

# MODEL 65 POST HOLE DIGGER

## ASSEMBLY & OPERATING INSTRUCTIONS



THIS SAFETY ALERT SYMBOL IDENTIFIES IMPORTANT SAFETY MESSAGES IN THIS MANUAL.

**SPECIAL  PRODUCTS**

15000 W. 44TH AVE. GOLDEN, CO 80403-1824 • 303-279-5544  
TOLL FREE U.S.A. NO. 800-525-8322 • FAX 303-278-3432

PD21-536-703

## ASSEMBLY INSTRUCTIONS



**CAUTION: DO NOT ATTACH THE DIGGER WHILE THE TRACTOR ENGINE IS RUNNING.**

- IMPORTANT:** The gear box is shipped without lubricant. Fill the top hole with EP 90 lubricant or the equivalent. Fill until the lube appears at the side level check hole. Approximately two pints or two pounds of the lubricant is enough to lubricate the gears and bearings. A greater amount will not harm the gear box. Do not fill to overflow point as this may damage the seals.
- STEP 1:** Be certain that the gear box has adequate lubrication. Check the oil level after every fifty hours of use.
- STEP 2:** Attach the boom (1) to the top link mounting bracket on the tractor using a top link pin and a lynch pin (not provided) through the hole at the bottom of the boom.
- STEP 3:** Connect the "A" frame (5) to the tractor's 3-point lift arms using the 7/8 in. pull pins with nut and lockwasher (5A) as shown in the drawing. Attach the "A" frame (5) to the boom (1) after selecting the desired hole (for angle adjustment) using the "A" frame pin (6) and lynch pin (4).
- STEP 4:** Attach the gear box (10) to the boom (1) using the boom pin (2). When in place secure with cotter pins (3). **NOTE:** Input shaft shield (9) and output shaft shield (26) are already attached to the gear box.
- STEP 5:** Attach the auger (20, 21 or 22) to the output shaft on the bottom of the gear box (10) using the 1/2 in. hex cap screws (17), 1/2 in. lockwashers (18) and 1/2 in. hex nuts (19). Tighten the nuts.
- STEP 6:** Attach the driveline (13) to the gear box input shaft using the 5/16 in. grade 5 hex cap screw (14), the 5/16 in. lockwasher (15) and the 5/16 in. NC hex nut (16). Tighten the hex nut. Insert the 1/4 in. x 3/8 in. set screw from the hardware kit in the hole on the yoke that aligns with the 3/16 in. groove on the gear box input shaft. Tighten.
- ATTENTION:** THE 5/16 IN. HEX CAP SCREW PROVIDES SHEAR PROTECTION. USE A GRADE 5 BOLT ONLY TO AVOID DAMAGE TO THE GEAR BOX OR AUGER.
- IMPORTANT:** The universal joint should be greased with a good grade chassis lube every week. At the beginning of each season grease the sliding driveshaft members with a moly grease. All diggers are equipped with quick-detach universal joints on the power-take-off end for a 1-3/8 in. splined shaft.
- STEP 7:** Attach the tractor end of the driveline (13) to the tractor PTO shaft. Push in the spring-loaded pin in the splined yoke (13E) and slip it on the splined PTO shaft of the tractor. Release the pin and push until it locks securely in place. It will be necessary to obtain a 1-1/8 in. to 1-3/8 in. sleeve spline adapter if your tractor PTO shaft has a 1-1/8 in. spline.
- STEP 8:** Attach and secure both chains on the driveline to the boom (1). See illustration A.
- STEP 9:** Attach the handle (8) to the gear box (10) and secure with the 5/16 in. set screw (11). Tighten.
- STEP 10:** Check all nuts and bolts for tightness. Stabilizers should be kept tight to avoid side sway of the digger.



**CAUTION: ALL SHIELDS MUST BE KEPT IN PLACE TO AVOID OPERATOR INJURY.**

NOTE: See illustration A for reference in assembling the digger and mounting it to the tractor. Note that the boom angle can be adjusted on your tractor for proper digging and ground clearance by moving the "A" frame to a different mounting hole as shown in illustration B.

