

Read this entire manual. This safety alert symbol is used throughout this manual to call your attention to messages involving your personal safety and the safety of others. Failure to follow these instructions can result in injury or death.

## **AWARNING**

Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.

Owner:			
Date Purch	ased:		
Model #:	F8	Serial #:	
Manual #:	9MF824	159055	_

## Operator's Manual Danuser Machine Company, Inc.

Danuser Machine Company, Inc. 500 E. 3rd St. P.O. Box 368 Fulton, MO 65251

Tel: (573) 642-2246 Fax: (573) 642-2240 E-mail: sales@danuser.com Website: www.danuser.com



Dear Owner/Operator,

Thank you for purchasing this Danuser F8 Digger. We appreciate your business.

Your safety as an operator of our product is very important to us. Therefore, *before* you assemble, install, operate, maintain, service, remove, or move your Danuser Digger, read and understand this manual thoroughly. If there is anything you do not understand, immediately contact your dealer, or contact our factory direct.

Phone: (573) 642-2246
Fax: (573) 642-2240
E-mail: sales@danuser.com

Your satisfaction in the performance and longevity of our product is also very important to us and can be prolonged by proper assembly, installation, operation, and maintenance as instructed in this manual.

Thank you again for your business and for your trust in our product. Please feel free to contact us at any time for further assistance.

Sincerely,

Danuser Machine Company, Inc. 500 E. 3rd St. P.O. Box 368 Fulton, MO 65251

Tel: (573) 642-2246 Fax: (573) 642-2240

E-mail: sales@danuser.com Website: www.danuser.com

Danuser provides this manual "as is" without warranty of any kind, either expressed or implied. Danuser assumes no responsibility for errors or omissions. Danuser assumes no liability for damages resulting from the use of the information contained herein. Danuser reserves the right to revise and improve its products as it sees fit. This manual describes the state of this product at the time of its publication and may not reflect the product in the future.

Danuser is a registered trademark.

#### **Foreword**

Please read this manual thoroughly!

Symbol

**Before** you assemble, install, operate, maintain, service, remove, or move your Danuser Digger, read this manual thoroughly. If there is anything you do not understand, immediately contact your dealer, or call our factory direct at (573) 642-2246. Powered equipment can be dangerous if not assembled, installed, operated, maintained, serviced, removed, or moved properly.

#### Warranty Registration

To activate your warranty coverage and to provide you with efficient customer service, please fill out your WARRANTY REGISTRATION FORM. This form is included in your unit's paperwork package. If you did not complete a WARRANTY REGISTRATION FORM or did not receive one, please call Danuser Machine Company, Inc. Or, register online at www.Danuser.com. Your satisfaction with our product and your safety as a user of our product are both very important to us.

#### **Symbols**

This SAFETY ALERT symbol identifies important safety messages. Carefully read each safety message that follows. Failure to understand and obey a safety message, or recognize a safety hazard, could result in 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.

Meaning

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<b>A DANGER</b>	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.		
<b>AWARNING</b>	Indicates a potentially hazardous situation which, if not avoided, <b>could</b> result in death or serious injury, including hazards that are exposed when guards are removed.		
<b>ACAUTION</b>	Indicates a potentially hazardous situation which, if not avoided, <b>may</b> result in minor or moderate injury. It may also be used to alert against unsafe practices.		
NOTE	This is important information for proper use of this equipment. Failure to comply may lead to premature		

equipment failure.

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Working with unfamiliar equipment can lead to careless injuries. Read and understand this manual, the manual for your tractor, and the safety signs attached to the equipment before assembling, installing, operating, or maintaining this post hole digger. If there is anything in this manual you do not understand, contact your dealer or Danuser Machine Company, Inc. The safe use of this machine is strictly up to you, the operator. If this unit is used, loaned, or rented by any other person, it is the owner's responsibility to make certain that the operator prior to operating:

- Reads and understands the operator's manuals
- Reads and understands the safety signs
- 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 the shear bolt or the auger retaining bolt with a bolt longer than specified by Danuser Machine Company, Inc. This improper replacement occurs most often on machines that are loaned or rented to someone who has not read the operator's manual and is not familiar with a post hole digger.

- This post hole digger is 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 or in use. Do not operate the digger with another person near or in contact with any part of the digger, 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 messages and operation instructions, prior
  to assembling, installing, or operating the digger.
- Please remember it is also important that you read, understand, and follow the safety signs on the
  digger. Clean or 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. Danuser Machine Company, Inc. will furnish
  new safety signs upon request at no charge.
- 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.
   Danuser Machine Company, Inc. has designed this post hole 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 properly attached.
- Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are
  recommended during assembly, installation, operation, adjustment, maintenance, repair, removal,
  or movement of the digger.
- When the use of hand tools is required to perform any part of assembly, installation, adjustment, maintenance, repair, removal, or movement of the digger, be sure the tools used are designed and recommended by the tool manufacturer for that specific task.
- Always use two people to handle heavy, unwieldy components during assembly, installation, adjustment, maintenance, repair, removal, or movement of the digger. The post hole digger shall be operated only by an operator positioned in the operator's seat of the tractor.
- Never place any part of your body where it would be in danger if movement should occur during assembly, installation, adjustment, operation, maintenance, repair, removal, or movement of the digger.
- Never allow children to operate or be around this post hole digger.
- Do not allow riders on the digger or tractor at any time. There is no safe place for any riders.

#### Safety

(continued)

- This post hole digger is designed for use only on tractors with 540 RPM power take-off. Never attach or attempt to operate this digger with any tractor exceeding 540 RPM power take-off.
- When traveling on public roadways, travel in such a way that faster-moving vehicles may pass safely. Use accessory lights, clean reflectors, and a slow-moving vehicle sign that is visible from the rear to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.
- Transporting over rough or hilly terrain can cause equipment to bounce or hit obstacles, which can cause damage to equipment or loss of operator control.
- Only properly trained people should operate this equipment. A person who has not read or does
  not understand the operator's manual and safety signs is not qualified to operate the post hole
  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.
- Auger contact with underground gas lines or electrical cables may result in serious injury or death from explosion or electrical shock. Before starting to dig, the operator shall call 811 or the local number to locate underground utilities.
- Before beginning operation, clear the work area of objects which might be picked up and thrown by or entangled in the auger.
- 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. All replacement parts shall meet original equipment manufacturer's standards and requirements.
- Worn edges or a slightly rounded point can seriously affect auger penetration. Check for wear before each use, and replace as necessary.
- Never replace the shear bolt or the auger retaining bolt with anything other than the specified bolt in this manual. A longer, or protruding, fastener is more likely to grab clothing or gloves, which can result in serious injury or death.
- Do not operate the post hole digger without all safety shields and guards in place. 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 shields and guards furnished with the digger and with the tractor.
- Never modify any part of the digger. Modifications may pose additional hazards and shall not be done.
- To prevent entanglement and possible serious injury or death, never add additional weight or use body weight to try to push the auger into the ground. A hydraulic down force kit is available if additional digging force is needed (see *Accessories*).
- Keep hands, feet, hair, jewelry, and clothing away from all moving and/or rotating parts.
- Never place yourself between the tractor and the digger while the tractor is running.
- 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.
- Do not shovel dirt away from a rotating auger, as the shovel can be caught and thrown by the auger.
- Do not walk or work under a raised digger unless it is securely blocked or held in position. Do not depend on the tractor hydraulic system to hold the digger in place. Stored energy devices shall be de-energized and/or blocked before disassembly and/or service.

