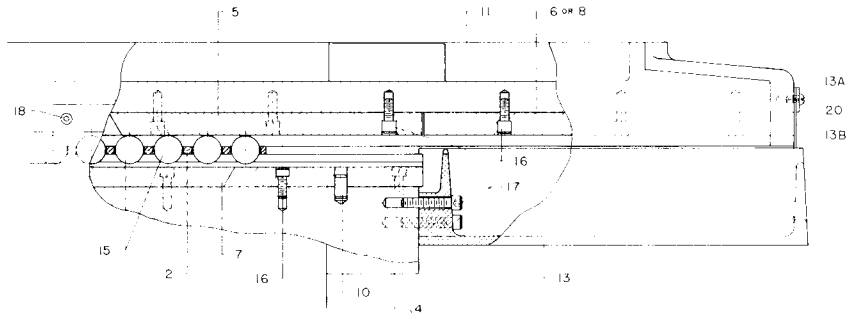
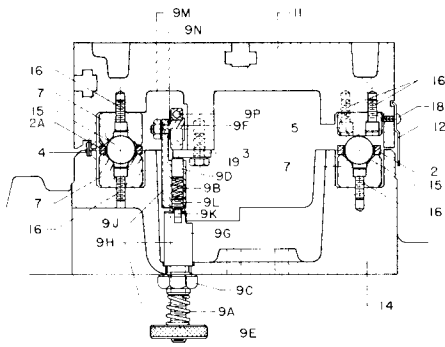


BALL-TRACK TABLE/SADDLE WAY SYSTEM PARTS LIST AND MAINTENANCE INSTRUCTIONS



SURFACE GRINDER MODELS

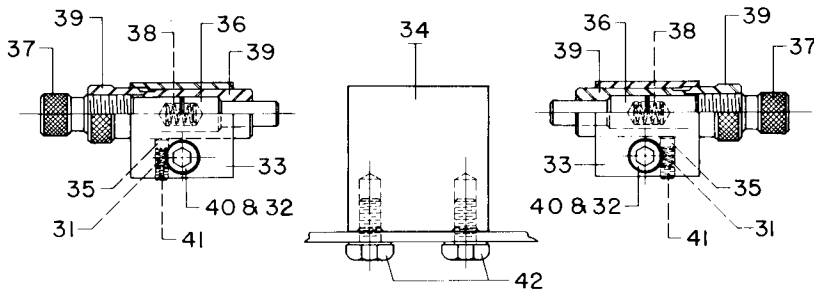
S612B, S612HB, S714B, S714HB

S618B, S618HB, S718B, S718HB, S918B, S918HB

Index No.	Part No.	Description	Quan. Req.
2	BA910BD	Bearing Cage (18 Hole)	1
2A	B2010BC	Bearing Cage (19 Hole)	1
3	BA930DBL	Hold Down Bar	1
4	BA930HE	Saddle Way Dust Shield	1
5	BA930WF	Flat Way Insert	1
6	BA930WFE	Flat Way Extension	2
7	RT310V	Vee Way Insert	3
8	BA930WVE	Vee Way Extension	2
9	BA930D1	Hold Down Assembly	1
9A	B610PS	Spring	1
9B	B911W	Spring	2
9C	B923EN	Nut	1
9D	BA930DP	Plug — Nylon	2
9E	BA930DN	Adjusting Nut	1
9F	BA930DR	Stud for Roller	1
9G	BA930DST	Threaded Sleeve	1
9H	BA930DTS	Tension Rod	1
9J	BA930DHW	Head	1
9K	K143EP	Plug	2
9L	3/8 x 3/8 NC	Hex Socket Set Screw	2
9M	1/4 N.F.	Hex Jam Nut (H.B.)	1
9N	No. 12 N.F.	Washer (1/4 x 1/2 x 16 ga)	1
9P	S5KDD	Ball Bearing (1.125 O.D.)	1
10	RT305DP	Dowel Pin	4
11	S610RB	Table	1
12	BA930HB	Saddle Way Dust Shield	1
13	S2030EB	Saddle Extension	2
13	S2030EH	Saddle Extension (Hydraulic Models)	2
13A	S2030SB	Bracket for Skirt	2
13B	S2030SL	Rubber Skirt — Left Side	1
13B	S2030SR	Rubber Skirt — Right Side	1
14	BA930VB	Saddle (S612B, S612HB)	1
14	S830VB	Saddle (S714B, S714HB)	1
15	3/4"	Precision Steel Ball	37
16	10-32 x 1/2	Hex Socket Cap Screw	42
17	1/4 x 1 1/4 N.F.	Hex Socket Cap Screw	8
18	10-32 x 1/4	Button Head Hex Socket Cap Screw	4
19	1/4 x 1/2 N.F.	Hex Cap Screw	4
20	10-32 x 1/4	Slotted Round Head Machine Screw	6

