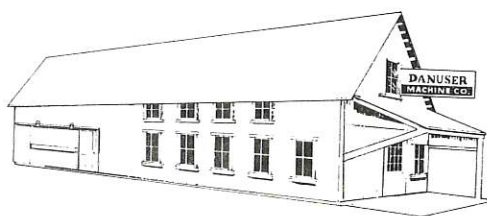


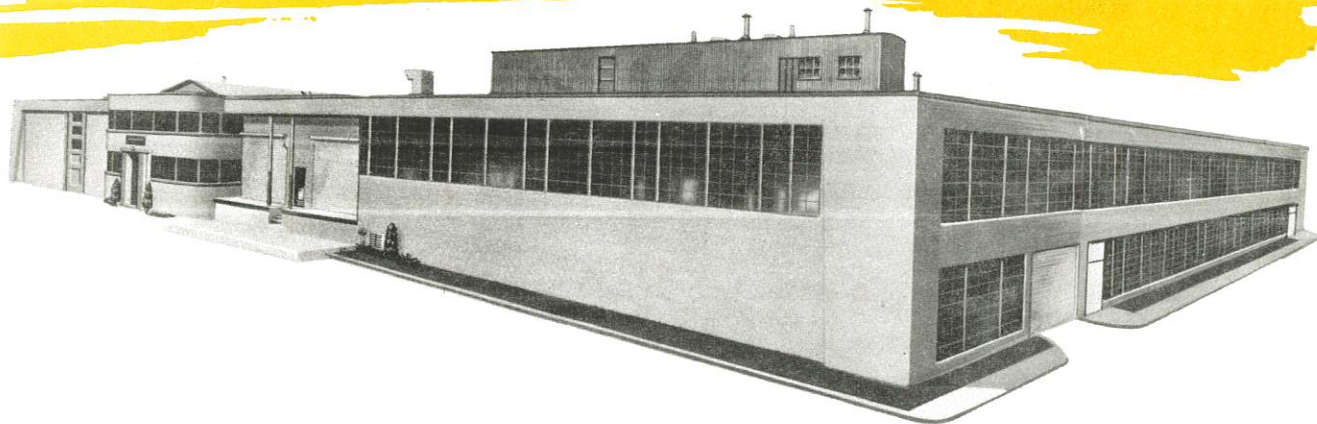
F-8 (W)

Serial No. 60,000 and up

Since 1910~



Building wagons and repairing all types of machinery was the business of my grandfather, K. B. Danuser, in this small shop. With pride in his Swiss craftsmanship, he established one policy for his concern — "the job had to be *right*".



A new, modern plant built by my father, Henry Danuser, is located on the original site. This building and its men are dedicated to the tradition of fine craftsmanship and the production of better machines for American fields. The challenge of changing economic conditions is being met with improved manufacturing methods to hold the price standards which are an integral part of Danuser Machine Company. From this sound growth will come new products, designed to better serve agriculture and industry.

Erub Danuser

IMPORTANT

Returning your registration card immediately assures proper dating of warranty on this implement. It also gives Danuser Machine Company the opportunity to provide you with information on changes in this product as they develop throughout the years.

Limited Warranty Policy

The Danuser Machine Company warrants its products for a period of one year (except for the G 20/40 gearbox which has a five year limited warranty) after date of sale by authorized dealer to be free from defects in material and workmanship, and will replace at its factory any part or parts thereof that shall be returned, with shipping charges prepaid, and which, when examined by us, shall disclose it to be defective, but this warranty shall not apply to implements or parts that have been subject to misuse, negligence, or accident, or that have been altered or repaired.

Items requiring your special attention in this manual or the decals on the implements are headed NOTE, **⚠ CAUTION**, **⚠ WARNING**, or **⚠ DANGER**. FAILURE to comply with a NOTE may lead to premature failure of the implement. FAILURE to comply with a **⚠ CAUTION** could result in damage or actual breakage of the implement or tractor, and minor personal injury. FAILURE to comply with a **⚠ WARNING**, or **⚠ DANGER** could result in personal injury or death.

⚠ WARNING

To prevent possible personal injury or death during assembly, installation, operation, adjustment, or removal of the implement, wear gloves, safety glasses or face shield, and do not wear loose clothing. Keep other persons a minimum of twenty-five feet (25') from any unit under power.

1. Guards and safety shields are for YOUR protection. DO NOT operate equipment unless they are in place.
2. DO NOT operate PTO with tractor safety shield removed.
3. Never travel with PTO in operation.
4. Operate all PTO-POWERED implements on standard 540 RPM tractors.
5. Shut off tractor engine, set brakes, and lower implement to ground before leaving tractor seat.
6. Our implements are designed for a one-man operation. It is the responsibility of the tractor operator to see that no one is in the proximity of the implement when it is started. DO NOT operate the implement with another person near or in contact with, any part of the implement, PTO drive, or Auger. Keep other persons at least twenty-five feet (25') from all implements in operation or under power.
7. DO NOT oil or adjust implement while in operation.
8. DO NOT attempt to operate implement on steep hillsides.
9. Reduce speed while transporting.
10. When the use of hand tools is required to perform any part of assembly, installation, removal, or adjustment of the implement, be sure the tools used are designed and recommended by the tool manufacturer for the specific task they will be used for.
11. Keep all bolts and nuts tight. Replace any damaged or worn parts immediately.

DANUSER F8 DIGGER

DESCRIPTION

The Danuser F8 Digger shown on the General Arrangement page is built to the exacting standards of high quality which have become synonymous with the word, "Danuser". It is designed for one-man operation that allows the operator to "Dig Holes Sitting Down". The precision-cut steel gears, heavy-duty roller bearings, cast steel gear housing and heavy tubular crane boom all form an integrated design to provide you, the customer, with the utmost in utility and reliability. Danuser Augers are available in sizes ranging from 4" to 30" in diameter and 40" to 52" long. Auger extensions in lengths of 7, 14, and 21 inches are available. The Augers are built with special wear-resistant steel on the lower flights, replaceable cutting edges, and replaceable points. Danuser Augers have a special feature in the retaining bolt (refer to the Auger page). This bolt keeps the Auger in place on the spindle should the shear bolt release. Study this owner's manual carefully before attempting to assemble and operate the Digger. You are responsible for furnishing this manual to others that may utilize the unit at your discretion.



WARNING

Serious injury or death can result from misuse.