#### Safety

(continued)

- 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. It is recommended the tractor be equipped with a Rollover Protection
  System (ROPS) and a seat belt be used.
- 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. Adjust as tight as practical for best performance.
- Do not operate the 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.
- To prevent rapid wear of U-joints and possible failure of drivelines, never lift the auger point more than twelve inches (12") off the ground when the PTO is operating.
- To prevent possible instantaneous driveline failure, never move the digger from hole to hole, or transport, while the auger is rotating. This could lead to injury from flying pieces of the failed driveline.
- Always stop the PTO, set the brake, shut off the tractor engine, and remove the tractor key before dismounting the tractor. Never leave equipment unattended with the tractor running.
- Most accidents occur because of neglect or carelessness. Keep all helpers and bystanders twenty-five feet (25') away from an operating digger.
- 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 the manufacturer of your post hole digger, we want to confirm to you, our customer, our concern for safety.

Our current production post hole diggers include, as standard equipment, safety signs and guards for auger adapters, gearbox inputs, and drivelines. Older machines can be retrofitted to add these safety signs and guards. If you have an older Danuser post hole digger which does not have standard safety equipment, please contact your dealer about bringing your machine up to the current level of safety.



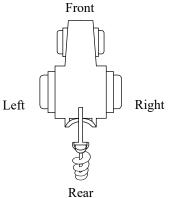
Improper operation of this post hole digger can cause serious personal injury or death. Operation of this post hole digger should only be done by a competent adult acting in compliance with the operator's manual. Since post hole digging operations are beyond our control, we disclaim all liability for any damages, injuries or death which may result.

#### **△WARNING**

This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov/product">www.P65Warnings.ca.gov/product</a>.

#### Decals & **Safety Signs**

Operator's Manual **Direction Terminology** 



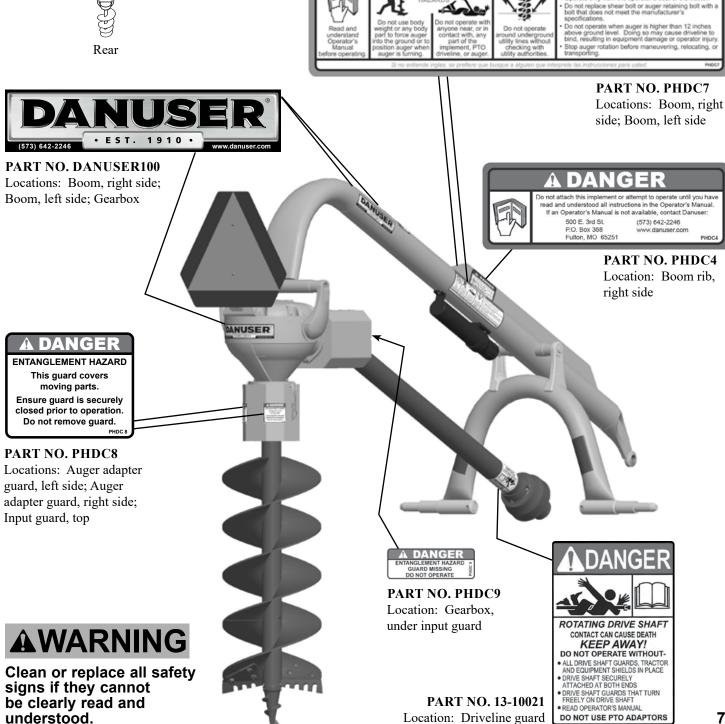
The F8 Digger comes equipped with all safety signs in place. Their locations are shown in this section. Read and follow their instructions and ensure their care:

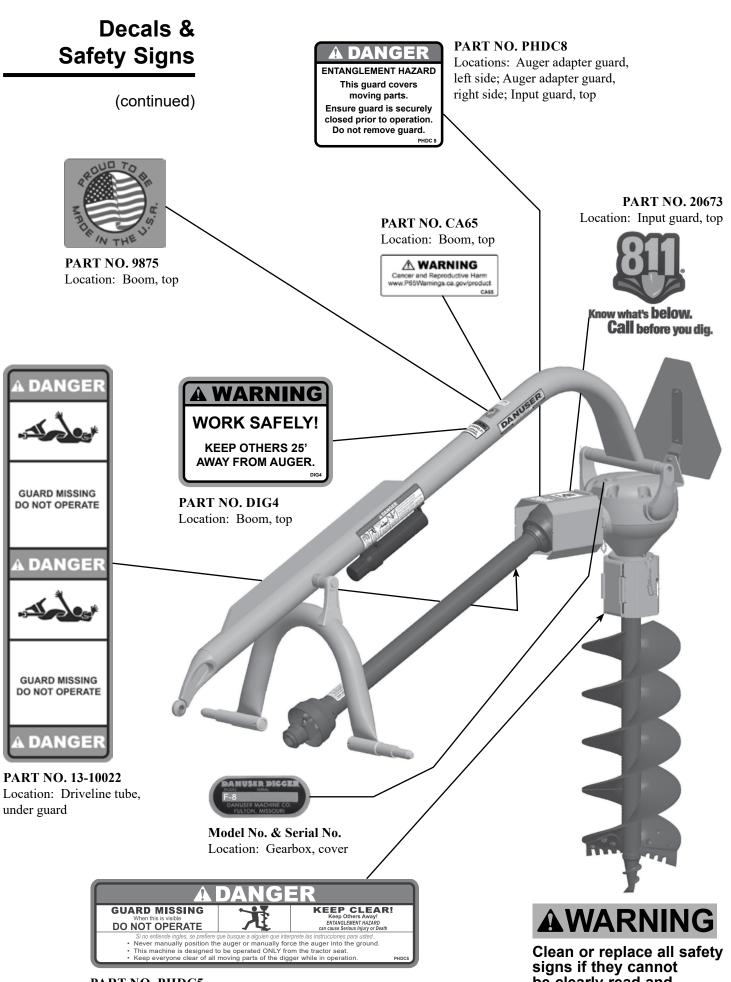
- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing, illegible, or damaged.
- Ensure replacement parts installed during repair have safety signs attached.

To install new safety signs, follow these steps:

- Clean the area where the safety sign is to be placed.
- 2. Spray a little soapy water on the surface where the safety sign is to be placed.
- Peel the backing from the safety sign, and apply it in the position shown.
- Firmly press the safety sign, and squeeze out the air bubbles with a straight edge (e.g., a credit card).

7





PART NO. PHDC5

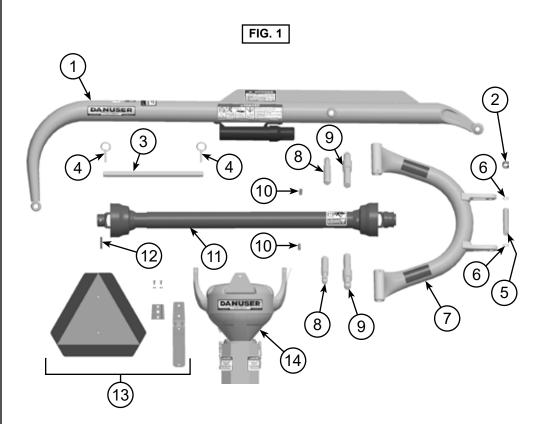
Location: Auger, under auger adapter guard

#### **Preparation**

Check for shipping damage immediately, and verify that all components have been received.

Report all shipping damage to the carrier immediately.