NOTE: When the 7/8 in. diameter pull pins in the "A" frame are too small for the holes in the lift arms, bushings should be used to obtain a proper fit.



**CAUTION: POWER-TAKE-OFF MUST BE IN THE "OFF" POSITION WHEN MOVING THE TRACTOR.**



**WARNING: DO NOT OPERATE THE DIGGER UNTIL YOU HAVE READ THE OPERATING INSTRUCTIONS AND NOTES ON SAFETY WHICH FOLLOW.**

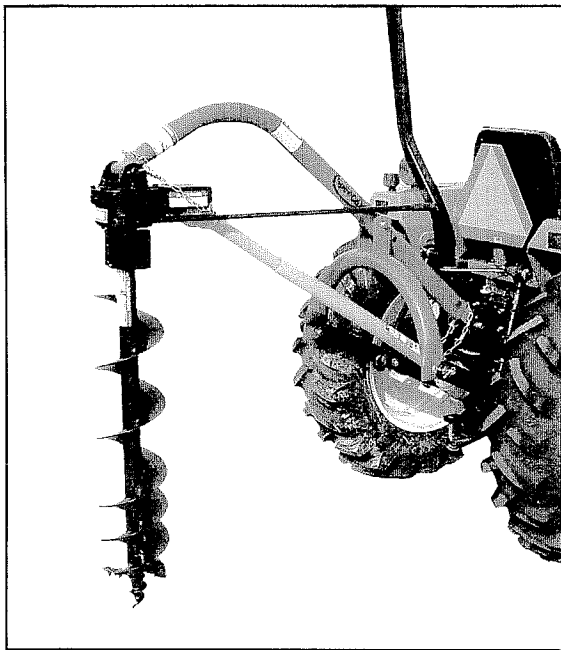


ILLUSTRATION A

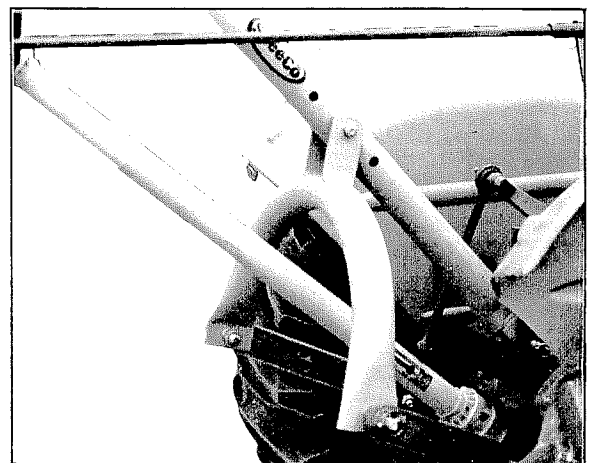


ILLUSTRATION B

## MODEL 65 POST HOLE DIGGER PARTS BREAKDOWN

REFERENCE NUMBER	PART NUMBER	DESCRIPTION	NUMBER REQUIRED	WEIGHT EACH (lbs.)
	PD24440	Model 65 Post Hole Digger less Auger	1	150.0
1	PD24840B	Boom	1	40.0
2	*PD24823E	Boom Pin	1	----
3	* O/L	5/32 in. x 1-1/2 in. Cotter Pin	2	----
4	*P791	7/16 in. Lynch Pin	1	----
5	PD24839	"A" Frame	1	24.0
5A	*P728	7/8 in. Pull Pin with Nut and Lockwasher	2	1.0
6	*P7715	"A" Frame Pin	1	0.8
7	*PD24822	Handle Grip	1	----
8	PD24841	Control Rod	1	3.5
9	PD2473	Gear Box Shield	1	3.2
10	PD2471E	Gear Box	1	50.0
11	O/L	5/16 in. Set Screw	1	----
13	PD2462E	Driveline with Plastic Shield	1	18.0
13A	PD24617E	Gear Box End "U" Joint Yoke	1	2.0
13B	PD24615E	"U" Joint Cross Assembly	2	1.0
13C	PD24611E	Inner Tube-Yoke and "U" Joint (Gear Box End)	1	9.0
13D	PD24612E	Outer Tube Yoke and "U" Joint (Tractor PTO End)	1	8.0
13E	PD24616E	"U" Joint Yoke (Tractor PTO End)	1	2.0
	PD24619E	Push Pin Kit for Tractor Yoke	1	----
13F	PD24614E	Inner Shield Tube Only	1	1.5
	PD24614Q**	Inner Shield Tube Only	1	1.5
13G	PD24613E	Outer Shield Tube Only	1	1.5
	PD24613Q**	Outer Shield Tube Only	1	1.5
13H	PD24659E	Guard Ring for Inner Tube	1	----
13I	HW171322	Roll Pin	2	----