ASSEMBLY INSTRUCTIONS

F8 DANUSER DIGGER

The Digger is shipped disassembled as seven (7) pieces: (1) The Gearbox, (2) The Boom, (3) The Yoke, (4) A box containing the U-Joint Assembly with necessary parts for attachment, (5) A Hardware Package, (6) The Auger Adapter Shield box, and (7) The Auger.

STEP 1: Check all pieces for shipping damage and make sure the boxes and the Hardware Package are unopened.

STEP 2: Open the hardware package and the U-Joint Assembly box and sort out the hardware using the General Arrangement page to aid in identifying the parts.

PLEASE REFER TO THE GENERAL ARRANGEMENT PAGE FOR AID DURING THE FOLLOWING STEPS

STEP 3: Slide shield on end of U-Joint assembly, then slide U-Joint on spline and install retaining ring through slot in end of U-Joint into groove in splines.



WARNING

Be sure the retaining ring is seated properly as damage can occur to the PTO or person injury may result if the retaining ring is not seated in the groove.

STEP 4: Install the lower pins in the yoke using the roll pins. If your tractor lower links are equipped for Category I pins, insure that the 7/8" end of the pin protrudes from the yoke. If your tractor is equipped for Category II pins, insure that the 1-1/8" end of the pin protrudes.

STEP 5: Attach the yoke to the Crane Boom, using the pin and snap rings.

STEP 6: Stand the Digger gearbox in an upright position, resting on the spindle. Attach the boom at the gearbox, using the pin and Klik-Pins.

STEP 7: If the pin in your tractor upper link bracket is 3/4" diameter, leave the bushing installed in the ball joint of the Digger Crane Boom. If your pin size is 1" diameter, a special bushing is provided. Drive out the bushing in the ball joint and install the special bushing.

DANUSER F8 DIGGER

INSTALLATION

INSTALLATION INSTRUCTIONS

Refer to your tractor Operator's Manual for instructions on tractor operation, tire inflation, and safety when using an integral three-point mounted implement.

F8 DIGGER

- STEP 1: Position the assembled Digger behind your tractor and connect the Crane Boom Ball Joint to the tractor upper link bracket with the tractor upper link pin. Secure the pin.
- STEP 2: Slip the lower link ball sockets over the Digger yoke link pins, securing them with Klik-Pins provided with your tractor hitch. Sway stabilizers must be used with the Digger.

CAUTION

Refer to the section entitled "TRACTOR 3-POINT HITCH ADJUSTMENTS" before proceeding further!

- STEP 3: Raise the Digger gearbox off the ground approximately 50 inches.
- STEP 4: Pack 1/4 lb. of good grade gun grease into open end of U-Joint drive tube. Insert U-Joint drive shaft into drive tube and grease the three lube fittings in the U-Joint and center crosses.

WARNING

Never allow anyone to work around the Digger, or attempt repairs, when it is in operation, or still under power.

- STEP 5: With the tractor engine shut off, connect the U-Joint drive shaft to the tractor PTO.
- STEP 6: Attach Auger with 1/2" X 4" standard Danuser shear bolt.

WARNING

- STEP 7: Open the Auger Adapter Shield box and install Auger Adapter Shield.

NOTE

The gearbox has been filled at the factory with three (3) pounds of Texaco Marfak No. 1. When adding lubricant to the gearbox, add Texaco Marfak No. 1 or equivalent. See lubrication instructions.

CAUTION

To prevent damaging U-Joints and safety shields, disconnect U-Joint from tractor PTO before lowering the Digger to the ground when removing it from the tractor.

DANUSER DIGGER

TRACTOR 3-POINT HITCH ADJUSTMENTS

For average conditions, the operating range of the Digger should be between 5 and 65 inches above ground level, measured from the pin attaching the Drive Assembly to the Boom. Slightly less or considerably more range is acceptable when desired, so long as there is no interference between Digger parts or Digger parts and tractor. As a general rule, the greater the operating range of the Digger Drive Assembly, the less force there is available for raising the auger in difficult soil conditions. Therefore, it is recommended that the 3-point hitch be adjusted toward the minimum required operating range.

CAUTION

At any time an adjustment is made to the 3-point hitch, reference should be made to the hitch section of the tractor Operator's Manual. The Digger should then be carefully raised and lowered through its operating range and checked for interference.

1. To change vertical limits of the Digger (transport height and digging depth):
 - (a) Attach front end of Boom to another hole in upper link bracket. Upper holes will lower the Digger; lower holes will raise the Digger.
 - (b) Shorten or lengthen lift links.
 - (c) Attach lift links to other holes in rockshaft lift arms. Rear holes increase lift range; front holes decrease it.
 - (d) Move lift links to different holes in lower links. Front holes usually increase; rear holes decrease range.
 - (e) Attach lower links to other forward pivot points. Lower points will raise the Digger; upper points will lower the Digger.
 - (f) Lengthen lower links to raise Digger; shorten to lower.
 - (g) Shift rear ends of lower links to a higher or lower position. Lowering will lower Digger; raising will raise Digger.
 - (h) Check tractor hydraulic system to be sure it is raising and lowering to its maximum and minimum recommended heights. Transport height and digging depth can be limited by adjusting lift control lever limit stops.

(Continued on back)

DANUSER DIGGER

TRACTOR 3-POINT HITCH ADJUSTMENTS



U-Joint shaft engagement should not be less than 10 inches when Digger is raised to maximum height.

2. If the front end of Boom strikes some part of the tractor when Digger is raised or lowered:
 - (a) Make adjustment under 1(a).
 - (b) Perform checks listed in 1 to limit maximum or minimum height of Digger.
 - (c) If possible, relocate or adjust the part of the tractor causing interference (tool box, seat, rear light, etc.).

3. If Digger Yoke strikes Boom when Digger is raised:
 - (a) Attach front end of Boom to a more forward hole on the upper link bracket.
 - (b) Attach lower links to rear forward pivot points.
 - (c) Lengthen lower links.
 - (d) Perform checks listed in 1 to limit transport heights.

4. If tractor has difficulty raising auger:
 - (a) Make adjustments under 1(c) and 1(d) to decrease lift range.
 - (b) Perform check 1(h).

5. If U-Joint strikes power take-off shield when Digger is raised:
 - (a) Perform checks under 1 to limit maximum height of Digger.

6. If tractor hitch action is "jerky" with Digger attached, or hitch raises and lowers rapidly during transport:
 - (a) Adjust tractor hydraulic system for "position control" implement rather than "draft" or "load control".
 - (b) If possible, lock tractor upper link bracket in a fixed position.