Before you begin assembly, open all packaging and compare the contents to the image (FIG. 1) and table below to ensure you have all of the components and your unit has all of the safety signs and guards required by current production safety standards. If your unit does not comply, contact Danuser Machine Company, Inc. IMMEDIATELY at (573) 642-2246.



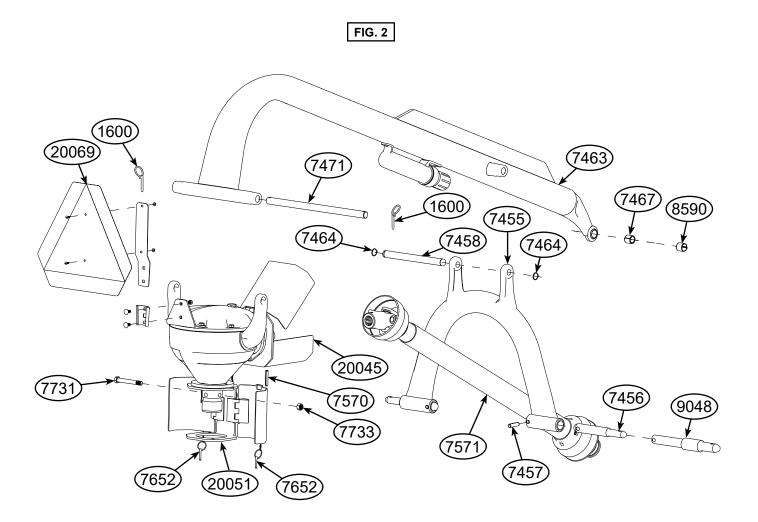
REF. NO.	PART NO.	DESCRIPTION	QTY.				
1	7463	Boom	1				
2	8590	Bushing (29/32" x 61/64")	1				
3	7471	Pin (7/8" x 16-11/16")	1				
4	1600	Klik Pin	2				
5	7458	Pin (7/8" x 10-1/16")	1				
6	7464	Snap Ring (7/8")	2				
7	7455	Yoke	1				
8	7456	Link Pin for Cat. I Hitch	2				
9	9048	Link Pin for Cat. II Hitch	2				
10	7457	Roll Pin (7/16" x 1-3/4")	2				
11	7571	Driveline	1				
12	7570	Roll Pin (5/16" x 2")	1				
13	20069	SMV Kit	1				
14	7561	Gearbox	1				
Operat	Operator's Manual (in canister attached to boom)						

#### Description

The Danuser F8 Digger is built to the exacting standards of high quality which have become synonymous with the name Danuser. The F8 Digger is designed for one-man operation from the tractor seat to "Dig Holes Sitting Down." The precision-cut steel gears, heavy-duty roller bearings, cast steel gear housing, and heavy tubular crane boom form an integrated design to provide utility and reliability. The F8 Digger is designed for 40 horsepower and above, Category I or II three-point hitch, 540 RPM PTO tractors using sway stabilizers. The digger has a 2-9/16 inch round spindle for auger attachment. Augers are available in lengths of 29, 33, 40, and 52 inches, and auger extensions are available in lengths of 7, 14, and 21 inches. Auger diameters range from 4 to 30 inches. Auger diameter must not exceed 30 inches. Danuser augers are built with special wear-resistant steel on the lower flights, replaceable cutting edges, and replaceable points. A **special** retaining bolt (1/2"-13 x 7/16") feature in Danuser augers keeps the auger in place on the spindle should the shear bolt release. Read and understand this manual, the manual for your tractor, and all safety signs before attempting to assemble, install, or operate this post hole digger. If you have any questions, contact your dealer or Danuser Machine Company, Inc. at (573) 642-2246.

#### Recommended Tools

- Snap ring pliers (expanding)
- Hammer or mallet
- · Roll pin punch
- Emery cloth (for removal of excess paint)
- 1/2", 9/16", and 3/4" wrenches



Instructions (Refer to FIG. 2.)

(continued)

### **AWARNING**

Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintenance, repair, removal, or movement of the digger. Do not allow long hair, loose fitting clothing, or jewelry to be around moving parts.

#### **ACAUTION**

Because of the weight of some components, and because some components are difficult to balance, two people are required for safe assembly and installation of this equipment.

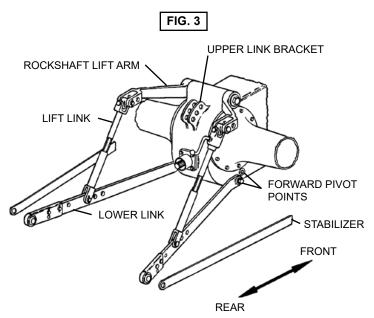
- STEP 1: Assemble pins (PN 7456 or PN 9048) into the yoke (PN 7455) and secure with roll pins (PN 7457). The protruding portion of the pin must be 7/8" for Category I hitches or 1-1/8" for Category II hitches.
- STEP 2: Attach the yoke to the boom (PN 7463) using pin (PN 7458) and snap rings (PN 7464). Stabilize components to avoid pinch points during assembly.

NOTE Position yoke so the red reflective tape is visible from the rear of the tractor.

- STEP 3: Attach the boom to the tractor upper link bracket with the tractor upper link pin. If the pin in your tractor upper link bracket is 3/4" in diameter, leave the bushing (PN 7467) installed in the ball joint of the boom. If your pin size is 7/8" in diameter, drive out the bushing in the ball joint and install bushing (PN 8590). If your pin size is 1" in diameter, drive the bushing out of the ball joint. Avoid pinch points around the pin during assembly.
- STEP 4: Slip the lower link ball joints over the digger yoke link pins, and secure with the klik pins provided with your tractor hitch. Keep hands away from pinch points while sliding components together.
- STEP 5: Adjust the sway stabilizers as tightly as practical for best performance and to keep the post hole digger from swaying side-to-side.

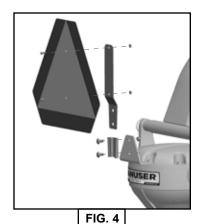
#### **ACAUTION**

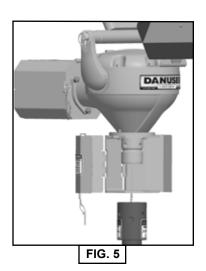
Sway stabilizers must be used with the digger.

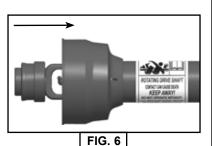


STEP 6: Stand the digger gearbox in an upright position resting on the auger adapter guard (PN 20051). Lower the boom to the gearbox, and attach the gearbox to the boom using pin (PN 7471) and klik pins (PN 1600). Avoid pinch points as the gearbox pivots.

(continued)







STEP 7: Raise the boom to the highest point, and make sure there is no contact between the boom and the tractor at any point. If necessary, adjust the travel of the boom to provide maximum travel without boom-tractor contact. Refer to your tractor operating manual for instructions on three-point hitch adjustments or refer to *Installation Troubleshooting*.

STEP 8: Install the SMV kit (PN 20069) (see FIG. 4).

STEP 9: Open the auger adapter guard (PN 20051) by unlatching two klik pins (PN 7652). Grease the inside of the auger adapter liberally, and attach the auger with the Danuser 1/2"–13 x 4", Gr. 2, 3/4" thread **special** shear bolt (PN 7731) and nut (PN 7733). NEVER use a bolt that does not meet these specifications.

