

# MODEL 70 POST HOLE DIGGER

## ASSEMBLY & OPERATING INSTRUCTIONS



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

**SPECIAL**  **PRODUCTS**

15000 W. 44TH AVE. GOLDEN, COLO. 80401 • 303-279-5544

## ASSEMBLY INSTRUCTIONS



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

**IMPORTANT:** The gear box is shipped without lubricant. Fill through 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 the 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 end 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. For category I tractors (lift arm spacing of 26 in.), use the pins in the inward position. For category II tractors (lift arm spacing of 32 in.) the pins should point outwards. 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) and boom pin bushing (2A). 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 3/8 in. grade 2 hex cap screw (14), the 5/16 in. lockwasher 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 3/8 IN. HEX CAP SCREW PROVIDES SHEAR PROTECTION. USE A GRADE 2 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 the handle (8) to the gear box (10) and secure with the 5/16 in. set screw (11). Tighten. Slide handle grip (7) on to handle (8).

**STEP 9:** 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 "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.**

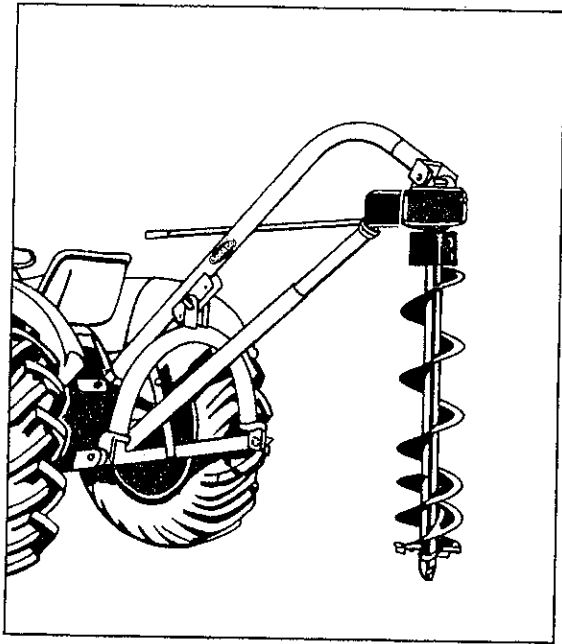


ILLUSTRATION A

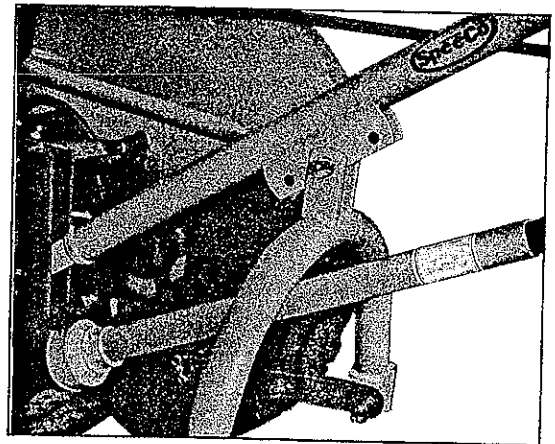


ILLUSTRATION B

## MODEL 70 POST HOLE DIGGER PARTS BREAKDOWN

REFERENCE NUMBER	PART NUMBER	DESCRIPTION	NUMBER REQUIRED	WEIGHT EACH (lbs.)
1	PD24417	Model 70 Post Hole Digger Less Auger	1	179.0
2	PD24816	Boom	1	48.0
	*PD24823	Boom Pin	1	1.0
2A	*PD24842	Boom Pin Bushing	1	
3	* O/L	5/32 in. x 1-1/2 in. Cotter Pin	2	----
4	*P791	7/16 in. Lynch Pin	1	----
5	PD2482A	"A" Frame	1	37.0
5A	*P728	7/8 in. Pull Pin with Nut and Lockwasher	2	1.0
6	*P772	"A" Frame Pin	1	0.8
7	*PD24822	Handle Grip	1	----
8	PD24820	Control Rod	1	3.5
9	PD2473	Gear Box Shiled	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	20.0
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
13G	PD24613E	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. NC x 2-1/2 in. Hex Cap Screw (Grade 2 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 Shield	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 Thread-In Screw Point and Cutting Edges	as required	23.0
	PD24525A	9 in. Auger with Thread-In 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 Thread-In 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
	*PD24420	Hardware Package	1	4.7