DANUSER DIGGER - OPERATING INSTRUCTIONS

 WARNING

To prevent possible personal injury or death during assembly, installation, operation, adjustment, or removal of the implement, wear gloves and safety glasses or face shield. Keep other persons a minimum of twenty-five feet (25') from any unit under power.

1. Raise auger point off ground and adjust auger to a vertical position by operating hand crank of the adjustable lift link.
2. Set tractor brakes to hold tractor on location and to prevent damage to Digger.
3. Lower auger point slowly to ground before engaging PTO. With engine at half throttle, engage PTO, lower auger into ground slowly so that dirt is conveyed from hole rather than screwing auger into ground. In many types of clay soils, it is necessary to hold back against the auger screw suction by moving the hydraulic control lever momentarily to either the "hold" or "raise" position.
4. When auger has been lowered about a foot or so into the ground, raise auger almost out of the hole, then drill deeper and raise auger again. Repeat this procedure until the desired hole depth is reached.
5. When auger has reached full depth required, allow auger to dwell momentarily at this depth to assist in cleaning out the hole.
6. Disengage PTO and raise auger from hole. For "heavy" soil conditions or for tractors requiring PTO shaft rotation to produce lifting power, allow auger to turn at slow speed while raising it from hole.
7. Loose dirt may be spun from auger by momentarily engaging PTO with engine running at faster speed than used in drilling.
8. If you break a shear bolt, the auger retaining bolt should retain the auger on the Digger spindle of the F-8. The roll pin should retain the U-Joint on the G 20/40 Digger.


 WARNING

9. Replace shear bolt as follows:
 - (a) Remove auger adapter shield on the F-8 only.
 - (b) Remove the broken shear bolt.
 - (c) F8 DIGGER: Install a new shear bolt, Danuser Part No. 7731, and nut, Danuser Part No. 7733. If genuine Danuser parts are not available, use a mild steel 1/2 - 13 x 4" bolt. Never use a bolt longer than 4".
G 20/40 DIGGER: Install a new shear bolt, Danuser Part No. 6015, and nut, Danuser Part No. 573. If genuine Danuser parts are not available, use a 5/16 - 18 x 2 1/4" bolt, Grade 5. Never use a bolt longer than 2 1/4".
 - (d) Tighten the shear bolt nut securely.
 - (e) Replace auger adapter shield.
10. If auger becomes lodged on an obstruction below ground, do not attempt to raise auger by hydraulic lift power alone until auger has been turned several revolutions in reverse.

 WARNING

Stop tractor engine, set tractor brakes.

After auger is freed, apply lift power and slowly rotate PTO to raise auger. Keep other persons twenty-five feet (25') from operating unit.

 WARNING

To avoid damage to universal joints, or any personal injury, do not transport Digger with tractor PTO engaged.

DANUSER DIGGER

MAINTENANCE

Check Digger daily for loose bolts or fasteners.

Check auger daily for loose, worn, or broken cutting edges or point. Worn edges or a slightly rounded point can seriously affect auger penetration.

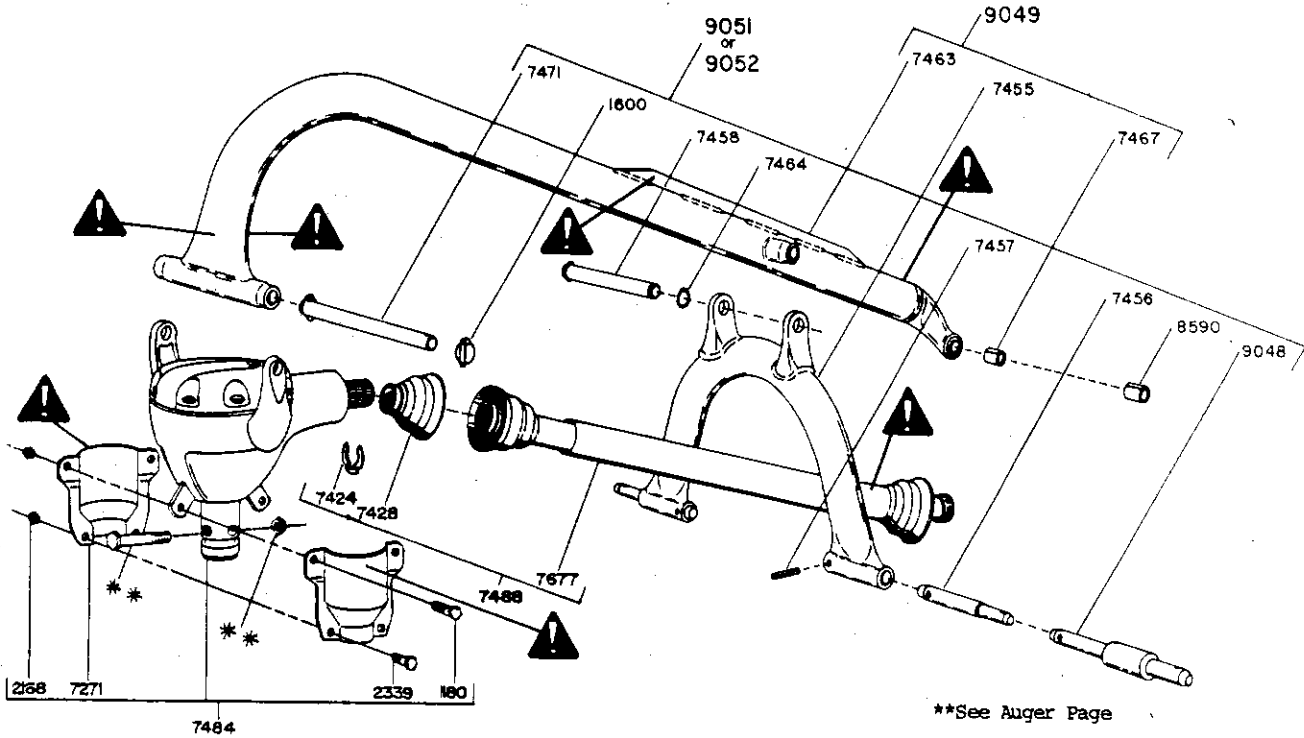
LUBRICATION FOR MODEL F-8

1. The Digger Gearbox has been filled at the factory to the proper level and should be checked periodically.
2. After 500 hours of usage, it is recommended that housing be drained, flushed, and refilled with three (3) pounds of Texaco Marfak No. 1 or equivalent.
3. This same lubricant may be used at all other lubrication points.
4. After scouring auger, through usage, coat with grease to protect against rusting.
5. Lubricate universal drive joints and all other fittings after digging 300 holes.
6. Each time an auger or auger extension is attached to the gearbox, the inside of the adapter should be coated liberally with grease.

