



**ROCKWELL**  
MANUFACTURING COMPANY  
PITTSBURGH 8, PENNSYLVANIA



DATED IM 1-4-61

## 7" STANDARD GRINDER and BUFFING MACHINE

These perfected tool grinders are the most accurate, finest and safest grinders made.

From the double sealed-for-life ball bearings to the Twin-Lite Safety Shields these grinders offer the utmost in efficiency, convenience and safety and set new standards because they contain additional features not found in competitive makes.

Fully MACHINED tool rests — efficient guards — balanced wheels — these are only a few of the outstanding features of these remarkable grinders.

### TOOL RESTS

Fully machined — not rough castings. Are fully adjustable — designed so that full advantage can be taken of sides of wheels. Easily detached.

### WHEEL GUARDS

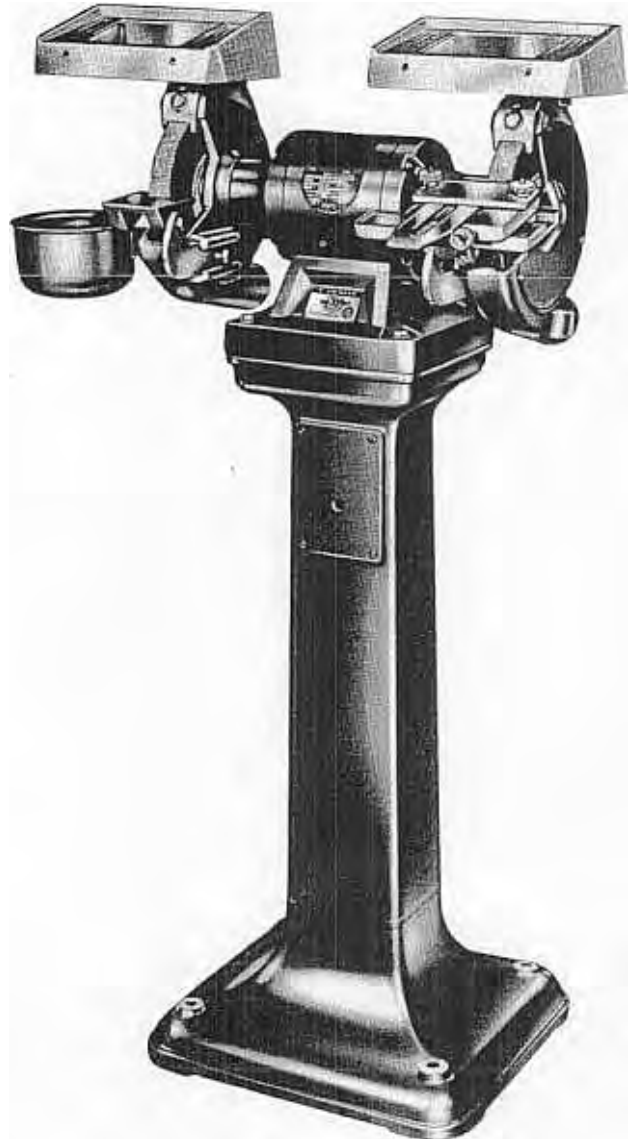
Heavy cast iron with steel side plates. Designed to meet the strictest regulations. Only actual grinding section of wheel is exposed. Chute discharges dust to rear. Spark guard adjustable to wear of wheel.

### ELECTRICAL CONNECTIONS

Before connecting any grinder to an electrical power system, be sure that the grinder rating agrees with the electrical system that it is to be connected to. We also recommend that #14 wire, fused with a 15 amp time lag fuse, be used to supply power to all Delta ½ hp grinders, immaterial of their electrical rating. Single phase and DC grinders are supplied with a cord set for use in connecting power to both the grinder motor and lights. The plug on 115 volt units is a 115 volt parallel blade polarized 3 prong grounding type plug. The plug supplied on 230 volt units is a 230 volt tandem blade polarized 3 prong grounding type plug. We recommend on 2 or 3 phase grinders the use of a 100 watt transformer with an isolated 115 volt secondary to supply power between the grinder light switch terminals in the grinder base, and the motor power leads. This transformer must be rated to supply 115 volts to the grinder lights since the grinder lights will be supplied wired to the light control switch for 115 volts operations on all 2 or 3 phase units. The transformer is not supplied by us.

### SAFETY SHIELDS

Patented Twin-Lite standard on all models. Double thickness shatter-proof glass. Included with each shield are two lamps which flood both sides and face of wheels, independent of shop lighting system. No glare in operator's eyes. Safety shields are wired to motor switch so as to go on and off with motor operation on single phase and DC grinders only. Separate toggle switch is furnished for lights on 2 and 3 phase grinders.



### BUFFING MACHINES

Buffing Machines are supplied with the toggle switch as standard equipment. All parts are interchangeable between the grinding and buffing machines as illustrated in drawings and parts list of this instruction manual, but the buffing machines are supplied without safety shields, lamp bulbs, water pot, wheels, guards and tool rests.