Index No.	Part No.	Description	Quan. Req.
2	B2010BC	Bearing Cage (19 Hole)	1
2A	B2010BD	Bearing Cage (20 Hole)	1
3	B2030DBL	Hold Down Bar	1
4	B2030HE	Saddle Way Dust Shield	1
5	B2030WF	Flat Way Insert	1
6	B2030WFE	Flat Way Extension	2
7	B2030WV	Vee Way Insert	3
8	B2030WVE	Vee Way Extension	2
9	BA930D1	Hold Down Assembly	1
9A	B610PS	Spring	1
9B	B911W	Spring	2
9C	B923EN	Nut	1
9D	BA930DP	Plug — Nylon	2
9E	BA930DN	Adjusting Nut	1
9F	BA930DR	Stud for Roller	1
9G	BA930DST	Threaded Sleeve	1
9H	BA930DTS	Tension Rod	1
9J	BA930DHW	Head	1
9K	K143EP	Plug	2
9L	3/8 x 3/8 NC	Hex Socket Set Screw	2
9M	1/4 N.F.	Hex Jam Nut (H.B.)	1
9N	No. 12 N.F.	Washer (1/4 x 1/2 x 16 ga)	1
9P	S5KDD	Ball Bearing (1.125 O.D.)	1
10	RT305DP	Dowel Pin	4
11	S710RB	Table (S618B, S618HB, S718B, S718HB)	1
11	S8010RB	Table (S918B, S918HB)	1
12	S930HB	Dust Shield	1
13	S2030EB	Saddle Extension	2
13	S2030EH	Saddle Extension (Hydraulic Models)	2
13A	S2030SB	Bracket for Skirt	2
13B	S2030SL	Rubber Skirt — Left Side	1
13B	S2030SR	Rubber Skirt — Right Side	1
14	B8030VB	Saddle (S618, S618HB)	1
14	S8030VB	Saddle (S718, S918) (S8030VHB on Hyd.)	1
15	3/4"	Precision Steel Ball	39
16	10-32 x 1/2	Hex Socket Cap Screw	52
17	1/4 x 1 1/4	Hex Socket Cap Screw	8
18	10-32 x 1/4	Button Head Hex Socket Cap Screw	5
19	1/4 x 1/2 N.F.	Hex Cap Screw	8
20	10-32 x 1/4	Round Head Machine Screw — Slotted	6

B911 SPRING LOADED STOPS ASSEMBLY (TOOL GRINDERS) S911 SPRING LOADED STOPS ASSEMBLY (SURFACE GRINDERS)

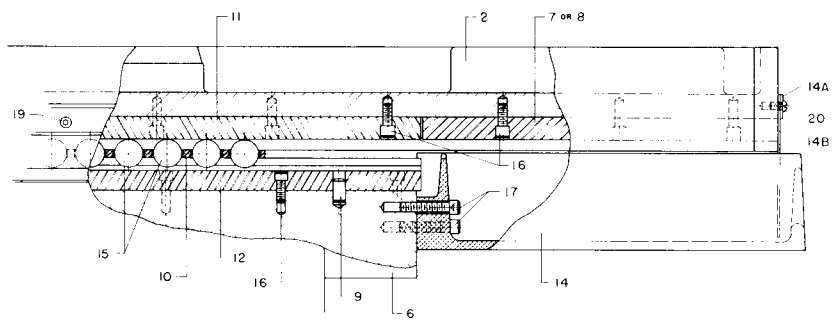
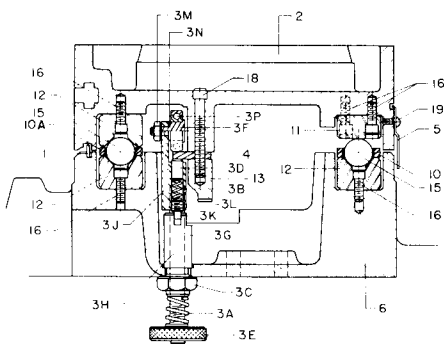


