the PTO.
- Make sure the auger point is on the ground before engaging the PTO.
- Increase the speed as required so dirt is conveyed from the hole. Refer to the Owner's Manual for suggestion on PTO speed.
- Under no circumstances should the PTO be run in excess of 540 RPM.
- In many types of soil, it may be necessary to hold back against the auger screw suction by
 moving the hydraulic control lever to "HOLD" or "RAISE" position to keep the auger from
 screwing into the ground.
- Never use body weight to help the auger penetrate the ground. When the ground is too tough to penetrate with your cutting edges and point, replace and try again. These are replaceable parts and must be in good condition to penetrate.
- If you have difficulty penetrating hard ground, refer to Owner's Manual for suggestions.
- When the auger has been lowered a foot or so into the ground, raise the auger almost out of the hole to clear the dirt, then drill deeper and raise the auger again. Repeat this procedure until the desired hole depth is reached.
- Do not shovel dirt away from a rotating auger as the shovel can be caught and thrown by the auger.
- Leave the power take off disengaged when traveling between holes.

IT IS ESSENTIAL THAT EVERYONE INVOLVED IN THE ASSEMBLY, OPERATION, TRANSPORT, MAINTENANCE, AND STORAGE OF THIS EQUIPMENT BE AWARE, CONCERNED, PRUDENT, AND PROPERLY TRAINED IN SAFETY.

ASSEMBLY INSTRUCTIONS

(Please refer to illustration of Model you have chosen.)

- 1. Attach Arch to lower hitch points. If tractor has Category II hitch, use Bushings provided on Arch pins.
- 2. Attach Arch to Boom with Pin and Cotter pins provided.
- 3. Attach Gearbox to Boom with Pin and Cotter pins provided.
- 4. Attach PTO Shield to top of Gearbox with bolts provided.
- 5. Prepare PTO for attachment. Refer to drawing below.
 - a. Remove any foreign material or paint from input shaft on Gearbox.
 - Separate PTO Drive Shaft. Use a good grade of gun grease and put a light coating on U-Joint Drive Shaft. Then insert into Drive Tube.
 - c. Attach PTO to Gearbox

- d. Make sure roll pin (301 & 601) is in groove of input shaft but not tight against bottom of groove so yoke will rotate freely. On 901, make sure the yoke is securely fastened to the splined input shaft.
- e. Put in Shear Bolt (301 & 601)
- f. Place Snap Yoke on tractor PTO.
- g. Raise and lower the Boom through its complete operating arch and check that nothing interferes with the operation. If anything interferes, make the proper three-point adjustment.
- 6. Attach the Output Shaft Shield to lower gearbox.
- Attach the Auger to Gearbox using bolts, lockwashers, and hexnuts provided.

OPERATING INSTRUCTIONS

- Lower Auger pint slowly to ground. Auger point should be about 4" to the rear of the plumb line of the center of the top of the Auger.
- 2. Set brake or use PARK position.
- Engage PTO shah clutch at half throttle and slowly lower Auger into ground. In some types of soil it may be necessary to hold Auger back from screwing itself into the ground with Hydraulic Control lever.
- In some types of soil, for best cleaning action, allow Auger to dig a foot or so and raise Auger almost out of the ground then dig deeper.
 Repeat as necessary.
- When Auger has reached the desired depth, leave Auger at this depth for a very short period to assist in cleaning out the hole.
- If Shear Bolt shears, replace with Manufacturer's Shear Bolt or with one of same Specification Number Grade 2.
- If Auger becomes lodged below ground, DO NOT attempt to lift Auger out of ground by Hydraulic Lift power alone. Reverse the rotation of the Auger

- by several turns. This can be accomplished by using a bar on the universal joints. After freeing the Auger, slowly lift with Auger slowly rotating.
- 8. DO NOT transport digger with PTO Shaft engaged. This may result in damage to universal joints.
- 9. Check digger daily for any loose bolts, damaged bolts, securing pins, etc.