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

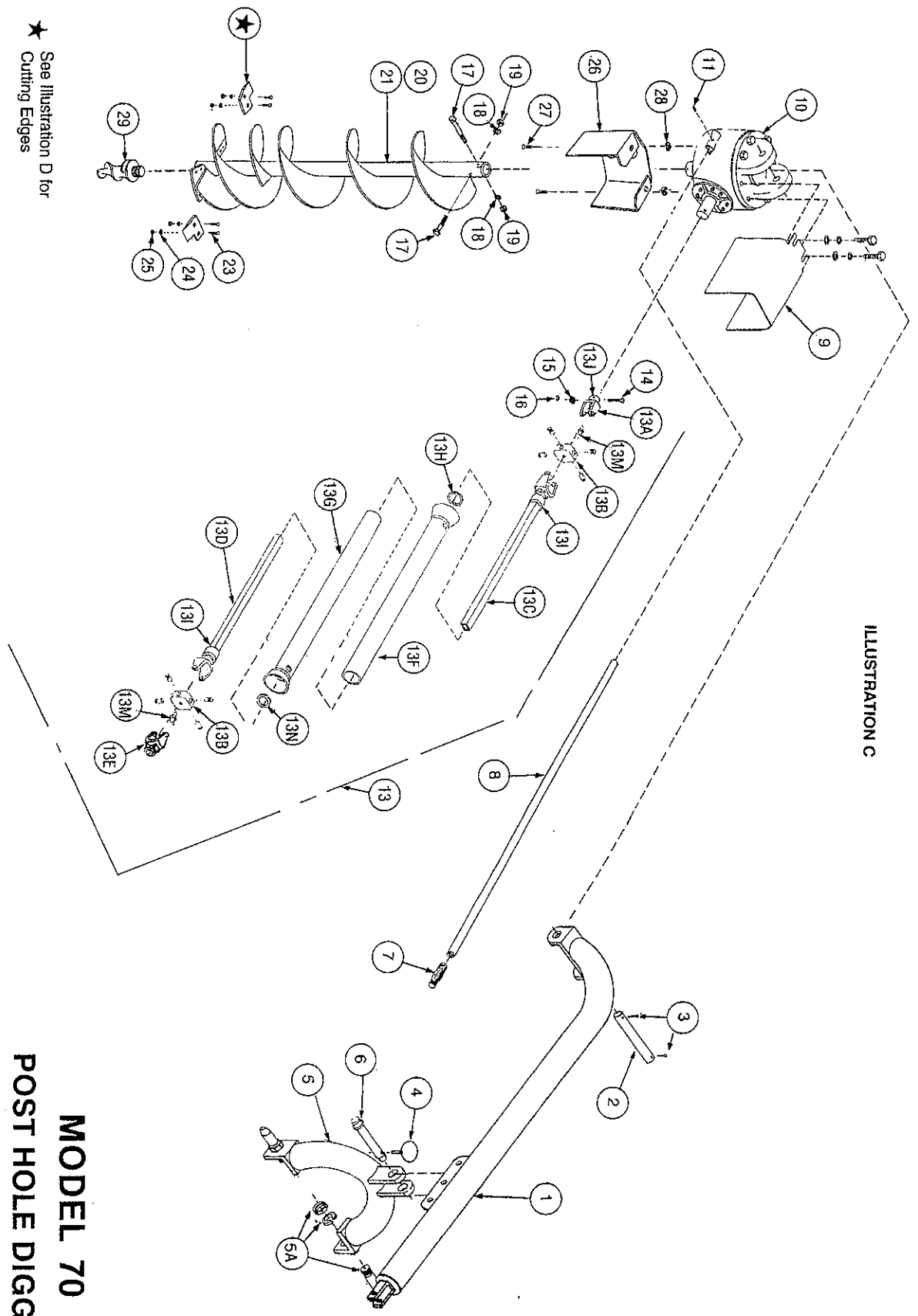


ILLUSTRATION C

**MODEL 70  
POST HOLE DIGGER**

★ See Illustration D for  
Cutting Edges

## 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.

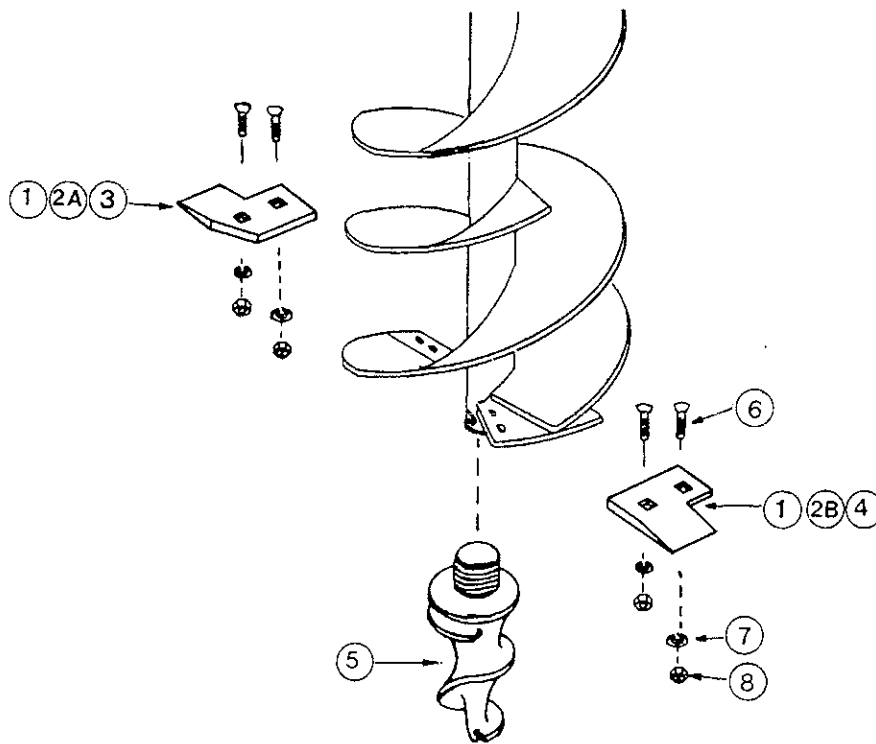


ILLUSTRATION D

**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.