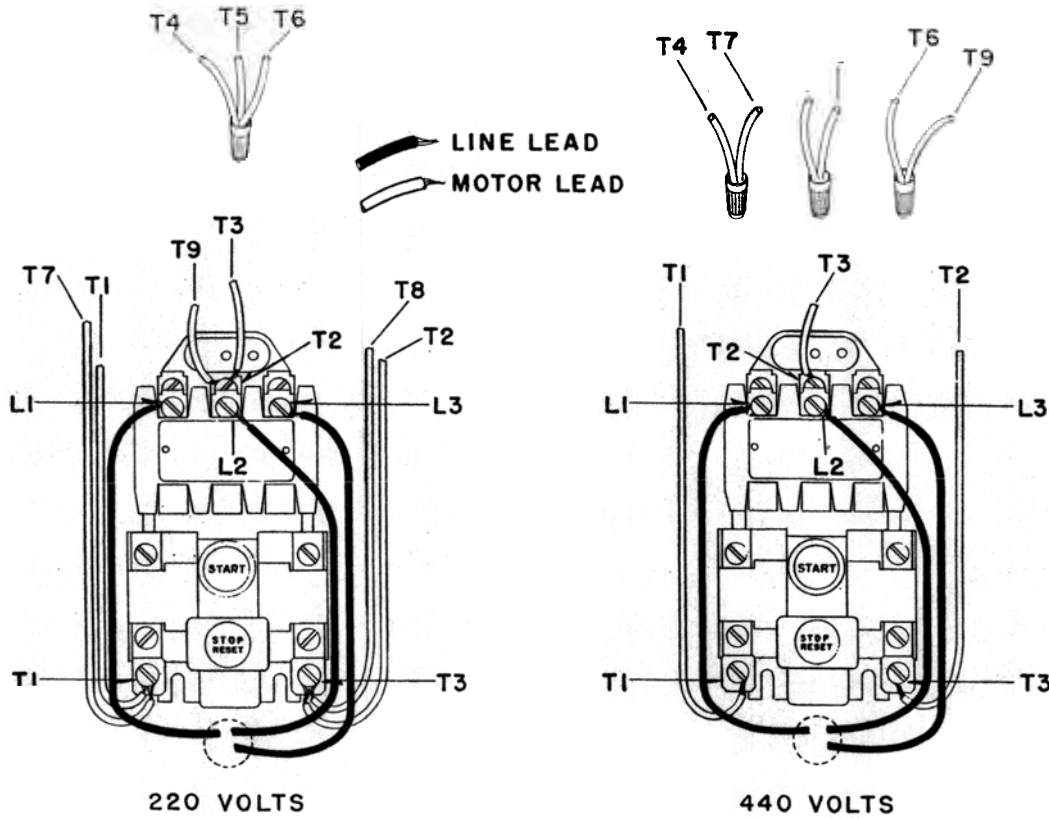
### BEARINGS

Precision double-sealed ball bearings. No oiling required for entire life of bearing. No trouble due to entrance of abrasive dust.

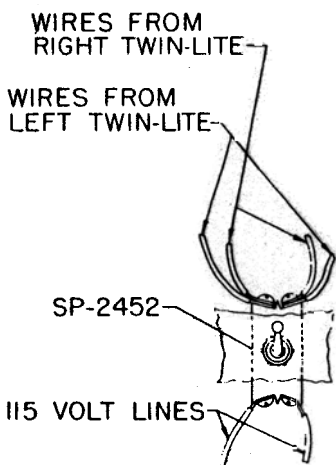
### WHEELS

It is earnestly recommended that only our balanced wheels be used on your grinder. These are high-grade Aluminum Oxide wheels and are balanced to within 1/10 inch ounce. While this may not seem important on the surface, the use of balanced wheels adds years to the

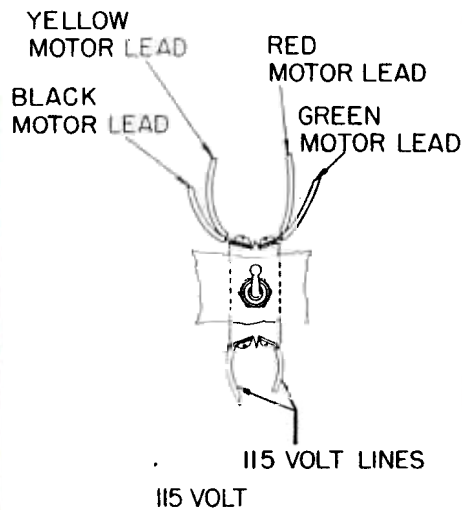
life of the bearings in any grinder, and by eliminating the commonest source of vibration, permits far more accurate work. If our wheels do not suit your work, your dealer can order special wheels from any reliable grinding wheel company, but be sure they are balanced for perfect results.