LUBRICATION SCHEDULE

- After the first fifty (50) hours it is recommended that the gear box be drained, flushed and refilled with SAE 90 EP. Then every 250 hours.
- 2. Universal joints to be greased after digging 300 holes. Tube and Shaft every other time.

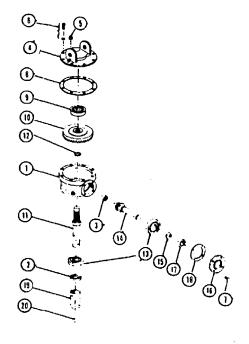
PTO SHAFT PARTS LIST

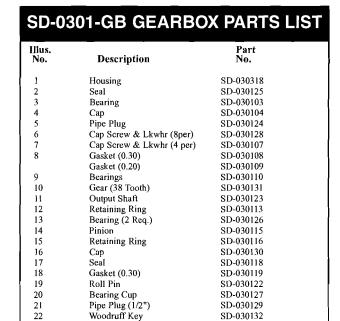
51 52 53 54 55 56 57 90 90 91 31 32 33 99 34 35 36 37 97 97 99 94 95

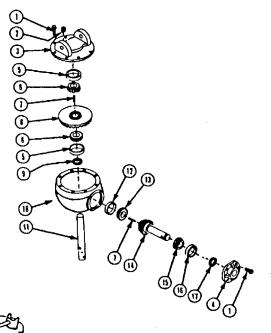
SD - 067 - 2W PTO Shaft Parts List

Pos.	Part Number	Description	Pos.	Part Number	Description
1	SD-067-20W1	Complete collar yoke	51	SD-067-20W10	Outer circlip
2	SD-067-222	Cross journal set	52	SD-067-20W11	Sliding sleeve collar
5	SD-067-20W2	Outer yoke	53	SD-067-20W12	Ball hold-up ring
11	SD-067-20W3	Roll pin for outer tube	54	SD-067-20W13	Spring
14	SD-067-20W4	Outer tube	55	SD-067-20W14	Fixed Sleeve
15	SD-067-20W5	Inner tube	56	SD-067-20W15	Ball 1/2"
16	SD-067-20W6	Roll pin for inner tube	57	SD-067-20W16	Yoke C02
21	SD-067-20W7	Inner yoke	71	SD-067-20W17	Special yoke
30	SD-067-20W8	Complete special yoke	72	SD-067-20W18	Grease fitting
31	SD-067-29	Guard retaining collar for outer tube	90	SD-067-20W19	U Joint for outer tube
32	SD-067-211	Cone for outer tube	91	SD-067-20W20	U Joint for inner tube
33	SD-067-20	Bolt (not shown)	94	SD-067-217	Half female guard
34	SD-067-212	Outer guard	95	SD-067-218	Half male shaft with guarding
35	SD-067-213	Inner guard	96	SD-067-20W21	Half female shaft with guarding
36	SD-067-215	Cone for inner tube	97	SD-067-20W22	Half male shaft with guarding
37	SD-067-214	Guard retaining collar for inner tube	98	SD-067-20W23	"Danger" Label for outer tube
40	SD-067-20W	Complete guard	99	SD-067-20W24	"Danger" Label for outer guard tube