NOTE Each time an auger or auger extension is attached to the gearbox, the inside of the auger adapter should be coated liberally with grease.

STEP 10: Install the **special** 1/2"-13 x 7/16" retaining bolt (PN 7676) which keeps the auger connected to the gearbox spindle if the shear bolt breaks. Once the auger is installed, close the auger adapter guard and latch the two klik pins (see FIG. 5).

STEP 11: Open the top of the input guard (PN 20045) by unlatching the klik pin (PN 7652). Slide the smaller end of the driveline (PN 7571) over the gearbox splines and secure by driving roll pin (PN 7570) through the end yoke and pinion.

NOTE Because of tight manufacturing tolerances, it may be helpful to slide the driveline over the pinion splines several times to make assembly easier.

STEP 12: Grease the three grease zerks in the driveline and center crosses, and close the top of the input guard by latching the klik pin.

## **AWARNING**

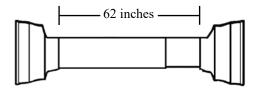
To avoid personal injury, you must stop tractor engine, set brakes, and remove the tractor key before proceeding with the next step!

STEP 13: Make sure the tractor engine is shut off, then connect the driveline to the tractor PTO. The driveline locks on with a retractable retaining ring coupling device. Slide the ring back for installation (see FIG. 6). Make sure the retracted retaining ring is snapped back and locked on the tractor PTO.

NOTE The F8 Digger is made for use with tractor PTO rotation in a clockwise direction as viewed from the rear of the tractor. Viewing backward from the operator's seat, the rotation will be counter-clockwise.

#### **ACAUTION**

Driveline shaft engagement should not be less than 10" when the digger is raised to its maximum height. To maintain proper engagement, you must not exceed the 62" length shown below.



(continued)

#### Installation Troubleshooting

NOTE

Refer to your tractor operating manual for instructions on tractor operation, tire inflation, and safety when using a three-point hitch mounted implement.

NOTE

The gearbox of the Danuser F8 Digger has been filled at the factory with three pounds of Shell Gadus S2 V220 grease. When adding grease to the gearbox, add Shell Gadus S2 V220 or equivalent.

For tractor three-point hitch adjustment, refer to FIG. 3.

	PROBLEM		SOLUTION
1.	Front end of boom contacts tractor when boom is raised or	a.	Attach the boom to the tractor through a different hole in the upper link bracket. Upper holes will shorten travel. Lower holes will increase travel.
	lowered.	b.	Refer to your tractor operating manual for adjustment of the three-point hitch.
		c.	Relocate or adjust the part of the tractor causing the interference.
2.	Digger yoke strikes boom when digger is	a.	Attach the front end of the boom to a more forward hole on the upper link bracket.
	raised.	b.	Attach the lower links to rear forward pivot points.
		c.	Lengthen the lower links.
		d.	Refer to your tractor operating manual for adjustment of the three-point hitch.
3.	Tractor has difficulty	a.	Attach the lift links to more forward holes in the
].	raising auger.	a.	rockshaft lift arms to decrease lift range.
		b.	Move the lift links to more forward holes in the lower links to decrease travel.
		c.	Check the tractor hydraulic system to be sure it is raising and lowering to the maximum and minimum heights recommended in your tractor operating manual.
4.	Driveline strikes tractor		
7.	power take-off shield when digger is raised.	a.	Refer to your tractor operating manual for adjustment of the three-point hitch.
5.	Tractor action is "jerky" with the digger attached,	a.	Adjust tractor hydraulic system for "position control" implement rather than "draft" or "load control."
	or the hitch raises and lowers rapidly during transport.	b.	If applicable, lock tractor upper link bracket in a fixed position.

#### **Transportation**

## **AWARNING**

When traveling on public roadways, travel in such a way that faster-moving vehicles may pass safely. Use accessory lights, clean reflectors, and a slow-moving vehicle sign that is visible from the rear to warn operators in other vehicles of your presence. Always comply with all federal, state, and local laws.

### **AWARNING**

Transporting over rough or hilly terrain can cause equipment to bounce or hit obstacles, which can cause damage to equipment or loss of operator control.

In addition to recommendations in your vehicle operating manual, follow these transportation guidelines:

- Select a safe travel speed when transporting from one area to another.
- Position the post hole digger low to the ground but at a height that prevents the auger from contacting the ground.
- When entering ditches or inclines, reduce speed. Stop and raise the post hole digger if needed to prevent the auger from contacting the ground.
- Reduce travel speed when transporting over rough or hilly terrain.
- When making turns, reduce travel speed. Allow adequate room to clear obstacles such as buildings, trees, or fences.
- When traveling on roadways, transport in such a way that faster-moving vehicles may safely pass.

Read and understand this operator's manual and all safety signs carefully before attempting to operate or adjust the Danuser F8 Digger. You are responsible for furnishing this manual to others who may use the unit. If you have any questions regarding the proper assembly, installation, or operation of this digger, contact your dealer or Danuser Machine Company, Inc.

### **AWARNING**

Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintenance, repair, removal, or movement of the digger. Do not allow long hair, loose fitting clothing, or jewelry to be around moving parts.

## **A** DANGER

This post hole digger was designed for one-man operation from the tractor seat. It is the responsibility of the operator to see that bystanders and all other people are at least twenty-five feet (25') from the digger in operation or under power. Serious personal injury or death may result if any attempt is made to assist digger operation by hand.

STEP 1: Call 811 or contact the local utility companies to make certain there are no buried gas lines, electrical cables, etc. in the work area. Clear area of objects that could wrap around the auger or might be thrown. Check for ditches, stumps, holes, or other obstacles that could cause the tractor to roll.

#### Operation

### **AWARNING**

Serious injury or death can result from misuse of this equipment.

### **ACAUTION**

The F8 Digger is designed for 40 horsepower and above, Category I or II three-point hitch, 540 RPM PTO tractors using sway stabilizers. Auger size must not exceed 30 inch diameter. Operation of this digger in a manner for which it was not intended will result in poor performance and could create a hazard and the potential for personal injury.

#### **Operation**

(continued)

## **A DANGER**

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.

## **A** DANGER

All persons should be at least twenty-five feet (25') away. Clear the area of bystanders, especially children. Do not allow anyone to stand behind, or to the side of, a rotating auger.

- STEP 2: Lay out and mark where you want to dig your holes.
- STEP 3: Adjust the auger to a vertical position:
  - a. Left to right vertical adjustments -

With the PTO disengaged, raise the auger point off the ground. If the auger pitches left or right, turn the adjusting screw or leveling crank on the lifting link until the auger appears vertical when looking from the tractor seat. Refer to your tractor operating manual for further instructions on three-point hitch adjustments.

NOTE

When mounted to the three-point hitch, your digger must be able to raise and lower through the highest and lowest points of your lift arm travel without binding against the tractor frame. If it does bind, adjust the tractor three-point linkage so that all movement is free.

b. Front to back vertical adjustments -

Lower the auger slowly until the point just touches the ground. Move the tractor slowly forward or backward until the auger appears vertical when looking from the tractor seat.

- STEP 4: Set the tractor brakes and take the tractor out of gear to hold the tractor on location to prevent damage to the digger.
- STEP 5: Slowly lower the auger point to the ground. Make sure the auger point is on the ground before engaging the PTO.
- STEP 6: Lower the auger into the ground slowly, then increase the speed as required so the dirt is augered out from the hole. NEVER exceed 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 momentarily to either the "HOLD" or "RAISE" position to keep the auger from screwing into the ground.

