

WIDDER
pipe cutting equipment



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18500 PORTABLE ELECTRIC POWER DRIVE

PRODUCT INFORMATION AND OPERATING INSTRUCTIONS:

Description: Widder 18500 Portable Electric Power Drive is an electric-motor-driven, heavy-duty power drive which provides power for threading pipe, conduit, and rod (bolt stock).

Pipe Threading Capacity: 1/8" through 2" N.P.T.

Motor: Universal type electric motor, 1/2 horsepower, 115 volts AC (50-60 Hz.), 15 amps, maximum draw. **Weight:** 29 lbs.

IMPORTANT: FOR YOUR SAFETY BEFORE OPERATING THIS UNIT, READ THIS OPERATOR'S MANUAL CAREFULLY AND COMPLETELY. LEARN THE OPERATION, APPLICATIONS, AND POTENTIAL HAZARDS PECULIAR TO THIS TOOL.

SAFETY PRECAUTION:

Warning: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

1. **Avoid accidental starting.**
 - Don't carry Power Drive with finger on trigger.

2. **Ground Machine.**
 - This tool must be grounded while in use to protect the operator from electric shock. This machine is equipped with an approved three-conductor cord and three-prong grounding-type plug to fit the proper grounding-type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal. **DO NOT USE THIS TOOL WITHOUT A GROUNDED (3-WIRE) SYSTEM.**

3. **Avoid dangerous environment.**
 - Do not use Power Drive in wet or damp locations. Do not expose electric power tools to rain or other water. Keep power cord away from heat, oil, and sharp edges.

4. **Extension cords.**
 - Use only three-wire extension cords which have three-prong grounding-type plugs and three-pole receptacles which accept the tool's plug. Be wary of "homemade" extension cords as they may not be correctly wired. Replace damaged cords.

Cord Length	Wire Size A.W.G.
5'-50'	12
50'-100'	10
100'-150'	8
150'-200'	6
200'-400'	4

5. **Outdoor use extension cords.**
 - When tool is used outdoors, use only extension cords suitable for use outdoors and so marked.

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6. Maintain Tool.

- Use sharp cutting tools and keep Power Drive clean for optimum performance.
- Follow all lubrication instructions as outlined in operating instructions.
- Keep handles clean, dry and free from oil and grease.

7. Do not force the tool.

- The Power Drive should be used for the application and use for which it was designed. Use the right tools for the job. Always use Support Arm (part# 18550) to support the weight and torque of the tool.

WARNING: THIS TOOL IS CAPABLE OF PRODUCING UP TO 400 FOOT POUNDS OF TORQUE AND MAY CAUSE SERIOUS INJURY IF IMPROPERLY USED. FOLLOW ALL INSTRUCTIONS

8. Dress properly.

- Do not wear loose clothing or jewelry. They can be caught in moving parts.
- Work gloves and non-skid footwear are recommended.
- Wear protective hair covering to contain long hair.
- WEAR EAR PROTECTION if exposed to long periods of noisy shop operation.
- WEAR SAFETY GLASSES

9. Secure Work.

- Use clamps or a vise to hold work **AT ALL TIMES.**

10. Do not overreach.

- Keep your balance and proper footing at all times. Do not reach across rotating parts, or material being worked on. Keep hands and loose tools away from moving elements.

11. Disconnect power.

- When not in use, before servicing, and when changing dies, always unplug tool from electricity.

12. Maintenance.

- Maintenance should be performed by a Factory Authorized Service Representative or the factory.

13. Replacement Parts.

- When servicing use only genuine replacement parts from an authorized distributor.

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OPERATING INSTRUCTIONS:

Warning: Operator should be thoroughly familiar with safety precautions before attempting to operate this tool.

1. Install die head squarely into the drive hub until spring-loaded drive pawls snap into place.
2. Secure pipe in a portable vise or bench vise.
3. Install Support Arm (part # 18500) onto pipe so that the Support Arm Post is pointing toward and flush with the end of the pipe to be threaded.

**CHECK DIE HEAD INSERTS FOR DAMAGE OR WEAR.
REPLACE INSERTS IF THEY APPEAR DULL OR DAMAGED.
DULL INSERTS WILL PRODUCE A RAGGED THREAD.**

4. Place die head over end of pipe. Make sure Support Arm is correctly positioned. Support Arm Post should pass through Handle on the Power Drive body.
5. Connect Power Drive to a GROUNDED OUTLET OR EXTENSION CORD (SEE SAFETY PRECAUTIONS).
6. During threading, it is critical that the die head is lubricated heavily with a quality heavy thread cutting oil.

**FAILURE TO LUBRICATE DIES WILL PRODUCE A
POOR AND/OR UNUSALBE THREAD**

7. Simultaneously depress the trigger and exert pressure against the die head with palm of free hand to make sure that thread is started.
8. Keep trigger depressed until the end of the pipe is even with the edge of the die head insert and release trigger.

9. Reverse threader by depressing trigger in opposite direction. Grip both handles of the tool and remove from pipe.

MAINTENANCE INSTUCTIONS:

Warning: Always disconnect tool from electricity before servicing Power Drive.