LUBRICATION FOR MODEL G 20/40

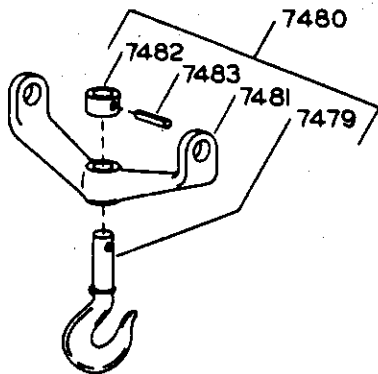
1. The Digger Gearbox has not been filled at the factory and must not be operated until two quarts of multigear lubricant EP SAE 140 is added.
2. Check the oil level in gearbox periodically by rotating the gearbox forward approximately 45° and checking at the l113 plug in cover. (Refer to the gearbox page.) Add multigear lubricant EP SAE 140 if required. DO NOT OVERFILL.
3. After 500 hours of usage, it is recommended that housing be drained, flushed and refilled with two (2) quarts of multigear lubricant EP SAE 140.
4. After scouring auger, through usage, coat with grease to protect against rusting.
5. Lubricate universal drive joints and all other fittings after digging 300 holes.
6. Each time an auger or auger extension is attached to the gearbox, the inside of the adapter should be coated liberally with grease.

DANUSER DIGGER MODEL F8 GENERAL ARRANGEMENT



PART NO.	DESCRIPTION	NO. REQ.
9049	CRANE BOOM Consists of the following:	1
7455	Yoke	1
7463	Boom (includes 7467 Bushing)	1
7467	Bushing (25/32X1)	1

PART NO.	DESCRIPTION	NO. REQ.
7484	Gearbox includes the following:	1
1180	Bolt (3/8-16 X 1 1/4) GR. 5	2
2168	Nut (3/8-16)	4
2339	Bolt (3/8-16 X 7/8) GR. 5	2
7271	Shield - Auger Adapter	2



PART NO.	DESCRIPTION	NO. REQ.
7488	U-JOINT PACKAGE Consists of the following:	1
7424	Retaining Ring	1
7428	Shield U-Joint	1
7677	Universal Joint Assy.	1

!	DESCRIPTION	NO. REQ.
	Safety Decals	7

PART NO.	DESCRIPTION	NO. REQ.
7480	HOOK ASSEMBLY Consists of the following:	1
7479	Hook	1
7481	Yoke	1
7482	Boss	1
7483	Roll Pin (5/16 x 1-3/8)	1

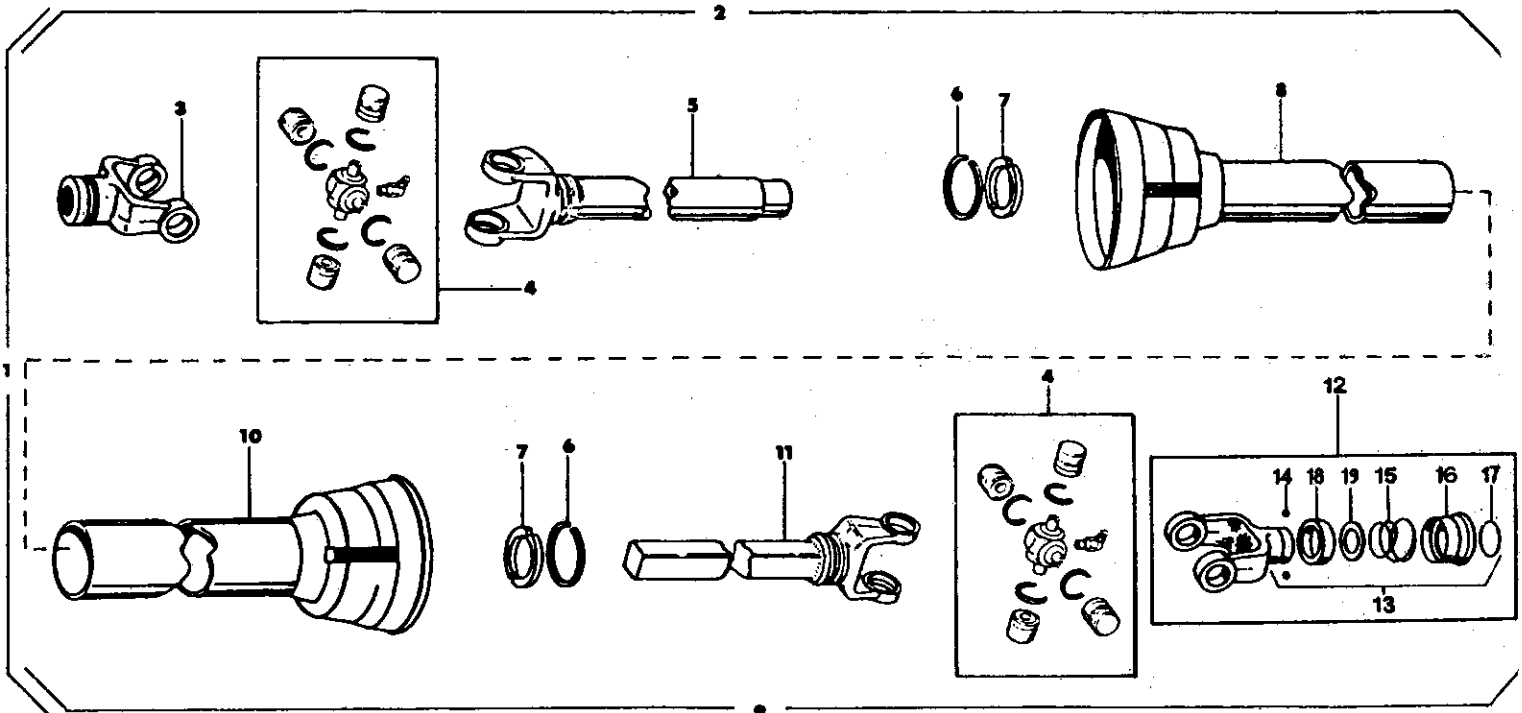
PART NO.	DESCRIPTION	NO. REQ.	
		9051	9052
9051	HARDWARE PKG - Category I	1	
9052	HARDWARE PKG - Category II Consists of the following:		1
1600	Klik Pin	2	2
7456	Link Pin (7/8 or 1-1/8 reversible)	2	
7457	Roll Pin (7/16 x 1-3/4)	2	2
7458	Pin (7/8 x 10-1/16)	1	1
7464	Retaining Ring (7/8)	2	2
7471	Pin (7/8 x 16-5/8)	1	1
8590	Bushing (29/32 x 1)		1
9048	Link Pin		2

Digger converts quickly to a handy crane boom. Remove one pin and replace Drive Assembly with Hook Assembly. Available through your Danuser Dealer.