Index No.	Part No.	Description	Quan. Req.
31	A630BS	Spring	2
32	B810P	T-Slot Plate	2
33	B911AB	Adjustable Stop Body	2
34	B911B	Center Stop Block	1
35	B911BP	Plug	2
36	B911PS	Plunger	2
37	B911TS	Tension Screw	2
38	B911X	Spring	2
39	B911BP	Micrometer Barrel (B911)	2
39	S911MB	Plain Barrel (S911)	2
40	5/16 x 1 1/4 N.F.	Hex Socket Cap Screw	2
41	10-32 x 3/16	Hex Socket Set Screw	2
42	5/16 x 5/8 N.F.	Hex Head Cap Screw	2

K. O. LEE COMPANY

PHONE: 605-225-5820
200 S. HARRISON ST.

ABERDEEN, S. D. 57401



BA900B, B2000B and B6000B SERIES TOOL GRINDERS

BA900B SERIES

B2000B and B6000B SERIES

Index No.	Part No.	Description	Quan. Req.
1	BA930HE	Saddle Way Dust Shield	2
2	BA910RB	Sub Table	1
4	BA930DBL	Hold Down Bar	1
5	BA930HB	Saddle Way Dust Shield	1
6	BA930VB	Saddle	1
7	BA930WFE	Flat Way Extension	2
8	BA930WVE	Vee Way Extension	2
10	BA910BD	Bearing Cage (18 Hole)	1
10A	B2010BC	Bearing Cage (19 Hole)	1
11	BA930WF	Flat Way Insert	1
12	RT310V	Vee Way Insert	3
13	S610R	Gear Rack	1

Index No.	Part No.	Description	Quan. Req.
1	B2030HE	Saddle Way Dust Shield	1
2	B2010B	Sub Table	1
4	B2030DBL	Hold Down Bar	1
5	S930HB	Saddle Way Dust Shield	1
6	B8030VB	Saddle	1
7	B2030WFE	Flat Way Extension	2
8	B2030WVE	Vee Way Extension	2
10	B2010BC	Bearing Cage (19 Hole)	1
10A	B2010BD	Bearing Cage (20 Hole)	1
11	B2030WF	Flat Way Insert	1
12	B2030WV	Vee Way Insert	3
13	S710R	Gear Rack	1

3	BA930D1	Hold Down Assembly	
3A	B610PS	Spring	1
3B	B911W	Spring	2
3C	B923EN	Nut	1
3D	BA930DP	Plug — Nylon	2
3E	BA930DN	Adjusting Nut	1
3F	BA930DR	Stud for Roller	1
3G	BA930DST	Threaded Sleeve	1
3H	BA930DTS	Tension Rod	1
3J	BA930DHW	Head	1
3K	K143EP	Plug	2
3L	$\frac{3}{8} \times \frac{3}{8}$ NC	Hex Socket Set Screw	2
3M	$\frac{1}{4}$ NF	Hex Jam Nut (H.B.)	1
3N	No. 12 NF	Washer ($\frac{1}{4} \times \frac{1}{2} \times 16$ ga)	1
3P	SSKDD	Ball Bearing (1.125 O.D.)	1