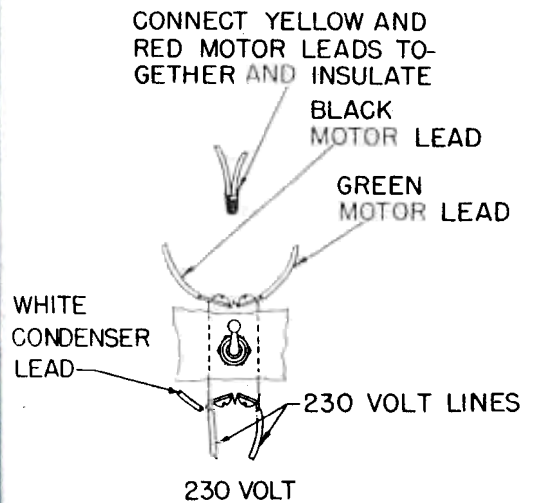
CONNECTION OF MANUAL STARTER FOR 3 PHASE GRINDER MOTOR

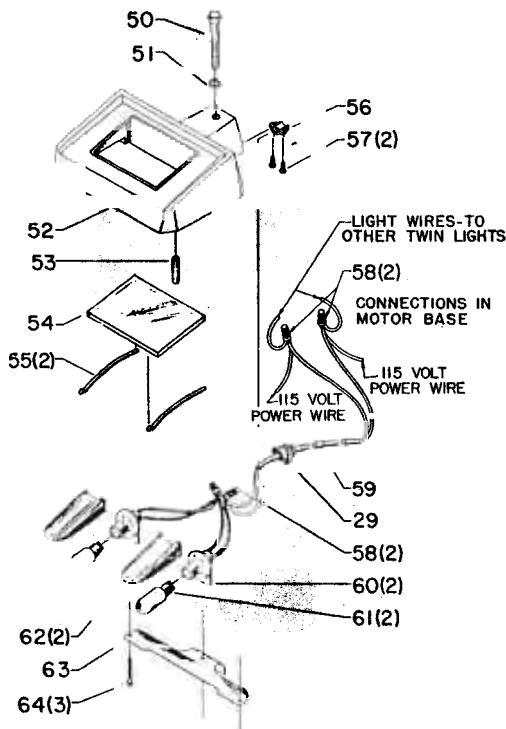
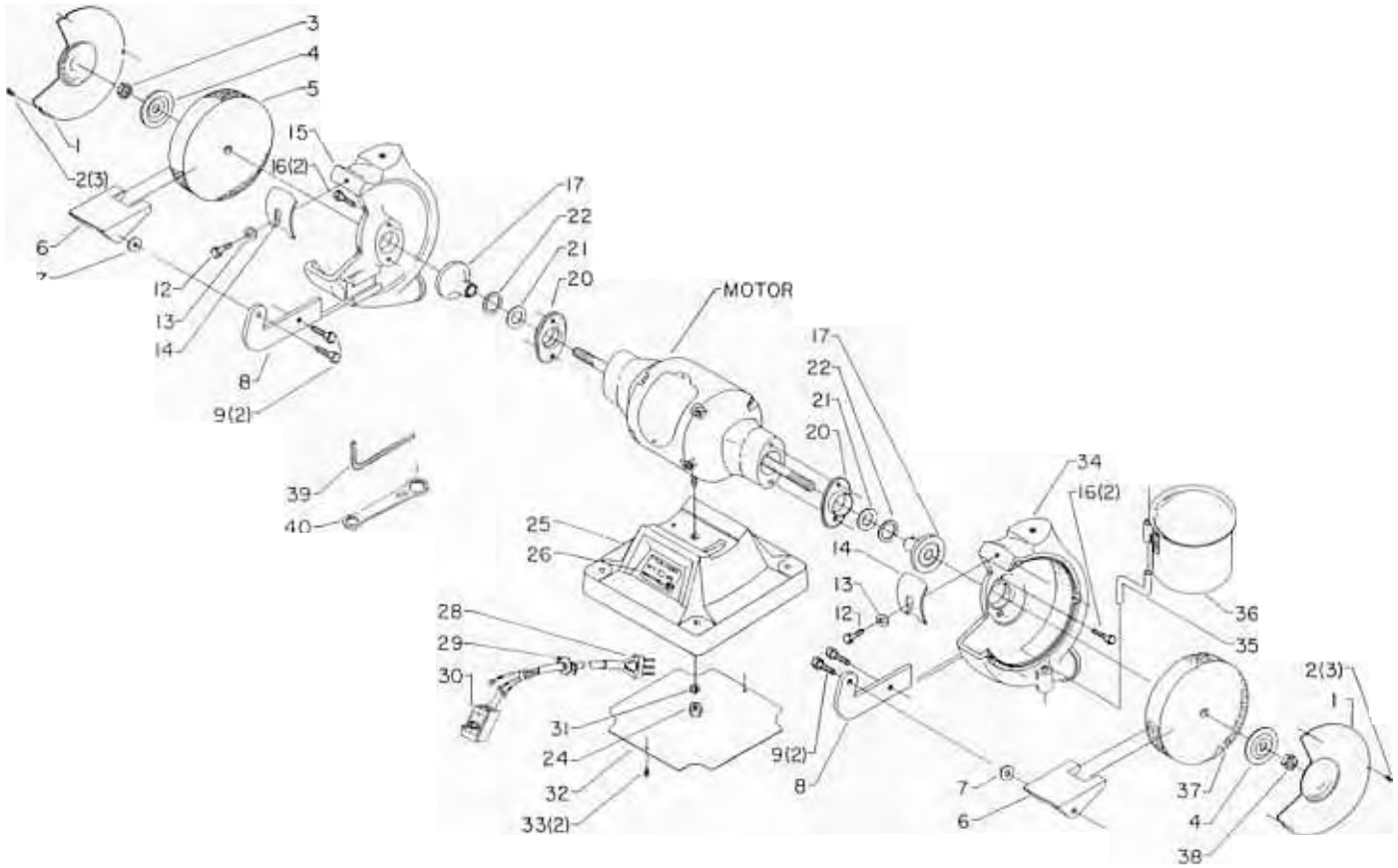


CONNECTION OF SWITCH FOR 3 PHASE GRINDER LIGHTS

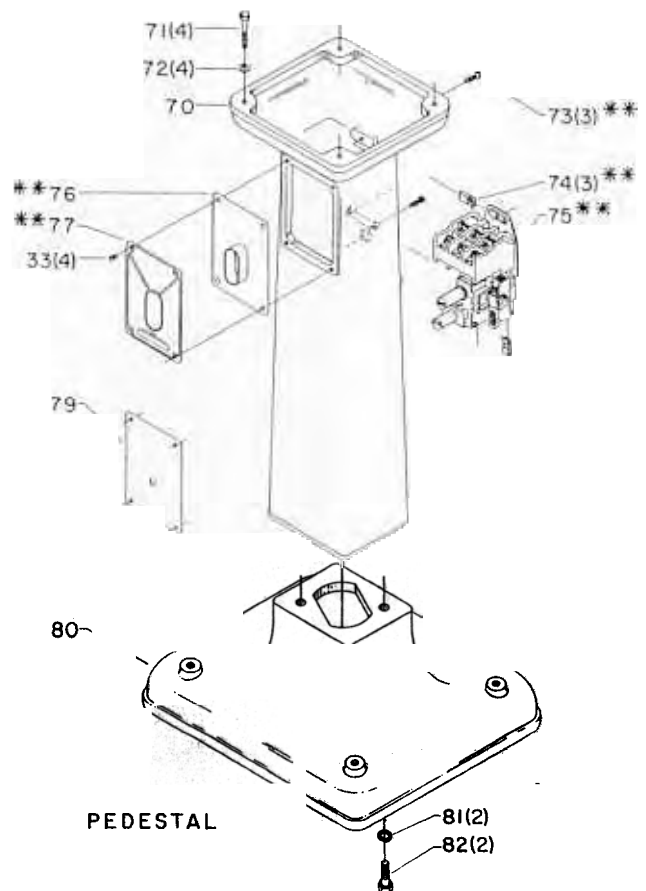


CONNECTION OF SWITCH FOR SINGLE PHASE GRINDER MOTOR AND LIGHTS





TWIN-LITE SAFETY SHIELD  
 (2 REQUIRED)