## **A DANGER**

NEVER add additional weight or 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 them and try again. These are replaceable parts and must be in good condition. If you have difficulty penetrating hard ground, refer to Difficult Digging Suggestions.

#### **ACAUTION**

This digger is designed to operate at a maximum PTO speed of 540 RPM. NEVER exceed 540 RPM.

- STEP 7: When the auger has been lowered 12 to 18 inches into the ground, raise the auger almost out of the hole, then dig another 12 to 18 inches and raise the auger again. Repeat this procedure until the desired hole depth is reached.
- STEP 8: When the auger has reached the full depth required, allow the auger to dwell momentarily at this depth at a slower speed to assist in cleaning out the hole.
- STEP 9: Disengage the PTO, and raise the auger from the hole.

For "heavy" soil conditions or for tractors requiring driveline rotation to produce lifting power, allow the auger to turn at a slow speed while raising it to the top of the hole.

STEP 10: To remove loose dirt from auger, spin the auger by momentarily engaging the PTO with the engine running at a faster speed than used for digging.

#### **Operation**

(continued)

### **AWARNING**

Replace a broken or damaged shear bolt or auger retaining bolt ONLY with an authorized factory replacement. A shear bolt or auger retaining bolt that is too long increases the possibility of personal injury. The shear bolt and auger retaining bolt must be of the proper size and grade to function properly.

### **AWARNING**

Auger adapter guard must be in place and latched before operating digger.

#### Difficult Digging Suggestions



Do not shovel dirt away from a rotating auger, as the shovel can be caught and thrown by the auger.

### **AWARNING**

To prevent injury, keep an area of at least twenty-five feet (25') around the auger clear of bystanders and all other people.

STEP 11: If you break a shear bolt, the auger retaining bolt should retain the auger on the F8 Digger spindle. Replace the **special** shear bolt as follows:

- a. Disengage the PTO, set the brakes, shut off the tractor engine, and remove the tractor key.
- b. Open the auger adapter guard by unlatching the klik pins, and remove the broken shear bolt.
- c. Install a new Danuser 1/2"-13 x 4", Gr. 2, 3/4" of thread **special** shear bolt (PN 7731) and nut (PN 7733). This is a **special** thread length bolt use genuine Danuser replacement parts only. NEVER use a bolt longer than 4".
- d. Tighten the shear bolt nut securely, close the auger adapter guard, and latch the klik pins.

### **AWARNING**

Keep others at least twenty-five feet (25') from the auger when applying lift power to raise the freed auger from the ground. Stop auger rotation prior to lifting out of hole.

STEP 12: If the auger becomes lodged on an obstruction below ground, do not attempt to raise the auger by hydraulic lift power alone. Disengage the PTO, set the tractor brakes, shut off the tractor engine, remove the tractor key, and dig around the auger enough to free it from the obstruction before trying to remove the auger from the hole. Apply lift power and slowly rotate the driveline to raise the auger to the top of the hole.

## **A DANGER**

Before digging around the auger, disengage the PTO, set the tractor brakes, shut off the tractor engine, and remove the tractor key.

STEP 13: Disengage the PTO when traveling between holes.

#### **ACAUTION**

To avoid damage to the driveline, and to reduce the risk of personal injury, never transport the digger with the tractor PTO engaged.

Worn edges or a slightly rounded point can seriously affect auger penetration. Check for wear before each use, and replace as necessary. Additional options:

- a. Different Auger Points shown on page 23.
- b. Different Cutting Edges shown on page 23.
- c. Down Force Kit shown on page 24.
- d. Hole Digger Head Augers shown on page 22.
- e. Weld-on Hole Digger Head shown on page 23.

## Removal & Storage

### **AWARNING**

Personal protection equipment including hard hat, safety glasses, safety shoes, and gloves are recommended during assembly, installation, operation, adjustment, maintenance, repair, removal, or movement of the digger. Do not allow long hair, loose fitting clothing, or jewelry to be around moving parts.

#### **ACAUTION**

Because of the weight of some components, and because some components are difficult to balance, two people are required for safe disassembly and removal of this equipment.

Following these steps will ensure proper removal of your F8 Digger:

- STEP 1: Lower the auger tip to the ground.
- STEP 2: Disengage the PTO, set the tractor brakes, shut off the tractor engine, and remove the tractor key.
- STEP 3: Ensure the digger is properly secured (with bracing, blocks, etc.) before removal from the tractor.
- STEP 4: Unhook the driveline from the tractor PTO shaft by pulling back on the collar of the yoke.
- STEP 5: Store driveline off of the ground, parallel to the boom, to keep driveline clean and to protect guards.
- STEP 6: Unhook the post hole digger from the tractor's three-point hitch.
- STEP 7: Lower post hole digger assembly to the ground.

NOTE Store the post hole digger on a solid, level surface to make connecting and disconnecting easier. Storage location should be clean and dry, away from any livestock or people.

When disconnecting the post hole digger from the tractor, store the driveline so that the drive shaft guard cone does not carry the weight of the drive shaft.

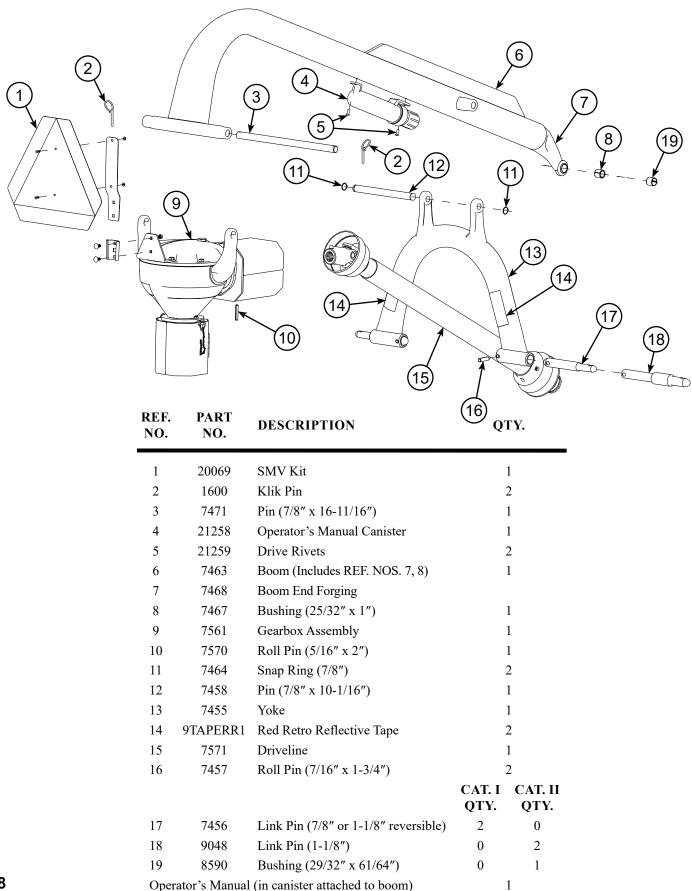
#### **Maintenance**

NOTE

WHAT TO DO	WHEN
Check digger for loose bolts or fasteners.	Daily
Check auger for loose, worn, or broken cutting edges or point.	Daily
Clean gearbox housing, flush, and refill with three lbs. of Shell Gadus S2 V220 grease or equivalent.	After 500 hours use
Coat auger with grease to prevent rusting.	After paint has been removed through usage
Lubricate universal driveline fittings with good quality gun grease.	After 300 holes
Lubricate universal driveline bushings with good quality gun grease.	Every 50 hours
Coat the inside of the auger adapter liberally with grease.	Each time an auger or auger extension is attached to the gearbox