IMPORTANT: When ordering parts please furnish MODEL NUMBER, SERIAL NUMBER, PART NUMBER, and DESCRIPTION.

DANUSER DIGGER
 MODEL F8
 UNIVERSAL DRIVES

UNIVERSAL JOINT TELESCOPING ASSEMBLY with TELESCOPING GUARD

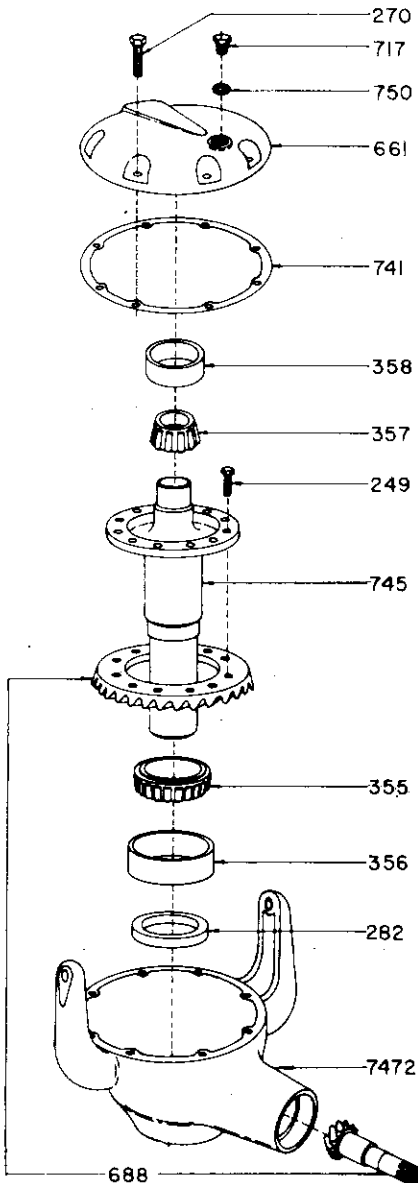


<u>Danuser Part No.</u>	<u>Weasler Part No.</u>	<u>Key No.</u>	<u>Description</u>
7677	422-2080-03	1	12 RW Universal Joint Telescoping Assembly with Guard
7255	TG422-2080	2	Joint & Tube Half with Guard
7256	TG1P2S	3	End Yoke
7590	12 RW Kit	4	Repair Kit
7257	7AB290/T2N1S	5	Yoke and Tube
6067	24N26	6	Bearing Retainer
7258	4P16	7	Nylon Bearing
7259	P20A362T4G	8	Inner Guard incl. Centralizer
7260	SG422-2080	9	Joint & Shaft half with Guard
7261	P10B350B4D	10	Outer Guard
7262	T1N2S/9E372H	11	Yoke and Shaft
7269	T6P6SL	12	Spring-Lok Yoke Assembly
6131	3-26-481	13	Spring-Lok Repair Kit
6075	12-5	14	Stainless Steel Ball
6132	23A26	15	Spring
6133	6A122-1	16	Collar Assembly
6078	24A24	17	Retaining Ring
6134	11M176	18	Cover
6135	11W178	19	Washer

DANUSER DIGGER MODEL F8 GEARBOX ASSEMBLY

IMPORTANT:

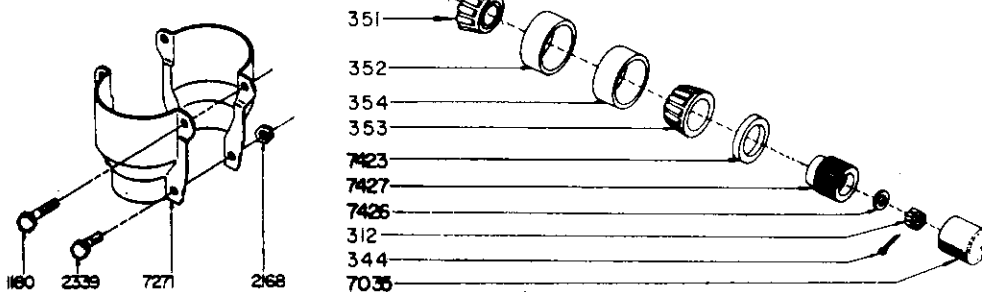
Only genuine Danuser parts should be used for any service repair of your GEARBOX UNIT. Full inter-changeability of all parts is attained through precision machining to close tolerances. The same assembly care should be taken as for any other high quality transmission.



PART NO.	DESCRIPTION	NO. REQ.
7484	GEARBOX (complete) Consists of the following:	1
249	Cap Screw (Special)	12
270	Cap Screw (7/16-20 x 1)	8
282	Seal, Grease	1
312	Nut	1
344	Cotter (7/64 x 1)	1
351	Bearing Cone (Pinion Inner)	1
352	Bearing Cup (Pinion Inner)	1
353	Bearing Cone (Pinion Outer)	1
354	Bearing Cup (Pinion Outer)	1
355	Bearing Cone (Spindle Lower)	1
356	Bearing Cup (Spindle Lower)	1
357	Bearing Cone (Spindle Upper)	1
358	Bearing Cup (Spindle Upper)	1
661	Cover, Gear Housing	1
688	Ring Gear and Pinion	1
717	Plug, Housing Cover	1
741	Gasket, Housing Cover	3
745	Spindle	1
750	Gasket, Cover Plug	1
1180	Bolt (3/8-16 X 1 1/4) GR. 5	2
2168	Nut (3/8-16)	4
2339	Bolt (3/4-16 X 7/8) GR. 5	2
7035	Cap-Pinion Protector	1
7271	Shield-Auger Adapter	2
7423	Seal, Grease	1
7426	Washer (Special)	1
7427	Spline Adapter	1
7472	Gear Housing	1

The drive speed through the gear housing is reduced by a gear ratio of 4-1/8 to 1.

IMPORTANT: When ordering parts please furnish MODEL NUMBER, SERIAL NUMBER, PART NUMBER and DESCRIPTION.