9	RT305DP	Dowel Pin	4
14	S2030EB	Saddle Extension	2
14	S2030EH	Saddle Extension (Hyd.)	2
14A	S2030SB	Bracket for Skirt	2
14B	B8030SL	Rubber Skirt — Left Side	1
14B	S2030SR	Rubber Skirt — Right Side	1
15	$\frac{3}{4}$ "	Precision Steel Ball (BA900 Series)	37
15	$\frac{3}{4}$ "	Precision Steel Ball (B2000, B6060 Series)	39
16	10-32 x $\frac{1}{2}$	Hex Socket Cap Screw	42
17	$\frac{1}{4} \times 1\frac{1}{4}$ NF	Hex Socket Cap Screw	8
18	$\frac{1}{4} \times 2$ NF	Hex Socket Cap Screw	4
19	10-32 x $\frac{1}{4}$	Button Head Hex Socket Cap Screw	4
20	10-32 x $\frac{1}{4}$	Slotted Round Head Machine Screw	6

MAINTENANCE INSTRUCTIONS

HAND POWERED TABLE TRAVEL GRINDERS

As soon as you have received your machine, move the table to the extreme right side of the machine, and check the level of way lube in the channel area surrounding the hardened ways in the saddle. This should be maintained near the top of the overflow space cut into the saddle extension casting. The oil provides a washing action on the balls, thus keeping them and the way contact line free of dust. Add way lube as necessary.

HYDRAULICALLY POWERED MACHINES OR MACHINES WITH PRESSURE LUBRICATION SYSTEM

- These models have special piping to the center of the 'V'-ways, and receive regular amounts of oil or way lube from the hydraulic system or power way lube system. Periodic inspection is advisable and may be done in the following manner.
- It is necessary to disengage the piston rod from the table at the right end of the table. Remove the thumb nut, move the table slightly further to the right, and remove the collar from the piston rod (reach under the table end to locate on rod). Move the table to the extreme right until the saddle table way reservoirs become visible. The level of lubrication should be maintained at the top of the overflow cut-out section of the saddle extension casting. With hydraulic machines, the level of way lube is approximately $\frac{3}{8}$ " deep from the bottom. If the level appears to be low, adjust the oil flow valve for the ways, (Part No. BA931W, Index No. 18, Pages 4, 10, Hydraulic Manuals) on hydraulic tank for increased flow to the table reservoirs. Similarly, attempt to determine if pressure lubrication system (one-shot, automatic one-shot, etc.) is putting out the proper amount of way lube. Adjust as necessary.

SUGGESTED INSPECTION AND CLEANING SCHEDULE

Monthly:

- Ways should be inspected at least once per month if the machine is in continuous use.

- Clean the bottom of the hardened TABLE 'V' and flat ways, at least once per week by moving the table to the extreme ends of its travel, left and right, and wiping the ways with a clean cloth.

Yearly:

- Clean out the hollow SADDLE EXTENSIONS on each side of the table. Move the table to one end and then the other, uncovering these extension areas. These hollow extensions will accumulate some dirt and oil drippings from the ways, and need to be cleaned periodically. Extensions are drained back into the saddle on hydraulic models.
- Remove the table from the saddle by removing the hand nut (Index No. 3E) from the table roller hold-down tension rod end (Index No. 3H), under the saddle, by counterclockwise turns. Be careful to detach all items attached to the table, such as coolant guards and the hydraulic piston rod. Remove the tensioning spring and lift the table straight upward until the hold-down rod clears the saddle sleeve hole. NOTE: Because of the nylon tensioning plugs, the entire assembly will hang onto the gear rack steel hold down bar (Index 4). Set the table on its side and inspect its ways for wear. Inspect the hardened ways and balls in the saddle for signs of wear. Clean out the saddle table way reservoirs. Replace with clean oil or way lube, and replace the table back onto the saddle by reversing the steps just taken to remove the table. Tighten the hand nut of the table roller hold-down assembly until the spring is fully compressed, and then loosen it by approximately $\frac{3}{4}$ of a turn.

SERVICE ASSISTANCE

If you perform regular maintenance to insure that the grinder Ball-Track way system is kept lubricated with clean oil or lubricant, it will last for many years. If you have maintenance or replacement difficulties, please contact either your distributor or our factory office, giving complete information as to model and serial number of your machine, and description of the problem.

K. O. LEE COMPANY

PHONE: 605-225-5820
200 S. HARRISON ST.

ABERDEEN, S. D. 57401

Form BT/SW-1 - 11-79 - W

Litho in U.S.A.