13J	* O/L	1/4 in. x 3/8 in. Set Screw	1	----
13M	HW17156	Grease Fitting	2	----
13N	PD24656E	Guard Ring for Outer Tube	1	----
14	* O/L	5/16 in. x 2-1/2 in. Hex Cap Screw (Grade 5 Shear Bolt)	1	----
15	* O/L	5/16 in. Lockwasher	1	----
16	* O/L	5/16 in. NC Hex Nut	1	----
17	* O/L	1/2 in. NC x 3 in. Hex Cap Screw	2	----
18	* O/L	1/2 in. Lockwasher	2	----
19	* O/L	1/2 in. NC Hex Nut	2	----
20	PD2451	6 in. Auger (Less Point and Cutting Edges)	1	20.0
21	PD2452	9 in. Auger (Less Point and Cutting Edges)	1	25.2
	PD24542	9 in. Heavy Duty Auger (Less Point and Cutting Edges)	1	39.2
22	PD2453	12 in. Auger (Less Point and Cutting Edges)	1	44.6
	PD24543	12 in. Heavy Duty Auger (Less Point and Cutting Edges)	1	52.6
23	O/L	3/8 in. NC x 1-1/4 in. Carriage Bolt	4	----
24	O/L	3/8 in. Lockwasher	4	----
25	O/L	3/8 in. NC Hex Nut	4	----
26	PD2477	Output Shaft Shiled	1	1.9
27	O/L	3/8 in. NC x 1 in. Hex Cap Screw (Grade 5)	2	----
28	O/L	3/8 in. Lockwasher	2	----
29	PD24592	Screw Point with 1-1/4" NC Threads	1	2.8
	PD24515A	6 in. Auger with Screw Point and Cutting Edges	as required	23.0
	PD24525A	9 in. Auger with Screw Point and Cutting Edges	as required	29.0
	PD24529	9 in. Heavy Duty Auger with Screw Point and Cutting Edges	as required	43.0
	PD24535A	12 in Auger with Screw Point and Cutting Edges	as required	49.0
	PD24536	12 in. Heavy Duty Auger with Screw Point and Cutting Edges	as required	57.0
	*PD24441	Hardware Package	1	4.7

O/L- Obtain locally. Common fasteners available through hardware and farm stores.

\*\*Q- Shield tube part numbers have been changed effective 12/00. This is only for drivelines with black driveshaft members (13C & 13D) and "U"-joint yokes (13A & 13E).