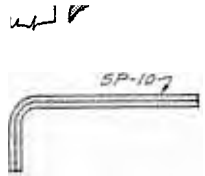
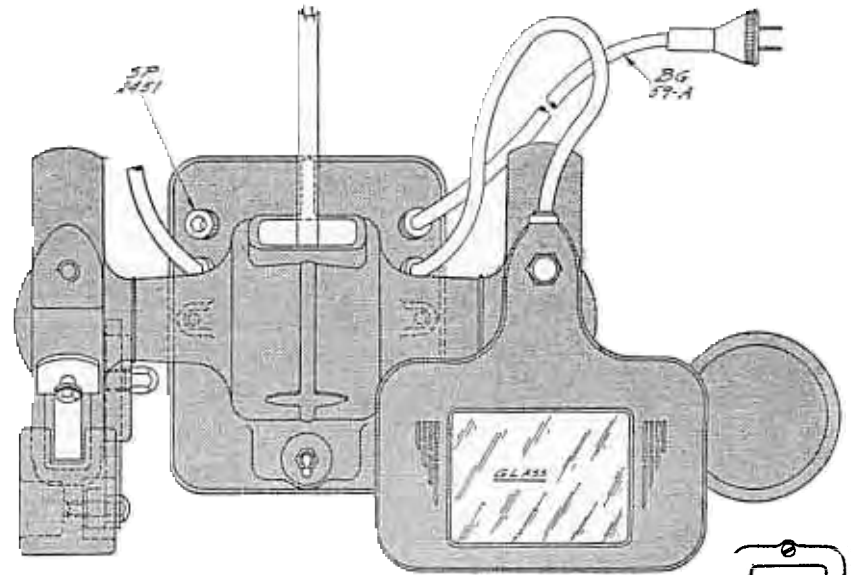
PEDESTAL

# Replacement Parts

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	BG-11	Guard	38	NCS-97	Special Jam Nut
2	SP-709	#10-32 x 1/4" Fl. Hd. Screw	39	Cat. #1533	Wrench
3	BG-23	Special Nut	40	Cat. #1524	Wrench
4	412-01-103-5004	Flange	50	SP-675	7/16-20 x 3" Hex. Hd. Screw
5	Cat. #23-816	Grinding Wheel	51	DDL-175	29/64 x 3/4 x 1/16" Washer
*	BG-145-S	Tool Rest, Consisting of:	52	412-01-054-5006	Guard
6	BG-145	Tool Rest	53	412-01-104-5003	Spacer
7	BG-35	Fiber Washer	54	BG-27	Glass
8	BG-144	Bracket	55	BG-66	Retainer
9	SP-658	3/8-24 x 1" Hex. Hd. Screw	56	BG-112	Clamp
12	SP-663	5/16-24 x 3/4" Hex. Hd. Scr.	57	SP-554	#8-32 x 1/2" Rd. Hd. Screw
13	SP-1605	3/8 x 7/8 x 1/16" Washer	58	SP-5022	Connector
14	BG-15	Deflector	59	BG-151	Cable
15	BG-2	Guard (Left)	60	BG-61-S	Connector Assembly
16	SP-750	5/16-18 x 1" Hex. Soc. Cap Scr.	61	Cat. #1280	Bulb
17	412-01-103-5005	Flange	62	BG-62	Deflector
20	BG-55-S	Retainer, Including:	63	412-01-031-5007	Cover
21	BG-57	7/8 x 1 17/32 x 1/16" Washer	64	SP-592	#8-32 x 1/2" Rd. Hd. Scr.
22	BG-56	1 1/8 x 1 17/32 x .025" Washer	70	CG-9	Pedestal
24	SP-1026	3/8"-16 Hex. Nut(Incl. w/Motor)	71	SP-613	5/16-18 x 1 3/4" Hex. Hd. Scr.
25	412-01-005-5005	Base	72	SP-1620	11/32 x 11/16 x 1/16" Washer
26	438-01-021-0067	Plate	• • 73	901-05-390-3711	Screw
28	SP-4839	Cable Assembly	• • 74	902-03-010-2964	Tinnerman Nut #C-1880-102
29	SP-4860	Clamp	• • 75	438-01-016-0059	Starter
30	SP-2452-R	Switch	• • 76	BG-47-S	Cover
31	SP-1716	7/16" Lockwasher	• • 77	BG-45	Plate
32	BG-34	Cover	79	BG-49	Cover
33	SP-551	#10-32 x 1/4" Rd. Hd. Screw	80	BG-40	Base
34	BG-3	Guard (Right)	81	SP-1705	1/2" Lockwasher
35	BG-152	Bracket	82	SP-672	1/2-20 x 1 1/4" Hex. Hd. Scr.
36	BG-148-S	Water Pot	*	Not Shown	
37	Cat. #23-815	Grinding Wheel	• •	Supplied with Cat. #23-226 and Cat. #23-227	