#### **<b>△WARNING**

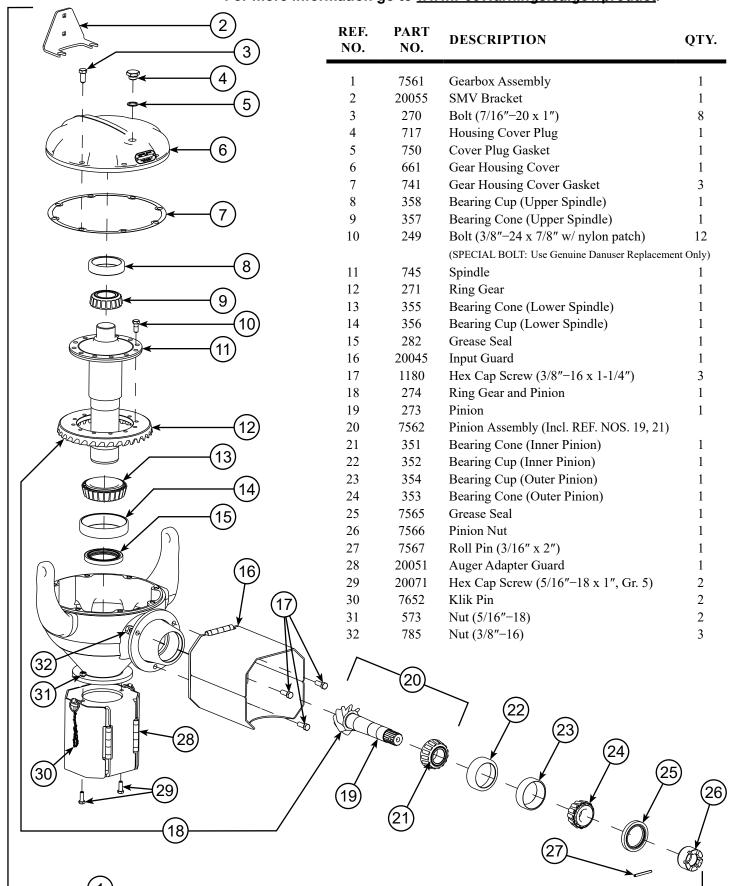
This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov/product">www.P65Warnings.ca.gov/product</a>.



## **Gearbox Assembly**

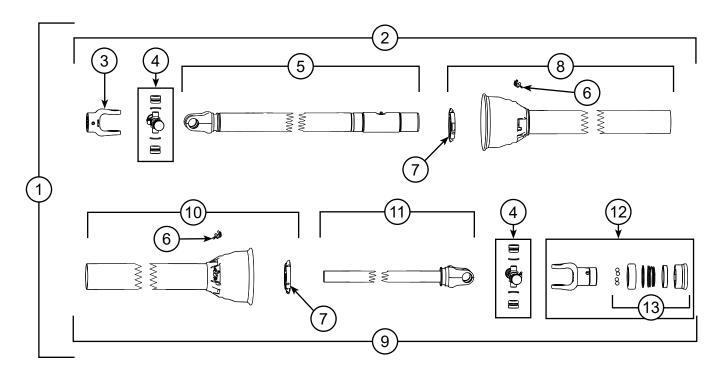
#### $\triangle$ WARNING

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PART NO. 13-10021 Location: Driveline guard



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	7571	Driveline	1
		Telescoping Assembly with Guard	
2	20096	Digger Half with Guard	1
3	7573	End Yoke	1
4	7590	Center Cross Kit	2
5	7257	Yoke and Tube	1
	20081	Easy-Lock Repair Kit (Includes REF. NOS. 6 - 7)	
6	20082	Easy-Lock	2
7	20083	Nylon Bearing	2
8	20098	Inner Guard	1
9	20097	Tractor Half with Guard	1
10	20099	Outer Guard	1
11	7262	Yoke and Shaft	1
12	7269	Spring-Lok Yoke Assembly	1
13	6131	Spring-Lok Kit	1
NOTE	F8 Ser	ial Numbers 81200 and prior should call	for parts.

PART NO. 13-10022 Location: Driveline tube, under guard

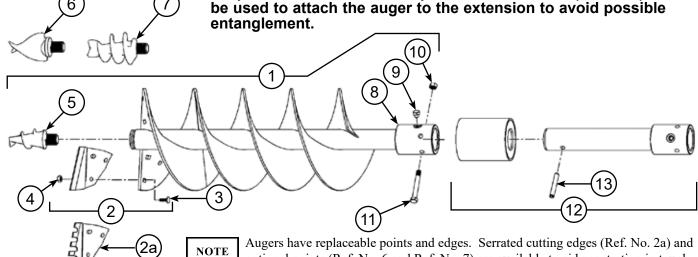
## Auger Assemblies

#### **△WARNING**

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## **A** DANGER

When using an extension, Ref. No. 9 (PN 7676), Ref. No. 10 (PN 7733), and Ref. No. 11 (PN 7731) should be relocated from the auger adapter to the extension adapter, and Ref. No. 13 (PN 9548) should be used to attach the auger to the extension to avoid possible entanglement.



Augers have replaceable points and edges. Serrated cutting edges (Ref. No. 2a) and optional points (Ref. No. 6 and Ref. No. 7) are available to aid penetration in tough digging conditions. Flights are replaceable except on 4" and 6", where the flight is a continuous spiral. Cutting edges for 4" and 6" augers are welded on the auger.

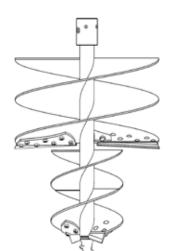
#### **AUGER ASSEMBLIES FOR 2-9/16" ROUND SPINDLES**

REF.	REF. PART NUMBER BY AUGER DIAMETER								0.551			
NO.	4"	6"	9"	10"	12"	14"	16"	18"	24"	30"	DESCRIPTION	QTY.
	450	417	1551	288	412	451	7650	1275	1270	7857	Standard Auger, 40" Long, with Plain Edges, Std. Point	1
			1552	487	488	489	7665	1276	1272	7935	Standard Auger, 40" Long, with Serrated Edges, Std. Point	1
1			7476	7478	7419	7437	7661				Standard Auger, 52" Long, with Plain Edges, Std. Point	1
			7497	7498	7499	7519	7734				Standard Auger, 52" Long, with Serrated Edges, Std. Point	1
2	7782	7783									Plain Cutting Edges (Weld On)	1 Set
2			7784	7788	7790	7792	7794	7796	7798	7890	Plain Cutting Edges (with Bolts and Nuts)	1 Set
2a			7785	7789	7791	7793	7795	7797	7799	7883	Serrated Cutting Edges (with Bolts and Nuts)	1 Set
3			784	784	784	784	784	784	784	784	Cutting Edge Bolt (3/8"-16 x 1" Carriage)	As Req'd
4			785	785	785	785	785	785	785	785	Cutting Edge Nut (3/8"–16 Hex)	As Req'd
5	899	831	831	831	831	831	831	831	831	831	Standard Auger Point	1
6		1937	1937	1937	1937	1937	1937	1937	1937	1937	Special Duty Auger Point	1
7		6210	6210	6210	6210	6210	6210	6210	6210	6210	Aggressive Duty Auger Point	1
8	7781	7781	7781	781	7781	7781	7781	7781	7781	7781	Auger Adapter Replacement (for Field Welding)	1
9	7676	7676	7676	7676	7676	7676	7676	7676	7676	7676	Retaining Bolt (1/2"-13 x 7/16")  SPECIAL BOLT: Use Genuine Danuser Replacement Only	1
10	7733	7733	7733	7733	7733	7733	7733	7733	7733	7733	Shear Nut (1/2"-13 Hex)	1
11	7731	7731	7731	7731	7731	7731	7731	7731	7731	7731	Shear Bolt (1/2"-13 x 4", Gr. 2, 3/4" of thread)  SPECIAL BOLT: Use Genuine Danuser Replacement Only	1
	20067	20067	20067	20067	20067	20067	20067	20067	20067	20067	Auger Extension with Guard (7")	1
12	7494G	7494G	7494G	7494G	7494G	7494G	7494G	7494G	7494G	7494G	Auger Extension with Guard (14")	1
	7663G	7663G	7663G	7663G	7663G	7663G	7663G	7663G	7663G	7663G	Auger Extension with Guard (21")	1
13	9548	9548	9548	9548	9548	9548	9548	9548	9548	9548	Coiled Pin (1/2" x 3-1/2")  SPECIAL PIN: Use Genuine Danuser Replacement Only	1