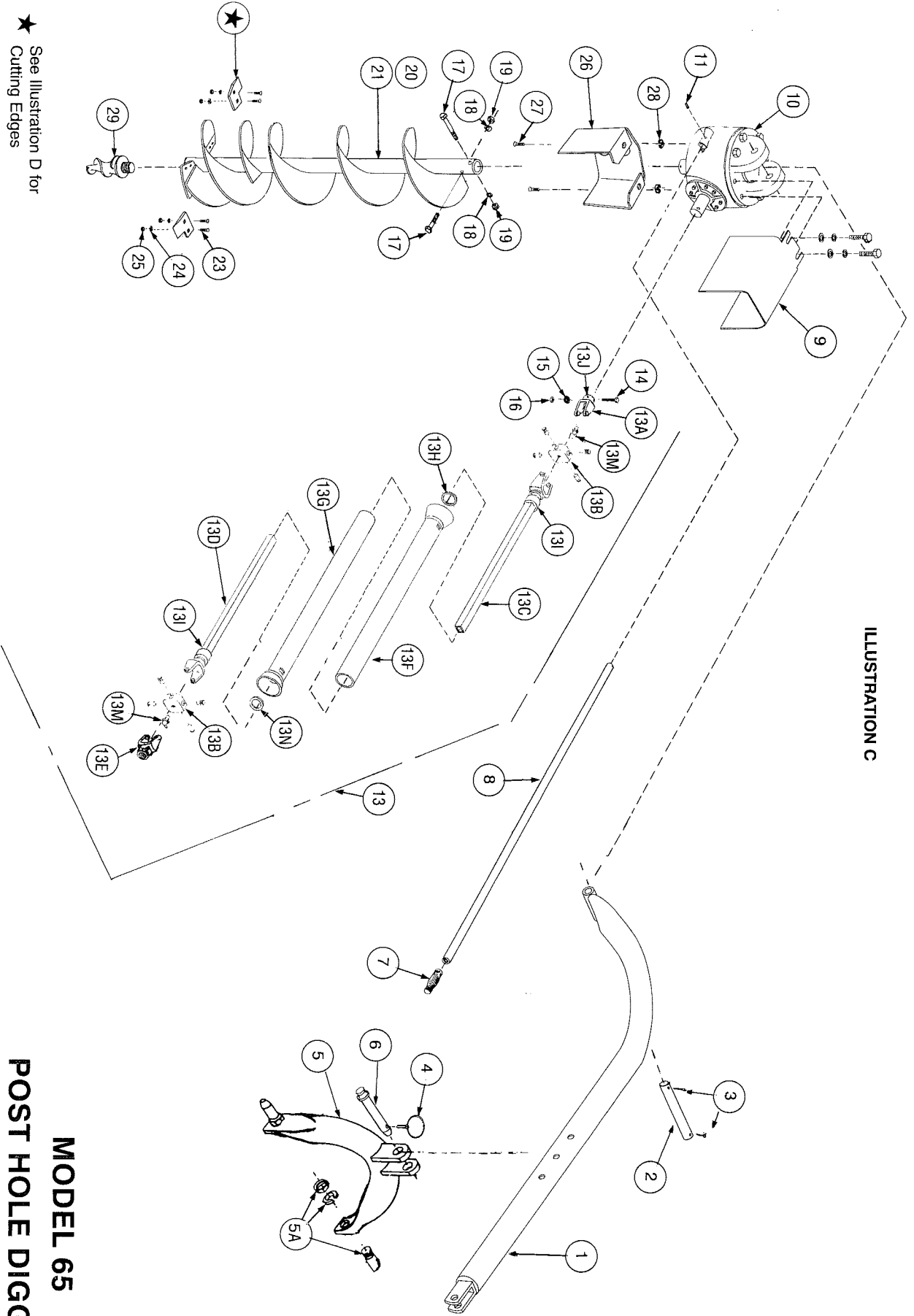


ILLUSTRATION C

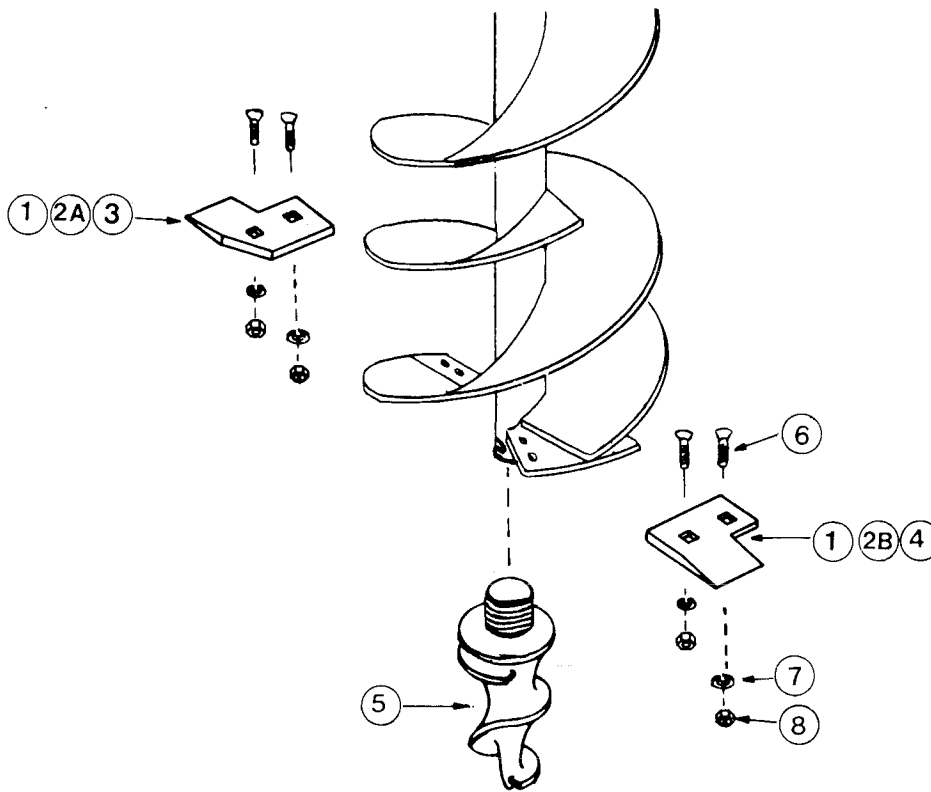
★ See Illustration D for Cutting Edges

# MODEL 65 POST HOLE DIGGER

## CUTTING EDGES AND POINT PARTS BREAKDOWN

REFERENCE NUMBER	PART NUMBER	DESCRIPTION	NUMBER REQUIRED	WEIGHT EACH (lbs.)
1	PD24567	6 in. Cutting Edge	2	0.3
2A	PD24577	9 in. Outer Cutting Edge	1	0.5
2B	PD24578	9 in. Inner Cutting Edge	1	0.5
3	PD24587	12 in. Outer Cutting Edge	1	0.8
4	PD24588	12 in. Inner Cutting Edge	1	0.8
5	PD24592	Screw Point with 1-1/4 in. NC Threads	1	2.8
6	O/L	3/8 in. NC x 1-1/4 in. Carriage Bolt	4	----
7	O/L	3/8 in. Lockwasher	4	----
8	O/L	3/8 in. NC Hex Nut	4	----