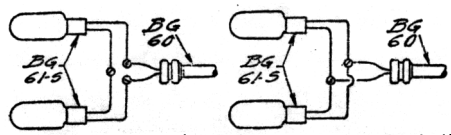


4 SP 1752  
 BG 29 21  
 BG 102 ND 88503-X SP 750 BG 8 BG 20  
 SR 206 BG 12 NCS



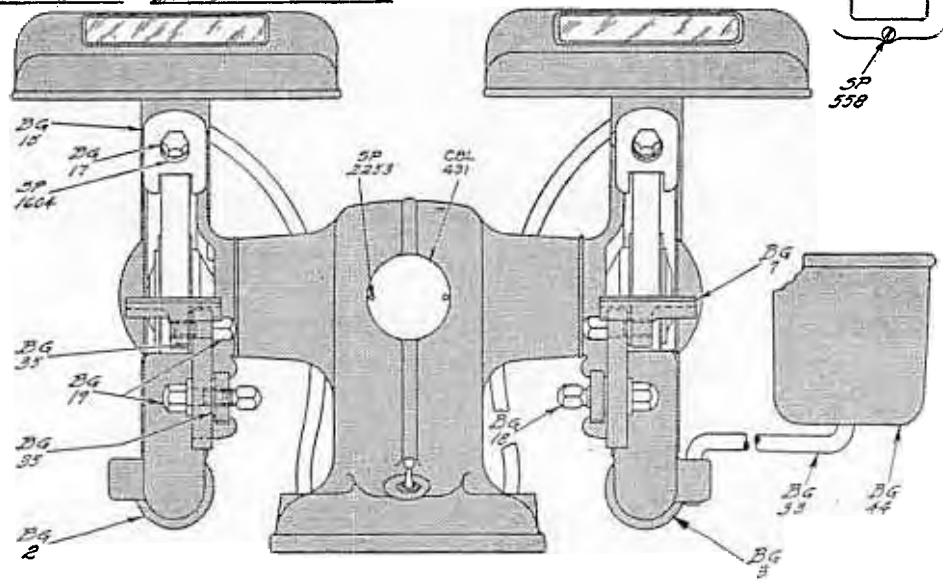
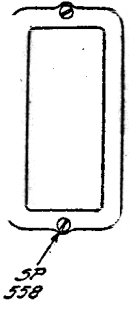
BG 60-X