DANUSER MACHINE COMPANY

SERVICE ADJUSTMENT POLICY

LIMITED WARRANTY

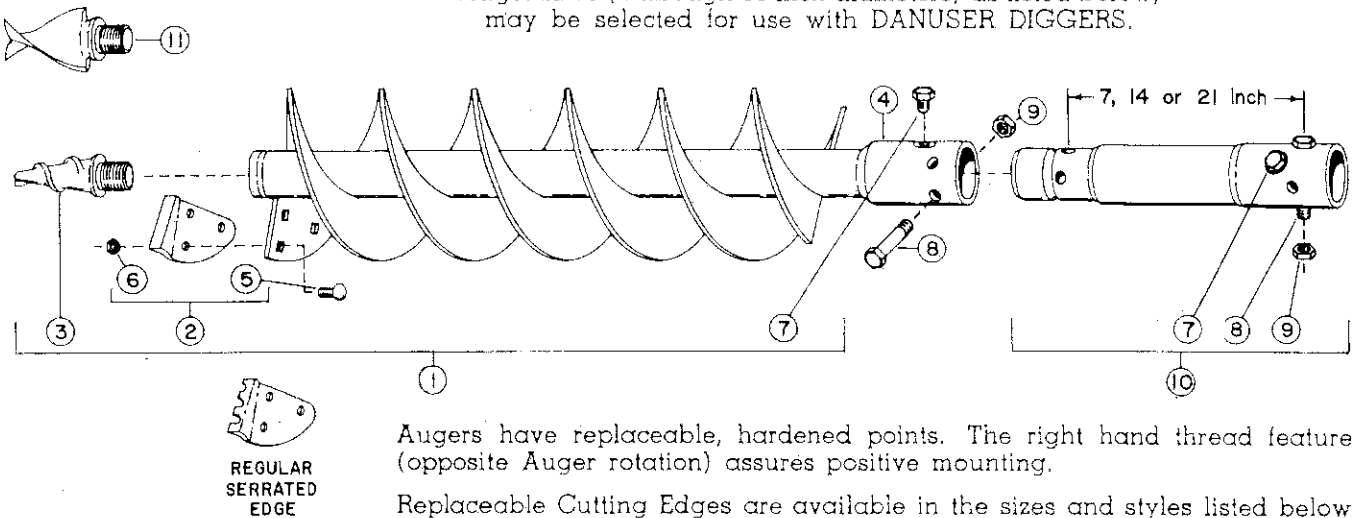
The Danuser Machine Company warrants its products, for a period of one year (except for the G 20/40 gearbox which has a five year limited warranty) after sale by authorized dealer, to be free from defects in material and workmanship.

1. ~~Parts may not be returned without authorization by Danuser Machine Company.~~
2. All products returned under a warranty inspection claim must be returned PREPAID to our factory.
3. To file a warranty inspection claim, your dealer must request from his Danuser Distributor a "SERVICE ADJUSTMENT REQUEST", which must be typed in triplicate. Forward the original and one duplicate through your dealer and distributor to DANUSER MACHINE COMPANY. If the return of the parts listed on your "SAR" is approved for warranty inspection, you will receive through your distributor and dealer the required "RETURN GOODS TAG(S)". You should then attach the tag(s) and return the parts through your dealer and distributor. Shipments arriving at our factory on a freight collect basis will be refused by our receiving department.
4. Our obligation under the above warranty is limited to repair or replacement at our factory of any part or parts thereof which the Danuser Machine Company determines to be defective.
5. Products or parts thereof which have been, by Danuser Machine Company's examination, improperly operated, damaged by accident or negligence, field repaired or altered, are not covered by this warranty.
6. Some purchased components, including gasoline engines, hydraulic motors, valves, and cylinders, but not limited to, are subject to the inspection and warranty of the respective manufacturer. Thus, delays in a warranty determination can be expected while we await their decisions. NOTE: Hydraulic valves, motors, and cylinders must arrive with all ports sealed from dirt and moisture. If they arrive with open ports, the warranty is void and no inspection will be made.
7. We reserve the right to change our specifications and design at any time.
8. ~~This warranty shall not obligate Danuser Machine Company to bear any cost of labor for field replacement, testing, or adjustment.~~

DANUSER DIGGER

AUGER ASSEMBLIES AND PARTS LIST

Auger sizes (4 through 30 inch diameters) as listed below, may be selected for use with DANUSER DIGGERS.



Augers have replaceable, hardened points. The right hand thread feature (opposite Auger rotation) assures positive mounting.

Replaceable Cutting Edges are available in the sizes and styles listed below and are packaged in sets complete with Bolts. Note: The 4" and 6" Augers have Edges welded to Augers.

Key	PART NUMBER — FOR AUGER SIZE										DESCRIPTION	No. Req.
	4"	6"	9"	10"	12"	14"	16"	18"	24"	30"		
1	450	417	1551	288	412	451	7650	1275	1270	7857	Standard Auger, 41" long, with Plain Edges & Std. Point	1
1			1552	487	488	489	7665	1276	1272	7935	Standard Auger, 41" long, with Serrated Edges	1
1			287								Standard Auger, 41" long, with Plain Angle Shear Edges	1
1			486								Standard Auger, 41" long, with Serrated Angle Shear Edges	1
1			7476	7478	7419	7437	7661				Special Auger, 53" long, with Plain Edges & Std. Point	1
1			7497	7498	7499	7519	7734				Special Auger, 53" long, with Serrated Edges	1
1			7846	7848	7850	7852	7854				Six Foot Auger, 76" long, with Plain Edges & Std. Point	1
1			7936	7937	7938	7939	7940				Six Foot Auger, 76" long, with Serrated Edges	1
2	7782	7783									Cutting Edges, Plain (Weld On)	1 Set
2			7784	7788	7790	7792	7794	7796	7798	7890	Cutting Edges, Plain (With Bolts)	1 Set
2			7785	7789	7791	7793	7795	7797	7799	7883	Cutting Edges, Serrated (With Bolts)	1 Set
3	899	831	831	831	831	831	831	831	831	831	Auger Point, Standard	1
4	7781	7781	7781	7781	7781	7781	7781	7781	7781	7781	Auger Adapter Replacement (For Field Welding)	1
5			784	784	784	784	784	784	784	784	Bolt, Cutting Edge (3/8 - 16 x 1 Carriage)	As Req.
6			785	785	785	785	785	785	785	785	Nut, Cutting Edge (3/8 - 16 Hex)	As Req.
7	7676	7676	7676	7676	7676	7676	7676	7676	7676	7676	Bolt, Retaining (Special)	1
8	7731	7731	7731	7731	7731	7731	7731	7731	7731	7731	Bolt, Shear (1/2 - 13 - 4)	1
9	7733	7733	7733	7733	7733	7733	7733	7733	7733	7733	Nut, Shear (1/2 - 13 Hex)	1
10	1849	1849	1849	1849	1849	1849	1849	1849	1849	1849	Auger Extension, (7")	1
10	7494	7494	7494	7494	7494	7494	7494	7494	7494	7494	Auger Extension, (14")	1
10	7663	7663	7663	7663	7663	7663	7663	7663	7663	7663	Auger Extension, (21")	1
11		1937	1937	1937	1937	1937	1937	1937	1937	1937	Auger Point, Special Duty	1