## Stepped & Orchard Augers

#### $\triangle$ WARNING

This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov/product">www.P65Warnings.ca.gov/product</a>.

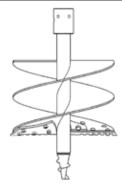


#### 2-9/16" ROUND SPINDLE STEPPED AUGERS

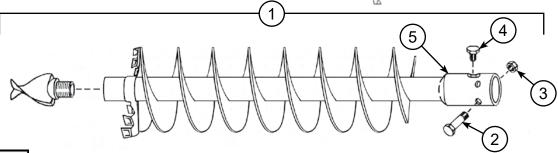
	JMBER BY DIAMETE		DESCRIPTION		
18" x 10" 24" x 12" 30" x 16"					
9611			33" Long with Plain Edges & Standard Point Auger Uses Both Dimensions of Cutting Edges - See Page 21		
9615			33" Long with Serrated Edges & Standard Point Auger Uses Both Dimensions of Cutting Edges - See Page 21		
	9612	9613	40" Long with Plain Edges & Standard Point Auger Uses Both Dimensions of Cutting Edges - See Page 21		
	9616	9617	40" Long with Serrated Edges & Standard Point Auger Uses Both Dimensions of Cutting Edges - See Page 21		

#### 2-9/16" ROUND SPINDLE ORCHARD AUGERS

PART NUM AUGER DI		DESCRIPTION
18" 24"		
9850	9849	29" Long with Serrated Edges & Standard Point



#### **Hole Digger Head Auger Assemblies**



**NOTE** Hole Digger Head Augers have replaceable points and teeth. Flights are replaceable, except on 6".

NOTE Auger Point PN 9353 is the <u>only</u> auger point that can be used with Hole Digger Heads.

#### AUGER ASSEMBLIES WITH HOLE DIGGER HEADS FOR 2-9/16" ROUND SPINDLES

REF.		PART	NUM	BER I	BY AU	GER I	DIAM	ETER		DESCRIPTION		
NO	6"	9"	10"	12"	14"	16"	18"	24"	30" DESCRIPTION		QTY.	
	9387	9314	9315	9316	9317	9318	9319	9320	9321	40" Hole Depth Auger with Double Flight Construction	1	
1		9322	9323	9324	9325	9326				52" Hole Depth Auger with Double Flight Construction	1	
						9359	9361	9363	9365	52" Hole Depth Auger with Single Flight Construction	1	
2	7737	7737	7737	7737	7737	7737	7737	7737	7737	Shear Bolt (1/2"-13 x 4" Gr. 5, 3/4" of thread)  SPECIAL BOLT: Use Genuine Danuser Replacement Only	1	
3	7733	7733	7733	7733	7733	7733	7733	7733	7733	Shear Nut (1/2"-13 Hex)	1	
4	7676	7676	7676	7676	7676	7676	7676	7676	7676	Retaining Bolt (1/2"-13 x 7/16")  SPECIAL BOLT: Use Genuine Danuser Replacement Only	1	
5	7781	7781	7781	7781	7781	7781	7781	7781	7781	Auger Adapter Replacement (for Field Welding)	1	

#### **Accessories**

#### **△WARNING**

Hole Digger Head Kits can be welded onto standard augers.

This product can expose you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="https://www.P65Warnings.ca.gov/product">www.P65Warnings.ca.gov/product</a>.

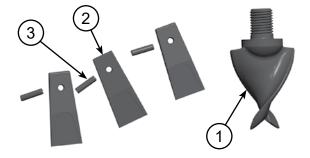
## HOLE DIGGER HEAD KIT\* (Field Weld to Auger)

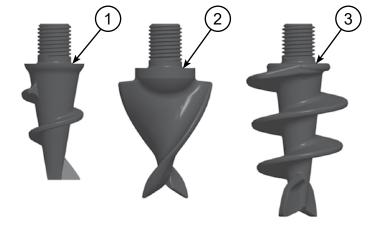
AUGER DIA.	NO. TEETH PER HEAD	PART NO.
6"	2	9386
9"	4	9306
10"	4	9307
12"	4	9308
14"	6	9309
16"	6	9310
18"	6	9311
24"	8	9312
30"	10	9313

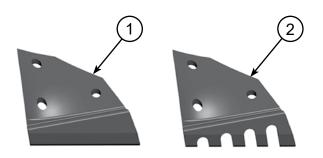
<sup>\*</sup> Includes head with teeth and roll pins, point and point adapter with tube, for welding to auger center column.

## HOLE DIGGER HEAD REPLACEMENT PARTS

REF. NO.	PART NO.	DESCRIPTION
1	9353	Hole Digger Head Point
1	9333	Hole Digger Head Follit
2	9234	Hole Digger Head Tooth
	9964	Hard-Surface Tooth (option)
3	7483	Roll Pin (5/16" x 1-1/4")







#### **AUGER POINTS**

REF. NO.	PART NO.	DESCRIPTION
1		Standard
	831	for augers 6" through 30" diameter
	899	only point for 4" augers
2	1937	Special Duty
3	6210	Aggressive Duty

Auger points are available in a variety of styles. See above for Hole Digger Head Point.

#### **CUTTING EDGES**

REF. NO.	PART NO.	DESCRIPTION
1 2	See Page 21 See Page 21	

Cutting edges are available with plain or serrated edges. See table on page 21 for part numbers.

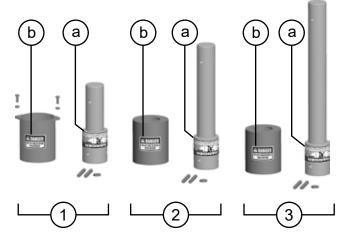
#### **△WARNING**

(continued)

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#### **AUGER EXTENSIONS**

REF. NO.	PART NO.	DESCRIPTION
1	20067	7" Auger Extension with washer, 2 <b>Special</b> Coiled Pins, and Auger Extension Guard
2	7494G	14" Auger Extension with washer, 2 <b>Special</b> Coiled Pins, and Auger Extension Guard
3	7663G	21" Auger Extension with washer, 2 <b>Special</b> Coiled Pins, and Auger Extension Guard
a	PHDC5	Safety Sign
b	2169	Safety Sign



Auger extensions with auger extension guards are available in lengths of 7, 14, and 21 inches for extra hole depth. Make sure your tractor can accommodate the extra length and still have adequate clearance. Use **only** factory supplied coiled pins to connect the auger to the auger extension. Two coiled pins are shipped with the auger extension, one to install and one spare. When installed, the coiled pin must be flush with the sides of the auger, and the area should be covered by the auger extension guard. The auger shear bolt should be covered by the auger adapter guard.