BG 63



SEPARATE 110 or 220 VOLT LINE REQUIRED FOR LAMP BULB CONNECTIONS WHEN GRINDER IS WIRED FOR 440 VOLT OPERATION

LAMP CONNECTION FOR 220 VOLT LAMP CONNECTION FOR 110 VOLT

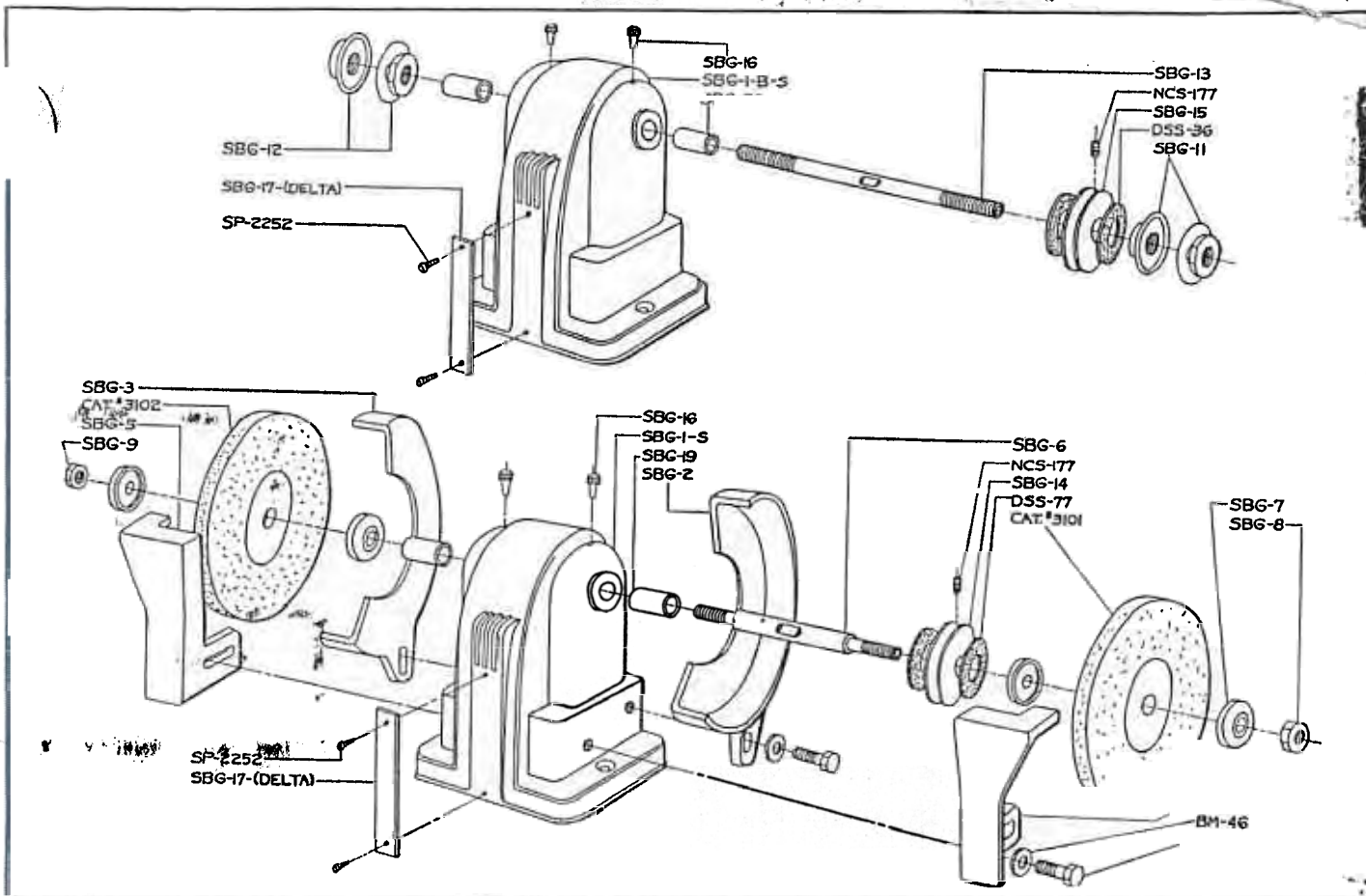


SP 709  
 14  
 BG 18

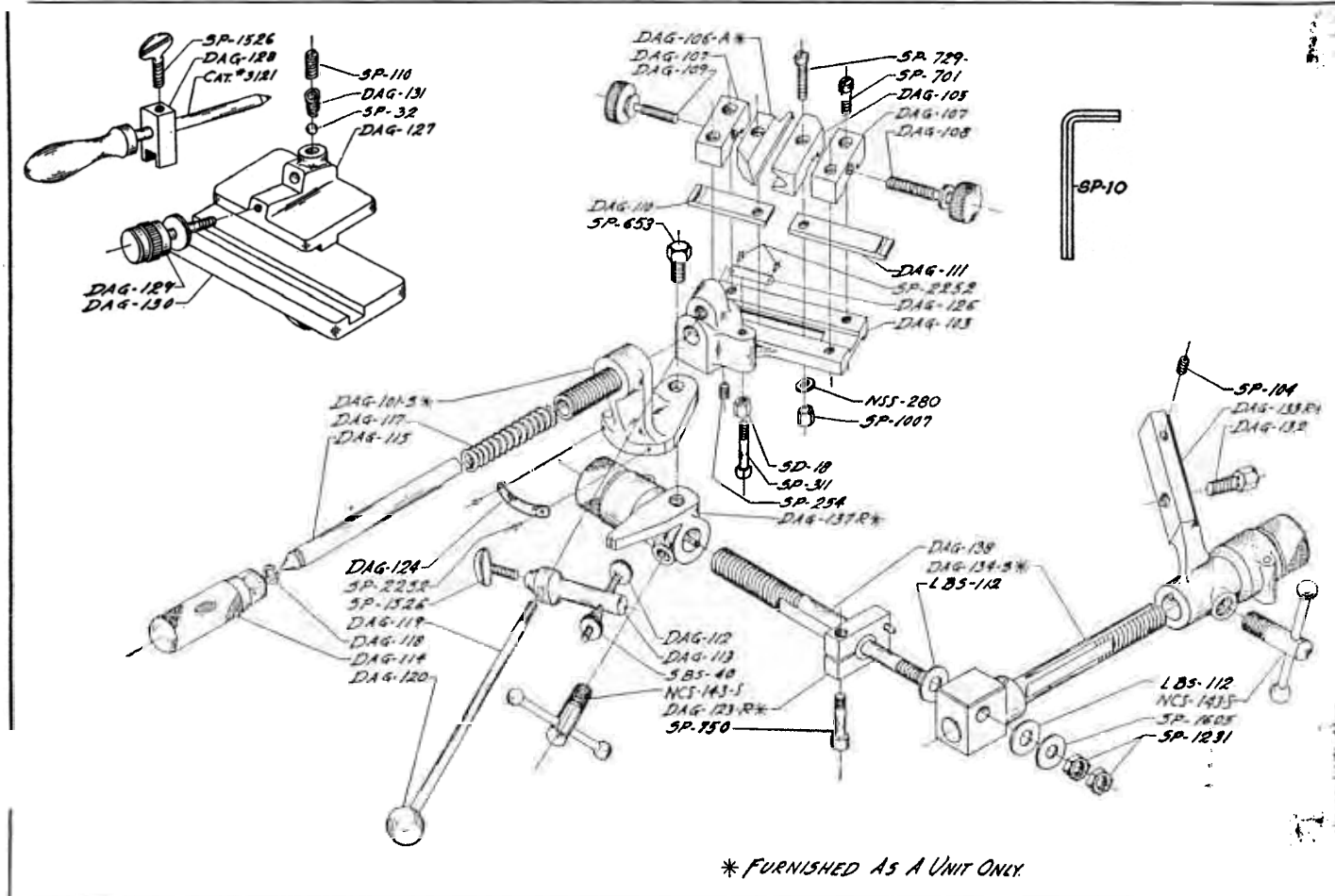
13

BG 101