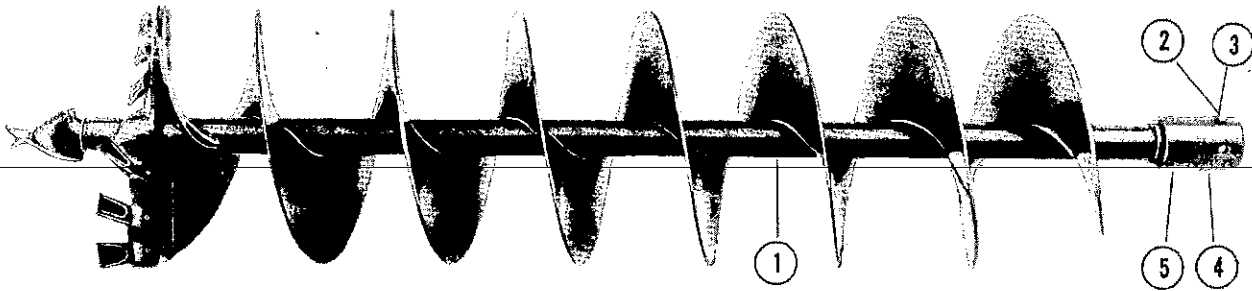
IMPORTANT: When ordering parts please furnish PART NUMBER, and DESCRIPTION.

SPECIAL EDGES AND POINT

Serrated Cutting Edges and Special Duty Auger Point are designed to aid penetration in tough drilling conditions.

DANUSER MACHINE COMPANY, Fulton, Missouri

AUGER ASSEMBLIES WITH DANUSER *Hole-digger* BORING HEADS



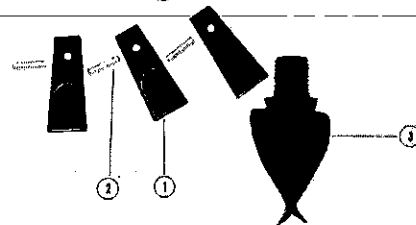
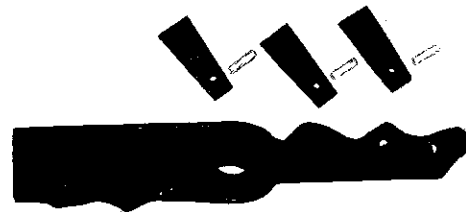
Key	PART NUMBER -- FOR AUGER SIZE										DESCRIPTION	No. Req.
	6"	9"	10"	12"	14"	16"	18"	24"	30"	36"		
1	9387	9314	9315	9316	9317	9318	9319	9320	9321		40" hole depth Auger, with double flight construction	1
1										9412	40" hole depth Auger, with single flight construction	1
1		9322	9323	9324	9325	9326					52" hole depth Auger, with double flight construction	1
1						9359	9361	9363	9365		52" hole depth Auger, with single flight construction	1
1		9327	9328	9329	9330						72" hole depth Auger, with double flight construction	1
1						9331	9332				72" hole depth Auger, with single flight construction	1
2	7737	7737	7737	7737	7737	7737	7737	7737	7737	7737	Shear Bolt (1/2 - 13 - 4)	1
3	7733	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	7676	Retaining Bolt (Special)	1
5	7781	7781	7781	7781	7781	7781	7781	7781	7781	7781	Auger Adapter Replacement (For Field Welding)	1

DANUSER *Hole-digger* BORING HEADS AND BORING HEAD PARTS

(FOR FIELD WELDING TO AUGER)



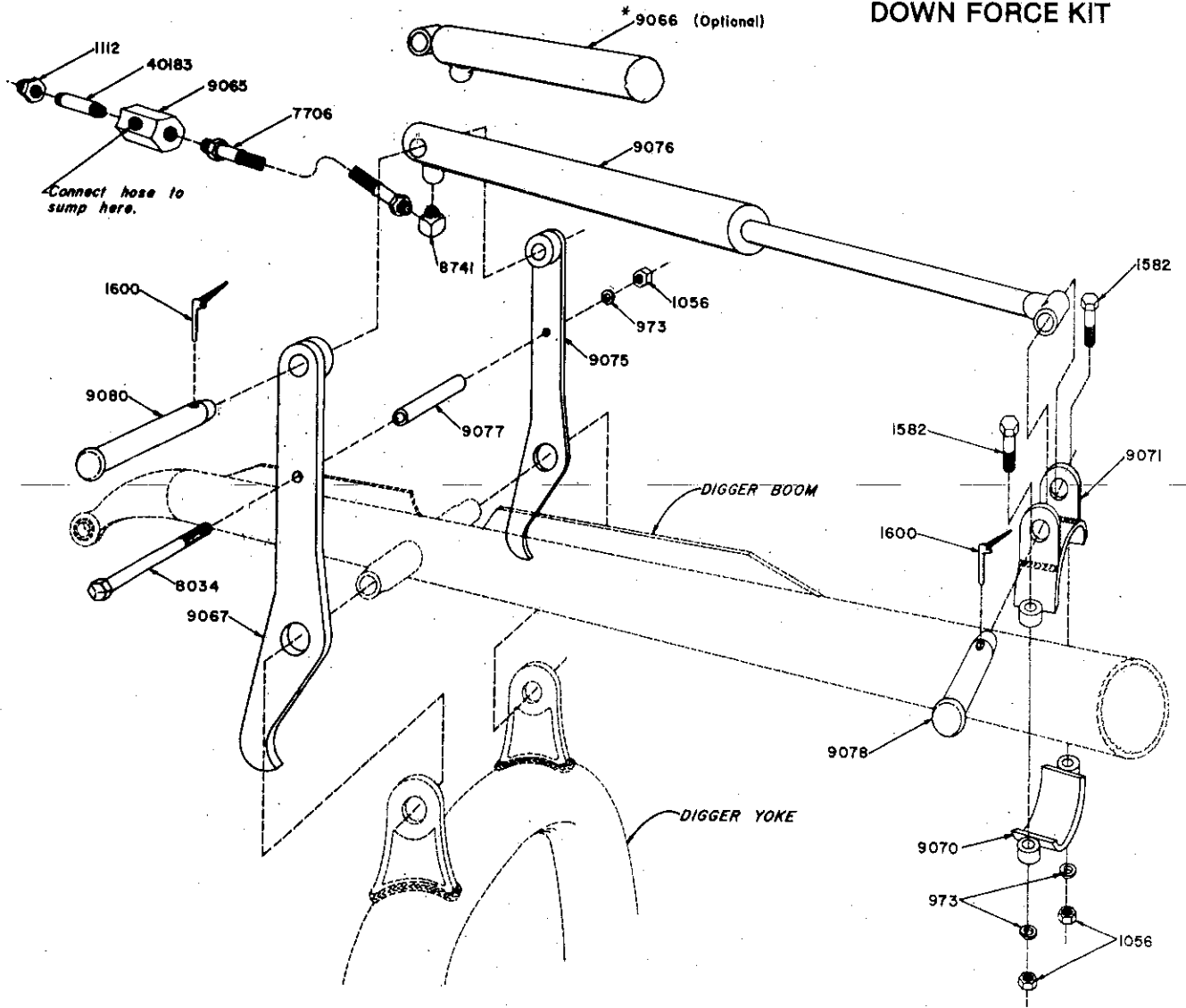
For Auger Diameter	No. Teeth per Head	*Part No.
6"	2	9386
9"	4	9306
10"	4	9307
12"	4	9308
14"	6	9309
16"	6	9310
18"	6	9311
24"	8	9312
30"	10	9313
36"	12	9416