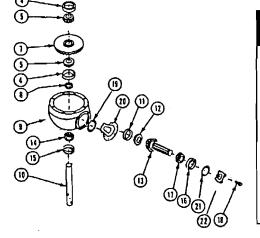
GEARBOX PARTS LIST







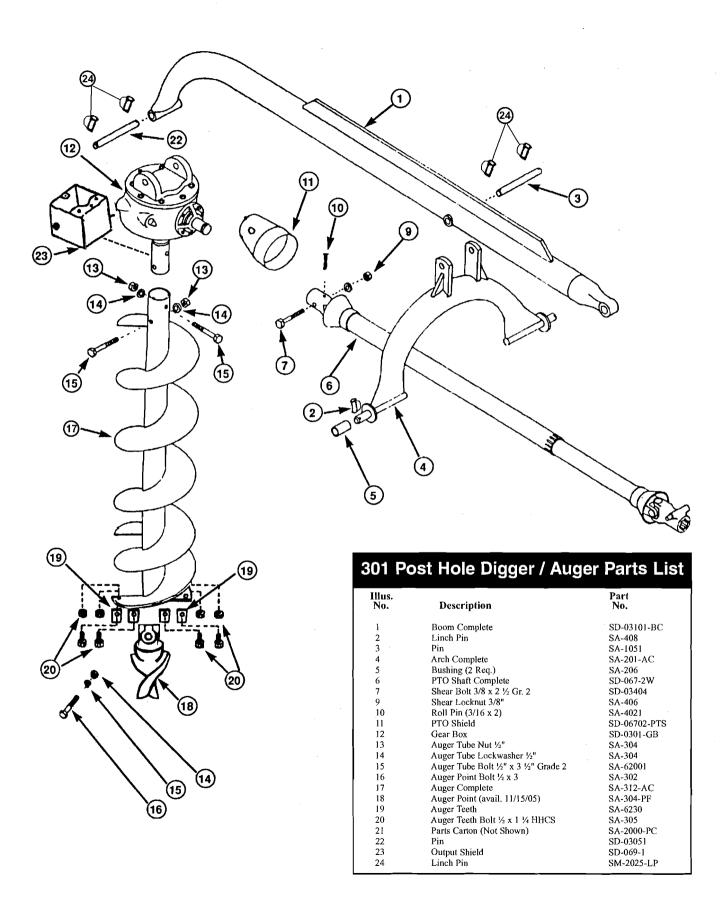
ILLUS. No.	PART No.	DESCRIPTION
1	SD-060718	Bolt & Lockwasher
2	SD-060716	Pipe Plug ½" NPT
3	SD-050711	Cover
4	SD-060703	Input Bearing Housing
5	SD-050708	Bearing Cone(2 Reg.)
6	SD-060707	Bearing Cup (2 Reg.)
7	SD-060715	Key Woodruff
8	SD-060705	Bevel Gear 35T
9	SD-060713	Seal Output
10	SD-060702	Gear Case
11	SD-060706	Output Shaft
12	SD-060712	Bearing Cone (Input)
13	SD-060711	Bearing Cup (Input)
14	SD-060704	Pinion Gear & Shaft
15	SD-060710	Bearing Cone (Input)
16	SD-060709	Bearing Cup (Input)
17	SD-060714	Seal Input