7" Tool Grinder, Belt

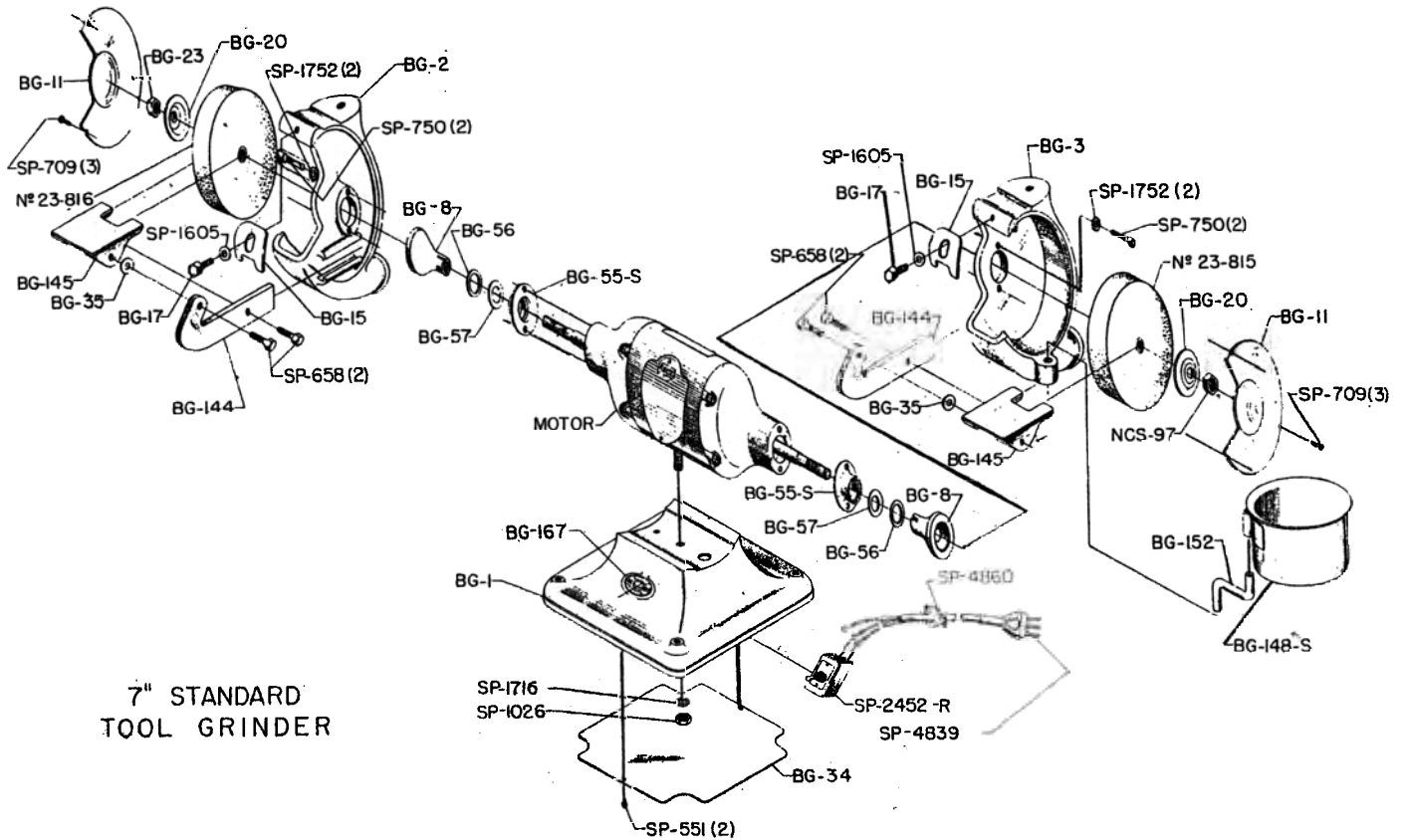


Old Style 6" Tool Grinder No. 3100 and Buffering Head No. 3110.

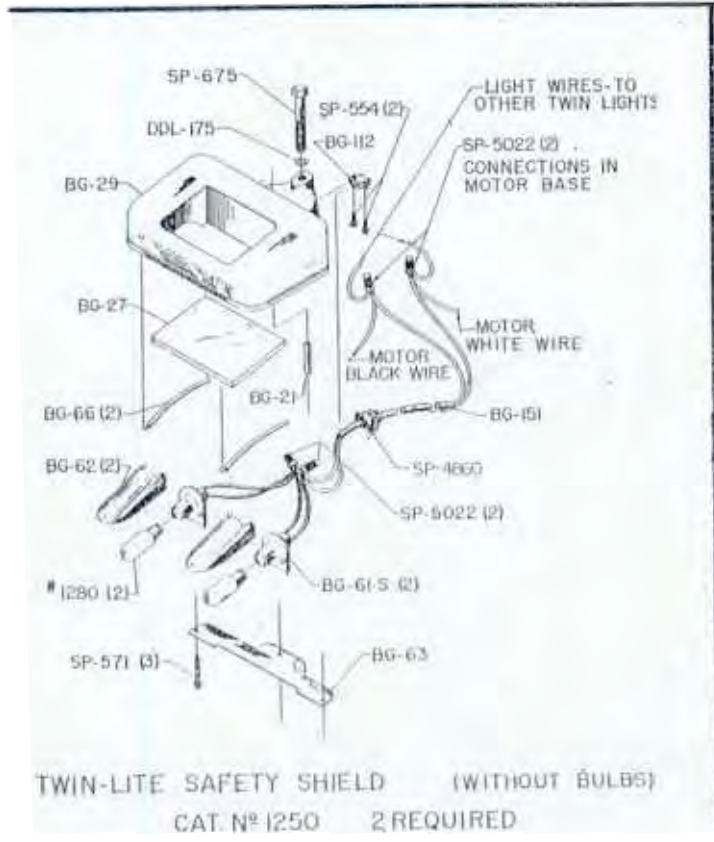


\* FURNISHED AS A UNIT ONLY

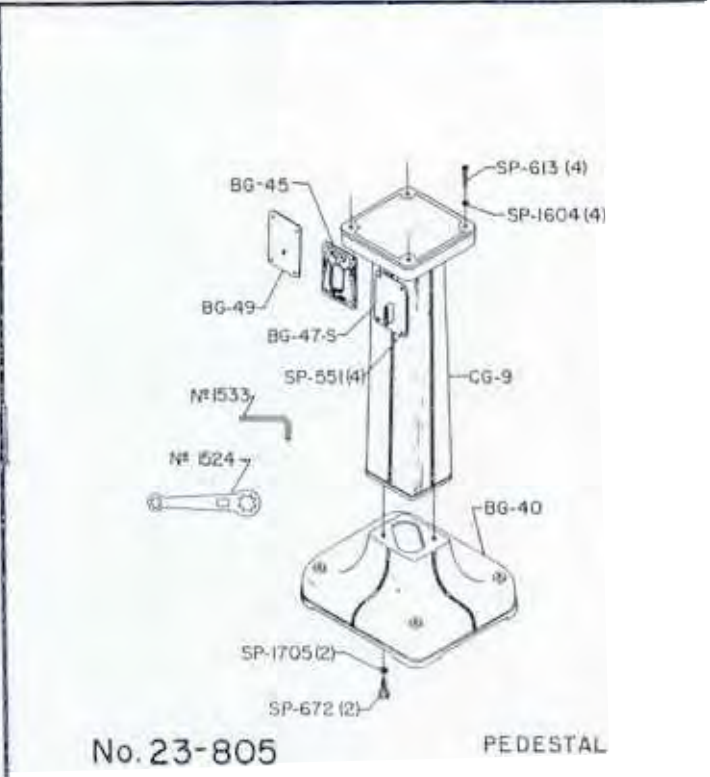
Old Style Drill Grinding Attachment No. 1296.