Note: If any maintenance is required other than that listed below, take Power Drive to A Factory Authorized Service Center.

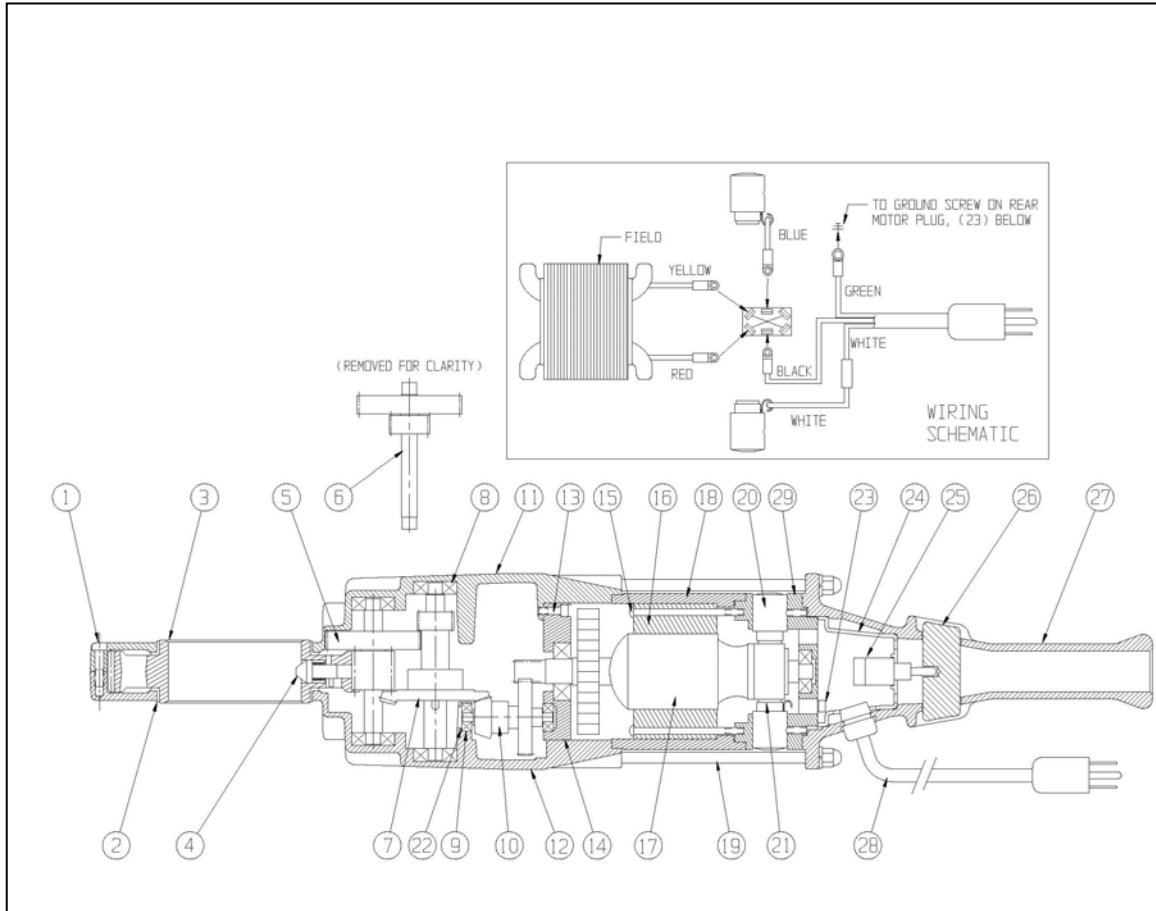
1. Lubrication.

- Approximately every 6 months remove the body cover and the drive hub. Remove old grease and carefully wipe down the face of the drive hub bearings and the bearing contact area of the drive hub. Apply a new coating of a high quality lubricating grease to the face of the gears, drive hub, and bearings.

2. Motor Brush Replacement.

- Approximately every 6 months remove the motor brushes and check for wear. Replace brushes when they are worn to less than 1/4" long.

18500 Electric Power Drive



Item #	Qty / Assy	Description	Item #	Qty / Assy	Description
1	11	Body Cap Screw	15	2	Field Screw
2	2	Bearing Ring	16	1	Field Assembly
3	1	Drive Hub Assembly	17	1	Armature
4	2	Drive Pawl Replacement Kit	18	1	Motor Cover
5	1	Pinion Assy#4	19	4	Tie Rod Assembly
6	1	Pinion Assy#2	20	1	Brush Holder Set and Screw
7	1	Pinion Assy#3	21	1	Brush Set
8	6	Ball Bearing	22	1	Finger Spring
9	2	Ball Bearing	23	1	Ground Screw
10	1	Pinion Assy#1	24	1	Switch Cup
11	1	RH Body Half Assembly	25	1	Switch Assembly
12	1	LH Body Half Assembly	26	1	Trigger
13	2	Front Plug Screw	27	1	Handle
14	1	Front Motor Plug Assembly	28	1	Cord Set
			29	1	Rear Motor Plug Assembly