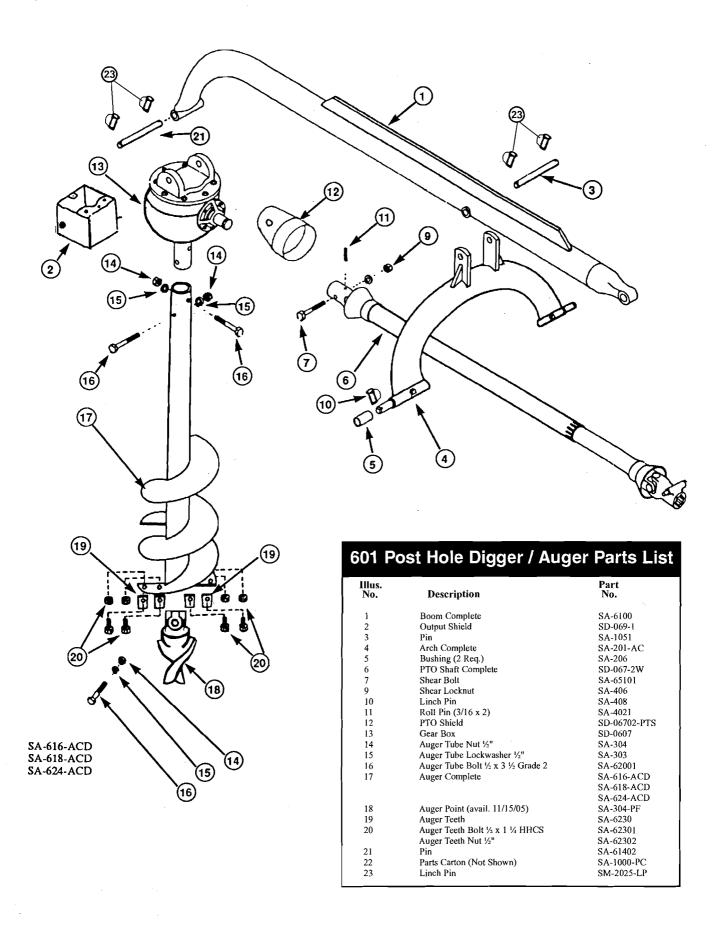
SD-0907 GLANDOX FANTS LIST						
Illus. No.	Part No.	DESCRIPTION	Illus. No.	Part No.	DESCRIPTION	
1	SD-BT0901	Bolt (8 Reg)	12	SD-060711	Bearing Cup (Input)	
2	SD-060716	Pipe Plug ½" NPT	13	SD-090717	Input Shaft (Spline)	
3	SD-090712	Cover	14	SD-060710	Bearing Cone	
4	SD-060708	Bearing Cone (2 Reg.)	15	SD-060709	Bearing Cup	
5	SD-060707	Bearing Cup (2 Reg.)	16	SD-090726	Bearing Cone	
6	SD-060705	Gasket (3)	17	SD-090725	Bearing Cup	
7	SD-090704	Bevel Gear (44T)	18	SD-909709	Outer Cap Bolt	
8	SD-060713	Seal Output	19	SD-090720	Gasket	
9	SD-090701	Gear Case	20	SD-090724	Shaft Support	
10	SD-090702	Output Shaft	21	SD-090720	Gasket	
11	SD-060712	Bearing Cone (Input)	22	SD-090715	Outer Cap	
			23	SD-090716	Input Seal	

SD-0007 GEARROY PARTS LIST

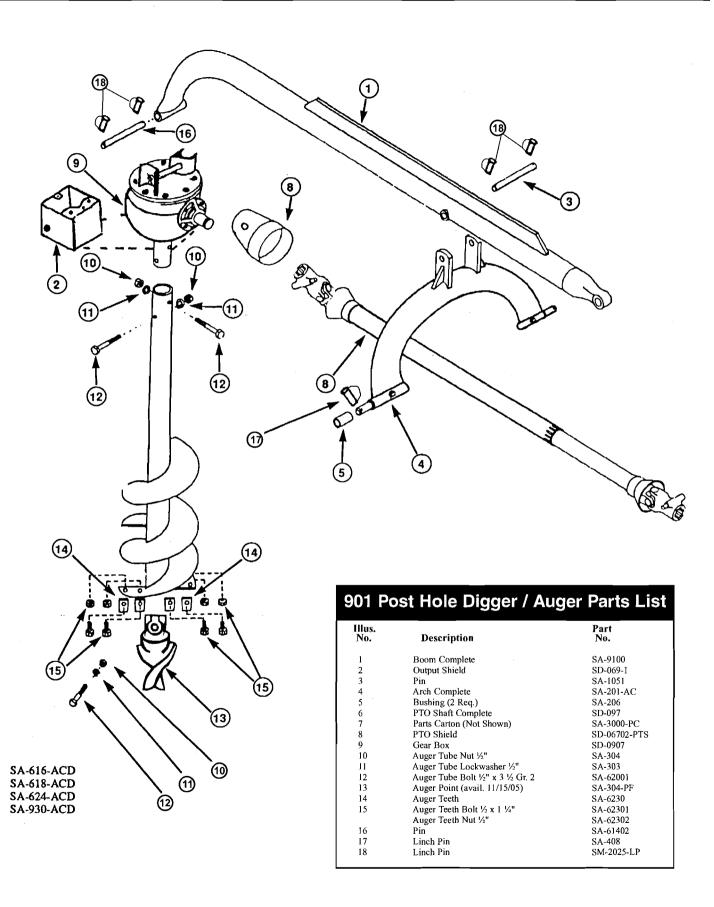
301 Post Hole Digger "The Mole"