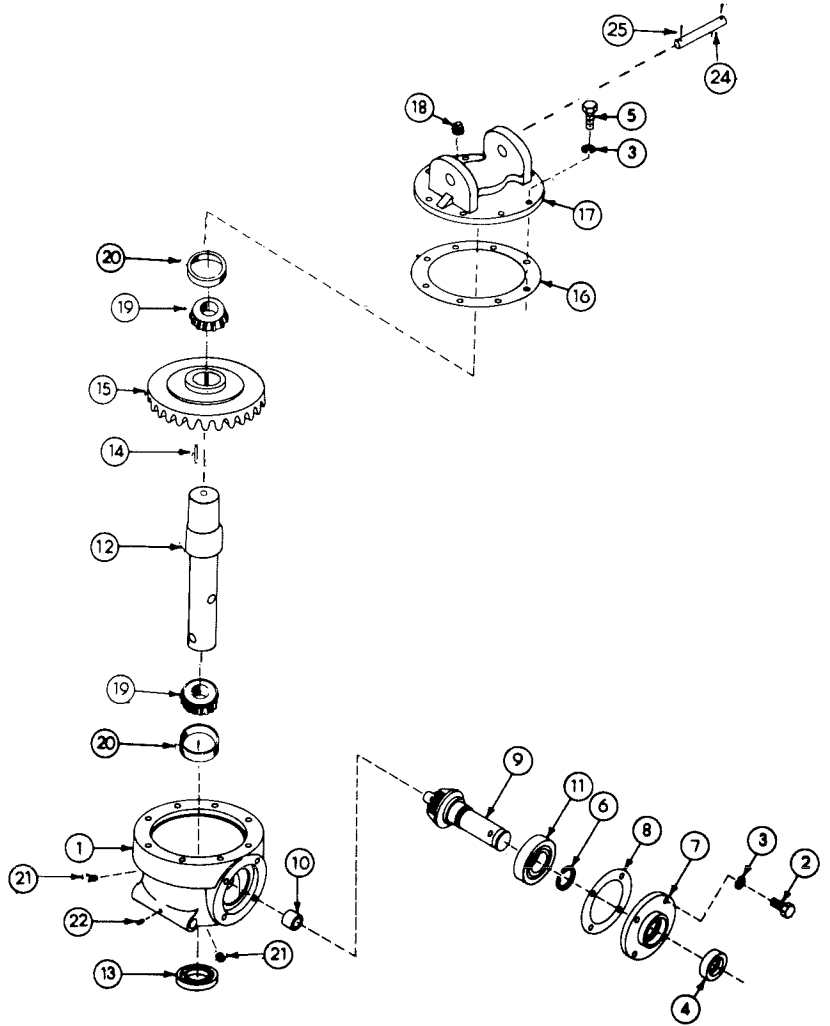
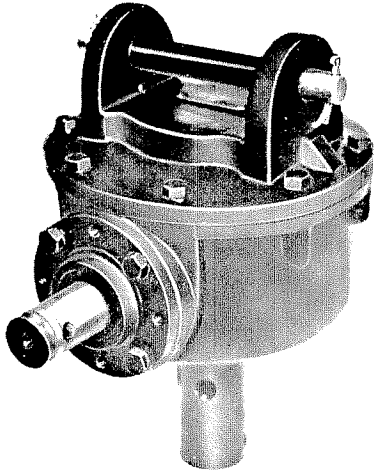
O/L- Obtain locally. Common fasteners available through hardware and farm stores.



**ILLUSTRATION D**

**NOTE:** It is important to replace the self-sharpening points on the auger when they show signs of excessive wear. Generally, the digging life of the point will be greater than that of the inner cutting edge. The digging life of the inner cutting edge will be greater than that of the outer cutting edge since it covers fewer inches of digging circumference.

# PD2471D GEAR BOX PARTS BREAKDOWN



REFERENCE NUMBER	PART NUMBER	DESCRIPTION	NUMBER REQUIRED
1	PD2471AS	Gear Box Complete with Shields	1
2	PD24711E	Gear Box Housing	1
3	O/L	3/8 in. NC x 1 in. Hex Cap Screw	4
4	O/L	3/8 in. Lockwasher	12
5	PD24760	Input Seal	1
6	O/L	3/8 in. NC x 1-1/4 in. Hex Cap Screw	8
7	PD24761	Input Retaining Ring	1
8	PD24713D	Input Cap	1
9	PD24725D	Input Cap Gasket	as required
10	PD24769	Input Shaft and Pinion Gear	1
11	PD24763	Needle Bearing	1
12	PD24764	Ball Bearing	1
13	PD24765E	Output Shaft	1
14	PD24766E	Output Seal	1
15	PD24771	Woodruff Key	1
16	PD24717E	Gear	1
17	PD24726D	Output Cap Gasket	as required
18	PD24712E	Cap	1
19	HC390313	1/2 in. NPT Pipe Plug	1
20	PD24772E	Bearing Cone	2
21	PD24773E	Bearing Cup	2
22	PD24774	1/4 in. NPT Pipe Plug	2
24	O/L	5/16 in. NC Hex Head Set Screw	1
25	PD24823E	Boom Pin	1
	O/L	5/32 in. x 1-1/2 in. Cotter Pin	2

O/L -- Obtain locally. Common fasteners available through hardware and farm stores.

## GENERAL MAINTENANCE

REFER TO ILLUSTRATION C

1. To remove the auger from the gear box output shaft, take out the two 1/2 in. x 3 in. hex cap screws (17).
2. To remove the driveshaft from the gear box input shaft, take out the shear pin bolt (14) and 1/4 in. set screw (13J).
3. To remove the auger control handle (8), loosen the 5/16 in. set screw (11) in the side of the gear box.
4. Check the oil level after every fifty hours of use. Use EP 90 lubricant and fill to oil level plug. All replacement lubricant should be of this type.
5. The universal joints should be greased with a good grade chassis lube every week. At the beginning of each season, grease the sliding driveshaft members with a moly grease.