7" STANDARD  
 TOOL GRINDER



TWIN-LITE SAFETY SHIELD (WITHOUT BULBS)  
 CAT. N° 1250 2 REQUIRED



No. 23-805 PEDESTAL



# Replacement Parts

Part No.	Description	Part No.	Description
BG-1	Base	SP-1701	3/16" Lockwasher
BG-2	Wheel Guard ( L. H. )	SP-1716	7/16" Split Lockwasher
BG-3	Wheel Guard (R. H. )	SP-1752	5/16" Lockwasher, Int. Teeth
BG-8	Inner Flange	SP-2452-R	2 Pole Toggle Switch
BG-11	Guard Plate	SP-4267	Square "D" Starter
BG-15	Deflector Plate	SP-4839	Power Cord 115-V
BG-17	5/16-24 x 11/16" Hex. Hd. Scr.	SP-4860	1/2" Box Connector
BG-20	Flange	#1250	Lamp Attachment Consisting of;
BG-23	.656-12, L. H. Acme Thd. Nut	BG-21	Insulating Bushing
BG-34	Base Shield	BG-27	Lamp Shade Glass
BG-45	3 Phase Switch Name Plate	BG-29	Lamp Shade
* BG-47-S	Switch Plate with Shield	** BG-60-M	Cord and Socket
BG-49	Switch Plate for Toggle	* BG-61-S	Lamp Socket Assy. ,
BG-55-S	Felt Retainer, Incl;	BG-62	Reflector
BG-56	1 1/8" x 1 17/32 x .025 Washer	BG-63	Bottom Cover Plate
BG-57	7/8" Felt Washer	BG-66	Bow Spring
* BG-145-S	Tool Rest Consisting of;	BG-112	Cord Clamp
BG-35	Fiber Washer	BG-151	Rubber Cable, 27" Long
BG-144	Tool Rest Slide Arm	DDL-175	29/64 x 3/4 x 1/16" Washer
BG-145	Tool Rest	SP-554	#8-32 x 1/2" Rd. Hd. Scr.
SP-658	3/8-24 x 1" Hex. Hd. Scr.	SP-571	#8-32 x 1 1/2" Hd. Scr.
* BG-148-S	Water Pot	SP-675	7/16-20 x 3" Hex. Hd. Scr.
BG-152	Water Pot Bracket	SP-5022	#73 Ideal Wire Nut
BG-167	Switch Name Plate	#23-805	Pedestal, Consisting of;
NCS-97	5/8-12 Acme Thread, Hex. Jam Nut	BG-40	Base
SP-551	#10-32 x 1/4" Rd. Hd. Scr.	CG-9	Center Section
SP-572	#10-32 x 1" Rd. Hd. Scr.	SP-672	1/2-20 x 1 1/4" Hex. Hd. Scr.
SP-613	5/16-18 x 1 3/4" Hex. Hd. Scr.	SP-1705	1/2" Split Lockwasher
SP-709	#10-32 x 1/4" Fil. Mach. Scr.		
SP-750	5/16-18 x 1" Hex. Hd. Scr.		
SP-1026	3/8-16 Hex. Nut		
SP-1604	5/16" Steel Washer		
SP-1605	3/8" Steel Washer		

\* Parts marked thus furnished only as a unit.

\*\* Not Shown



# REPLACEMENT PARTS

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	Cannot Furnish	Base	35	904-02-010-1716	7/16" Split Lockwasher
2	412-01-054-5005	Wheel Guard (L.H.)	36	438-01-629-5001	2 Pole Toggle Switch
3	412-01-054-5004	Wheel Guard (R.H.)	38	1201141	Power Cord 115-V
4	406-01-103-0002	Inner Flange	39	438-01-004-0004	1/2" Box Connector
5	412-01-054-3003	Guard Plate	*	23-025	Lamp Attachment Const. OF:
6	412-01-036-5002	Deflector Plate	40	Cannot Furnish	Insulating Bushing
7	412-01-103-5004	Flange	41	412-01-053-5001	Lamp Shade Glass
8	902-01-200-9848	.656-12, L.H. Acme Thd. Nut	42	412-01-054-5006	Lamp Shade
9	412-01-031-5006	Base Shield	43	Cannot Furnish	Cord and Socket
10	Cannot Furnish	3 Phase Switch Nameplate	44	438-01-307-0005	Lamp Socket Assy.
11	412-01-331-5001	Switch Plate w/Shield	45	Cannot Furnish	Reflector
12	Cannot Furnish	Switch Plate for Toggle	46	412-01-031-5003	Bottom Cover Plate
13	412-01-379-5001	Felt Retainer, Incl:	47	412-01-079-5001	Bow Spring
14	904-01-021-3551	1-1/8" X 1-17/32 X .025 Washer	48	438-01-004-0022	Cord Clamp
15	908-01-010-5255	7/8" Felt Washer	49	438-01-002-0020	Rubber Cable, 27" Long
*	412-01-391-5003	Tool Rest Const. Of:	50	904-01-031-2925	29/64 X 3/4 X 1/16" Washer
17	904-07-010-5560	Fiber Washer	51	901-02-010-0554	#8-32 X 1/2" Rd. Hd. Scr.
18	412-01-014-5002	Tool Rest Slide Arm	52	901-02-010-0571	#8-32 X 1-1/2" Hd. Scr.
19	412-01-091-5001	Tool Rest	53	901-01-060-0675	7/16-20 X 3" Hex Hd. Scr.
20	901-01-060-0658	3/8-24 X 1" Hex Hd. Scr.	54	438-01-007-0003	#73 Ideal Wire Nut
21	412-01-376-5001	Water Pot	*	23-805	Pedestal, Const. Of:
22	412-01-014-5001	Water Pot Bracket	55	412-01-055-5002	Base
23	Nameplate	By Request Only	56	Cannot Furnish	Center Section
24	902-01-201-2571	5/8"-12 Acme Thread, Hex Jam Nut	57	901-01-060-0672	1/2-20 X 1-1/4" Hex Hd. Scr.
25	901-02-010-0551	#10-32 X 1/4" Rd. Hd. Scr.	58	904-02-020-1705	1/2" Split Lockwasher
27	901-01-060-0613	5/16-18 X 1-3/4" Hex Hd. Scr.	59	Cannot Furnish	7/32" Hex Wrench
28	901-01-060-0663	5/16-24 X 11/16" Hex Hd. Scr.	60	43-524	9/16 and 7/8" Hex Box Wrench
29	901-02-050-0709	#10-32 X 1/4" Fil. Machine Scr.	61	23-280	Lamp Bulb
30	901-03-010-0750	5/16-18 X 1" Hex Hd. Scr.	62	Cannot Furnish	Motor
31	902-01-040-1026	3/8"-16 Hex Nut	63	23-815	Grinding Wheel
32	904-01-010-1604	5/16" Steel Washer	64	23-816	Grinding Wheel
33	904-01-010-1605	3/8" Steel Washer			
34	904-02-010-1701	3/16" Lockwasher	*	NOT SHOWN ASSEMBLED	