601 Post Hole Digger "The Badger"



901 Post Hole Digger "The Tiger"



(-



FOR YOUR RECORDS

Making hard work easy

Shaver Manufacturing Company

P.O. Box 358, Graettinger, IA 51342 Phone 712-859-3293 • FAX 712-859-3294

Date Purchased:	_ Serial #
 	
Where Purchased:	Invoice #

Please Return Card to Assure Warranty

RETAIL CUSTOMER'S RESPONSIBILITY UNDER SHAVER MFG. WARRANTY

It is the Retail Customer and/or Operator's responsibility to read the Operator's Manual, to operate, lubricate, maintain and store the product in accordance with all instructions and safety procedures. Failure of the operator to read the Operator's Manual is a misuse of this equipment.

It is the Retail Customer and/or Operator's responsibility to inspect the product and to have any part (s) repaired or replaced when continued operation would cause damage or excessive wear to other parts or cause a safety hazard.

It is the Retail Customer's responsibility to deliver the product to the authorized Shaver Dealer, from whom he purchased it, for service or replacement of defective parts which are covered by warranty. Repairs to be submitted for warranty consideration must be made within forty-five (45) days of failure.

It is the Retail Customer's responsibility for any cost incurred by the Dealer for traveling to or hauling of the product for the purpose of performing a warranty obligation or inspection.

IMPORTANT FEDERAL LAWS AND REGULATIONS* CONCERNING EMPLOYERS, EMPLOYEES AND OPERATIONS.

*(This section is intended to explain in broad terms the concept and effect of the following federal laws and regulations. It is not intended as a legal interpretation of laws and should not be considered as such).

U.S. Public Law 91-596 (The Williams-Steiger Occupational and Health Act of 1970) OSHA

This Act Seeks:

"...to assure so far as possible every working man and woman in the nation safe and healthful working conditions and to preserve our human resources..."

DUTIES

Sec. 5 (a) Each employer-

- shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;
- shall comply with occupational safety and health standards promulgated under this Act.
 (b) Each employee shall comply with occupational safety and health standards and all rules, regulations and orders issued pursuant to this Act which are applicable to his own actions and conduct.

OSHA Regulations

Current OSHA regulations state in part: "At the time of initial assignment and at least annually thereafter, the employer shall instruct every employee in the safe operation and servicing of all equipment with which the employee is, or will be involved."

These will include (but are not limited to) instructions to:

Keep all guards in place when the machine is in operation;

Permit no riders on equipment:

Stop engine, disconnect the power source, and wait for all machine movement to stop before servicing, adjusting, cleaning or unclogging the equipment, except where the machine must be running to be properly serviced or maintained, in which case the employer shall instruct employees as to all steps and procedures which are necessary to safely service or maintain the equipment.

Make sure everyone is clear of machinery before starting the engine, engaging power, or operating the machine.

Child Labor Under 16 Years Old

Some regulations specify that no one under the age of 16 may operate power machinery. It is your responsibility to know what these regulations are in your own area or situation. (Refer to U.S. Dept. of Labor, Employment Standard Administration, Wage & Home Division, Child Labor Bulletin #102).



Shaver Manufacturing Company

Setting the standard in fencing and landscape equipment
P.O. Box 358, Graettinger, IA 51342 • 712-859-3293 • FAX 712-859-3294

© August 2005