### SAFETY

***READ AND UNDERSTAND THOROUGHLY THESE NOTES ON SAFETY BEFORE OPERATING THE DIGGER.***

1. This post hole digger is designed to be operated **ONLY** from the tractor seat.
2. Always make certain that the tractor is shut off and the PTO drive is disengaged before leaving the tractor seat.
3. Do not attach the digger or perform maintenance operations on it while the tractor engine is running.
4. Never manually position the auger or manually force the auger into the ground.
5. Make sure all safety shields are in place and tightened down.
6. Stand clear of the driveline and auger during operation to avoid becoming entangled or injured.
7. If an immovable object is encountered, turn off the machine immediately to prevent damage to the gear box or driveshaft and injury. A shear bolt is provided but may become welded to the input shaft if the driveshaft is left running after being sheared.
8. Always perform maintenance operations such as lubrication, adjustments or repairs on the post hole digger with the tractor engine off, the PTO drive disengaged and the auger point resting on the ground.
9. Do not operate the digger when the auger point is more than 6 in. above ground level. Operating the digger in elevated positions may cause the PTO driveline "U" joints to bind, resulting in equipment damage and operator injury.
10. Be certain that all persons in the work party are familiar with the operation of the digger.



11. Keep hands, feet and clothing away from power-driven parts.
12. Make certain that everyone is clear of all moving parts of the digger while in operation.
13. Always use the correct shear bolt.
14. Always replace missing or defaced decals. Reorder from Special Products Co., 15000 W. 44th Ave., Golden, CO 80403.
15. Check the tractor owner's manual for instructions on operation and safety.



**WARNING: FAILURE TO OBSERVE THESE SAFETY PRECAUTIONS CAN RESULT IN AN INJURY.**

## SAFETY DECALS

<span style="font-size: 2em; font-weight: bold; margin-left: 10px;">DANGER</span>		
	<p style="text-align: center;"><b>Rotating Parts Hazard</b> <b>Keep Away</b></p> <p style="text-align: center;"><b>To Prevent Serious Injury or Death from Rotating Parts:</b></p> <p style="text-align: center;"><i>Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.</i></p> <ul style="list-style-type: none"> <li>● Read and understand owner's manual before operating.</li> <li>● Do not operate without all shields and guards in place.</li> <li>● Do not use body weight to force the auger into the ground or to locate auger point when auger is turning.</li> <li>● Keep away from auger, cutting head and driveline when engine is running.</li> </ul> <p style="text-align: right; font-size: 0.8em;">PHDC 1</p>	

PART NUMBER: DL52020100  
LOCATION: TOP OF BOOM ON GEAR BOX END

<span style="font-size: 2em; font-weight: bold; margin-left: 10px;">DANGER</span>	
<p><b>TO PREVENT SERIOUS INJURY OR DEATH:</b></p> <p><i>Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.</i></p> <ul style="list-style-type: none"> <li>● Read and understand owner's manual before operating.</li> <li>● Operate only from the tractor seat.</li> <li>● Stay away from rotating parts. Keep others away.</li> <li>● Do not dig around underground utility lines without checking with authorities.</li> </ul> <p style="text-align: right; font-size: 0.8em;">PHDC 2</p>	

PART NUMBER: DL52020200  
LOCATION: UPPER RIGHT SIDE OF BOOM

**ATTENTION**

**540 RPM MAXIMUM**

**PTO OPERATING SPEED** 9

PART NUMBER: DL51011900  
LOCATION: PTO DRIVE SHAFT SHIELD


**SAFETY DECALS**

**⚠ 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 SPECIAL PRODUCTS CO., 15000 W. 44th AVE., GOLDEN, CO 80403-1824 PHONE 303-279-5544 PHDC 4