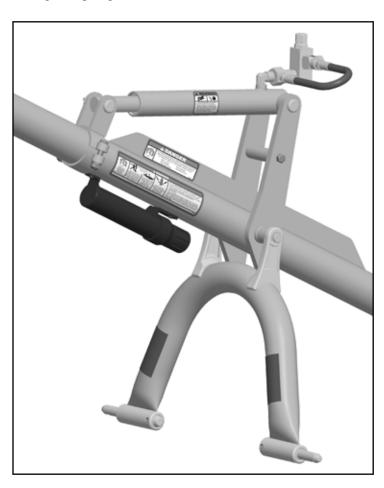
#### **DOWN FORCE KIT**

A hydraulic down force kit (PN 9079) is available to make difficult digging easier.

The kit attaches to the boom without alteration and with the use of ordinary hand tools. It provides approximately 500 pounds of additional force to the auger point for easier penetration of hard or frozen ground.

The kit does not interfere with normal digging operations.

The kit operates from the tractor hydraulic system with normal remote cylinder outlets. Customer provides mating coupler tip to fit his particular tractor as well as sufficient hydraulic hose and fittings to connect the valve to the tractor sump.



#### Warranty

Model #

Serial #

#### DANUSER MACHINE COMPANY, INC.

#### LIMITED WARRANTY

This Limited Warranty is extended only to the original purchaser of our products. Danuser Machine Company, Inc. ("Danuser") warrants this product to be free from defects in material and workmanship for a period of one year from the purchase date from an authorized Danuser Dealer. The gearbox warranty can be extended to five years if the WARRANTY REGISTRATION FORM has been completed and is on file at Danuser. Start of the warranty period is determined by purchase date given on your WARRANTY REGISTRATION FORM. Proof of purchase and serial number may be required.

- 1. Our obligation under this warranty is limited to repair or replacement at our factory or at a location designated by Danuser of the part(s) of Danuser products which Danuser determines to be defective. Our sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.
- 2. This warranty shall <u>not</u> obligate Danuser to bear any cost of labor for field repair, replacement, testing, or adjustment. This warranty is void if any attempt is made to make field repairs to hydraulic components. To qualify for warranty inspection, the "failed" part must be returned in its original "failed" condition.
- 3. Parts may not be returned without written authorization from Danuser.
- 4. Some purchased components, including but not limited to hydraulic components are subject to the inspection and warranty of the respective manufacturer. Thus, delays in a warranty determination can be expected while Danuser awaits their decision.
- 5. To make a claim under this warranty, first contact your authorized Danuser Dealer. The Danuser Dealer shall complete the Warranty Claim Form and obtain written authorization from Danuser to return parts. All warranty claims must include detailed information regarding make and model of vehicle on which the Danuser product was mounted, hours of use, description of events that led up to the failure, and any other information helpful in reviewing the warranty claim. All warranty returns must be prepaid. Shipments arriving at our factory on a freight collect basis will be refused by our receiving department. The freight charge will be credited if the parts are determined by Danuser to be defective, and the associated freight costs in returning those parts will be prepaid by Danuser.
- 6. Products or parts thereof which, as determined by Danuser's examination, show wear from normal use, have been improperly operated, damaged by accident or negligence, field repaired, altered or modified are not considered defective in material and workmanship and are not covered by this warranty. This warranty does not apply to parts subject to normal wear or to damage caused by the failure to perform recommended maintenance or to replace worn parts. This warranty shall not obligate Danuser to bear any cost of labor for field repair, replacement, testing, or adjustment nor for damage caused by accident, abuse, misuse, or environmental elements.
- 7. Any parts or labor required to repair or replace parts not covered under this warranty will be charged to the customer. Parts repaired or replaced by Danuser are then covered by this warranty only for the remainder of the original warranty as if such parts were original parts.
- 8. Danuser reserves the right to change its specifications and designs at any time.

This warranty is exclusive and in lieu of all other express warranties, if any, including the implied warranties of merchantability and fitness for a particular purpose. It shall not extend beyond the duration of the expressed warranty provided herein and the remedy for violations of any implied warranty shall be limited to repair or replacement of the defective part pursuant to the terms contained herein. No employee, dealer, salesman, or representative is authorized to change this warranty in any way or grant any other warranty. Danuser shall not be liable for any consequential, incidental, or punitive damages, losses, or expenses, including those resulting from or caused by any defects.

Danuser Machine Company, Inc. 500 East Third Street P.O. Box 368 Fulton, Missouri 65251 Phone: (573) 642-2246
Fax: (573) 642-2240
E-mail: sales@danuser.com
Website: www.danuser.com





# Important Safety Message for Owners/Operators of Post Hole Diggers



As the manufacturer of your post hole digger, we want to confirm to you, our customer, our concern for safety. Please help us ensure your safety and the safety of those in the surrounding work area by following these simple, common sense guidelines, along with those in the operator's manual and on the product safety signs, when using a post hole digger. Failure to follow safety rules and/or improper use can result in severe injury or death to operators or bystanders.

Everyone involved in the assembly, operation, transport, maintenance, and storage of this equipment must be aware, prudent, and properly trained in its safe and proper use. Most post hole digger accidents involve entanglement in the driveline or auger. The entanglement risk becomes greater when you replace our shear bolt or auger retaining bolt with a bolt that does not meet our stated specifications. This improper replacement occurs most often on machines that are loaned or rented to someone who has not read the operator's manual and is not familiar with a post hole digger.

Our current production post hole diggers include, as standard equipment, safety signs and guards for auger adapters, gearbox inputs, and drivelines. Older machines can be retrofitted to add these safety signs and guards. If you have an older Danuser post hole digger which does not have standard safety equipment, please contact your dealer about bringing your machine up to the current level of safety.



If you have not read or do not understand the instructions in the operator's manual and on the attached safety signs, you are not qualified to operate the post hole digger.



If you do not have an operator's manual and current safety signs attached to the unit, immediately request them from Danuser or your dealer.



Before operating, ensure all shields, guards, and safety signs are in place. All these safety measures are standard equipment on current production diggers. If you have an older digger, contact us or your dealer how to bring it up to current safety standards.



Post hole diggers are designed for one-man operation. Always sit in the tractor seat while operating the digger. Never operate the unit when anyone is near, or in contact with, any rotating or moving part.



Entanglement risk increases when you replace our shear bolts or auger retaining bolts with bolts longer than Danuser specifies in the operator's manual.



Before using the post hole digger, ensure the auger point and teeth are properly installed and in good working condition.



Before starting any project, always call 811 to locate any underground utility lines, pipes, or cables.

Do not use body weight or any body part to force the auger into the ground or to position the auger when it is turning. Do not operate with anyone near, or in contact with, any part of the implement, PTO driveline, or auger. It is the responsibility of the operator to see that no one is within 25 feet of the digger when it is started or in use. The final responsibility for safety rests with the operator of this machine.