Key	DESCRIPTION	Part No.
1	Hole Digger Head Tooth	9234
2	Roll Pin (5/16 x 1-3/8)	7483
3	Hole Digger Head Point	9353

* Includes Head with Teeth and Roll Pins, Point and Point Adapter with Tube, for welding to Auger center column.

DANUSER DIGGER DOWN FORCE KIT



PART NO.	DESCRIPTION	NO. REQ.
9079	DOWN FORCE KIT Consists of the following:	1
973	Lock Washer (1/2)	3
1056	Nut (1/2 - 13)	3
1112	Reducing Bushing (1/2 - 3/8)	1
1582	Bolt (1/2 - 13 x 2 1/2)	2
1600	Klik-Pin	2
7706	Hose (3/8 - 45)	1
8034	Bolt (1/2 - 13 x 5 1/2)	1
8381	Joint Tape	1
8741	Elbow (3/8 x 90°)	1
9065	Valve	1

PART NO.	DESCRIPTION	NO. REQ.
*9066	Cylinder (optional) (Order Seal Repair Kit #9097)	1
9067	Cylinder Support L.H.	1
9070	Lower Clamp Assembly	1
9071	Upper Clamp Assembly	1
9075	Cylinder Support R.H.	1
9076	Cylinder (Order Seal Repair Kit #9096)	1
9077	Spacer	1
9078	Clevis Pin (1 x 3 5/16)	1
9080	Clevis Pin (1 x 5 15/16)	1
40183	Nipple (3/8 x 2 1/2)	1

* When the Optional Cylinder is furnished, it may be identified by the boss welded to head end for attaching pin.
Seal Repair Kits are NOT interchangeable and must be ordered for the Cylinder used.

IMPORTANT: When ordering parts please furnish PART NUMBER, and DESCRIPTION.

INSTRUCTIONS FOR ATTACHING NO. 9079 DOWN FORCE
KIT TO DANUSER MODELS F7, F7A, F8, F7U & 8700 DIGGERS

Tractor must be equipped with 3-way or 4-way remote control valve and outlets.

Remove pin securing Digger yoke to Digger boom.

Install R.H. cylinder support 9075 and L.H. cylinder support 9067 on boom pivot boss. Reassemble yoke to boom.

Install spacer 9077 between cylinder supports and secure with bolt 8034, lockwasher 973 and nut 1056. Do not tighten nut.

Assemble upper 9071 and lower 9070 clamp assemblies loosely to Digger boom using bolts 1582, lockwashers 973 and nuts 1056.

Assemble elbow 8741 to cylinder 9076 (optional cylinder 9066) using joint tape furnished. (Note: One layer of joint tape should be used on all taper pipe thread fittings.) DO NOT let tape extend to inside of fitting and DO NOT over tighten fittings. Assemble hose 7706 to elbow.

Attach Digger to tractor according to instructions furnished and raise to MAXIMUM height.

Attach head end of cylinder, with elbow and hose down, to upper ends of cylinder supports using pin 9080 and Klik-Pin 1600. Collapse cylinder to its minimum length and attach cylinder rod to clamp 9071 with pin 9078 and Klik-Pin 1600.

Push upper ends of cylinder supports 9067 and 9075 forward so that lower ends are resting firmly against yoke. Extend cylinder approximately 3/4" by sliding clamp assembly on boom and tighten clamp securely in this position.

Tighten bolt 8034 securing spacer 9077 between cylinder supports. Attach the free end of hose 7706 to "CYL" port of valve 9065.

The hose and fittings to connect the valve to the sump should be obtained locally. The connection to sump can be made at an oil fill, oil level check, breather or drain opening. However, it is preferable to connect at a point below the oil level. The thread in the valve is 3/8-18 PTF.

Attach a suitable hose coupler tip to the "unmarked" port of the valve. Nipple 40183 and reducing bushing 1112 are included for possible use at this point. The coupler tip is not included and must be obtained from the tractor dealer. Connect coupler tip and valve to a remote hydraulic outlet on rear of tractor. If tractor is equipped with a 4-way remote control valve, there will be two outlets. Either one can be used depending upon which direction the operator prefers to move the valve control lever to apply down force.

OPERATION

The down force kit provides approximately 500 lbs. of additional force to the auger for drilling through tough digging conditions. To apply down force to auger, move the remote control lever in the proper direction to apply pressure at coupler to which control valve 9065 is connected. As long as the lever is held in position, force will be applied. When lever is returned to neutral, the down force cylinder is automatically connected to the system sump and Digger can be raised, lowered and otherwise operated in a normal manner.