PART NUMBER: DL52020400  
 LOCATION: BOTH SIDES OF GEAR BOX SHIELD

**⚠ DANGER**



**Rotating Driveline  
 CONTACT CAN CAUSE DEATH  
 KEEP AWAY !**

**DO NOT OPERATE WITHOUT-**

- ALL DRIVELINE GUARDS, TRACTOR AND EQUIPMENT SHIELDS IN PLACE
- DRIVELINES SECURELY ATTACHED AT BOTH ENDS
- DRIVELINE GUARDS THAT TURN FREELY ON DRIVELINE

PART NUMBER: DL51019200  
 LOCATION: PTO DRIVE SHAFT SHIELD


**⚠ DANGER**

**TO PREVENT SERIOUS INJURY OR DEATH:**

- Contact dealer, make sure your machine has all current safety guards and shields in place.
- Do not operate without all guards and shields in place.
- Do not operate when auger is higher than 12 inches above ground level. Doing so may cause driveline to bind, resulting in equipment damage or operator injury.
- Stop auger rotation before maneuvering, relocating or transporting. PHDC 3

PART NUMBER: DL52020300  
 LOCATION: UPPER LEFT SIDE OF BOOM  
 AND PTO DRIVE SHAFT SHIELD

**⚠ DANGER**

<p><b>GUARD MISSING</b>                  When this is visible  <b>DO NOT OPERATE</b></p>		<p><b>KEEP CLEAR!</b>                  Keep Others Away !  <b>ENTANGLEMENT HAZARD</b>                  can cause Serious Injury or Death</p>
<p><i>Si no entiende ingles, se prefiere que busque a alguien que interprete las instrucciones para usted.</i></p> <ul style="list-style-type: none"> <li>● Never manually position the auger or manually force the auger into ground.</li> <li>● This machine is designed to be operated ONLY from the tractor seat.</li> <li>● Keep everyone clear of all moving parts of the digger while in operation. <small>PHDC 5</small></li> </ul>		

PART NUMBER: DL52020500  
 LOCATION: TOP END OF AUGER TUBE



**ALWAYS REPLACE MISSING OR DEFACED DECALS**

## OPERATING INSTRUCTIONS



**CAUTION: 540 RPM MAXIMUM PTO OPERATING SPEED.**



**CAUTION: ALWAYS BE CERTAIN THAT EVERYONE IS CLEAR OF THE DIGGER BEFORE STARTING ENGINE OR OPERATION.**

- STEP 1:** After mounting the digger to the tractor, lower the point slowly to the ground at the desired digging angle before engaging power.
- STEP 2:** Engage the power-take-off and start digging at a slow speed, lowering the auger slowly as it begins to dig.
- STEP 3:** Increase speed as the auger goes deeper. The type of soil will determine the proper auger speed. If the soil is extremely hard, it will generally improve operation to vary the speed of the auger at times. If an object is encountered which is too large for the auger to move, the digger will begin to vibrate. Withdraw the auger and remove the obstacle.
- STEP 4:** When the auger has reached the desired depth, spin it momentarily at a high speed to clear the hole of dirt. Reduce speed before withdrawing the auger from the hole.
- STEP 5:** Disengage the power-take-off after withdrawing from the hole and move the tractor to the next hole location.



**DANGER: STAND CLEAR OF THE DRIVELINE AND AUGER DURING OPERATION TO AVOID BECOMING ENTANGLED OR INJURED. IF AN IMMOVABLE OBJECT IS ENCOUNTERED, TURN OFF THE MACHINE IMMEDIATELY TO PREVENT DAMAGE TO THE GEAR BOX OR DRIVELINE. A SHEAR BOLT IS PROVIDED BUT MAY BECOME WELDED TO THE INPUT SHAFT IF THE DRIVELINE IS LEFT RUNNING AFTER BEING SHEARED.**



**CAUTION: DO NOT OPERATE DIGGER WHEN THE AUGER POINT IS MORE THAN 6 IN. ABOVE GROUND LEVEL. OPERATING IN ELEVATED POSITIONS MAY CAUSE THE PTO DRIVELINE "U" JOINTS TO BIND, RESULTING IN EQUIPMENT DAMAGE AND/OR OPERATOR INJURY.**