HYDRAULIC RESERVOIR

The hydraulic pump and pump motor are housed in the lower section of the hydraulic reservoir. The pump motor must be connected to the starter switch. This is done by connecting the multi-wired cable that extends from the rear of the reservoir to the junction box located on the back of the grinder base. A four-wire cable is furnished for three phase installations. Match up loose wires by the color code, secure each, and insulate. The green wires should be fastened to the clamp screw inside the junction box to complete the ground. A three-wire cable is furnished for single phase installations. Match up color coded wires and ground the green wires to the junction box clamp screw. Grinding wheel spindle must rotate clockwise. To obtain proper direction, change leads connected to source of power. The spindle and hydraulic motors have been wired to rotate properly. Changing any pre-wired leads will cause the hydraulic pump to rotate improperly and the system will not operate.

Two flexible hydraulic hoses are furnished with each machine. The intake hose should be connected to the front elbow on the table carriage and the front connection on the hydraulic reservoir. The exhaust hose should be connected to the rear elbow on the carriage and the rear connection on the hydraulic reservoir. In connecting the hydraulic hoses, connect to the carriage ends first. Locate the reservoir on the floor along the right hand side of the machine and approximately 4" from the rear of the stand.

Remove the top cover of the reservoir and pour in three gallons of hydraulic oil which is furnished with the machine. The level of the hydraulic oil should not be permitted to drop below the top of the filter screen. If the hydraulic oil level is allowed to drop below the top of the filter screen, air will be taken into the hydraulic system which will in turn cause erratic hydraulic operation. If this condition does occur - completely cycling each cylinder (longitudinal and crossfeed) twice will generally eliminate the air accumulation. To insure long, trouble free operation of this hydraulic machine, the hydraulic oil should be changed every six months. The reservoir and the filter screen should be cleansed at the time of the oil change. See lubrication chart for recommended hydraulic oils.

If the need arises to check the hydraulic pump pressure, attach a pressure gauge (200 P.S.I.) to the outlet line as shown on the hydraulic reservoir drawing. Adjust the pressure by removing the pressure relief valve top cap and turning the adjusting screw in to increase the pressure and out to decrease

(con't.)

INSTRUCTIONS
&
SPECIFICATIONS

2A DELUXE HYDRAULIC SURFACE GRINDER

BOYAR-SCHULTZ
A Unit of Esterline Corporation
Broadview, Illinois, 60153

ESTERLINE

BOYAR-SCHULTZ
Division of Esterline Corporation
2000 S. 25th Avenue • Broadview, Illinois 60153 • Tel. (312) 287-5800 TWX. 910—226-4946

BOYAR-SCHULTZ 2A DELUXE HYDRAULIC SURFACE GRINDER

The new 2A DeLuxe Hydraulic Surface Grinder with its many new features and performance hertofore associated with larger more costly grinders enables every tool room to do high production grinding as well as individual grinding of precision parts.

This machine is built to the usual Boyar-Schultz standard of high quality. The 2A DeLuxe Hydraulic Surface Grinder is available in either 6x12 or 6x18 table size.

All castings are specially designed for permanent stability; they are made of special wear resisting alloys - scientifically stress relieved.

2A SPECIFICATIONS	6x12	6x18
TABLE TRAVEL		
Longitudinal	13"	19"
Crossfeed	7"	7"
WORK HEIGHT (Using 7" Dia. Wheel)	0"-11-1/4"	0"-11-1/4"
TABLE WORKING SURFACE ("T" Slot, 3/8" width)	12" x 5-5/8"	18" x 5-5/8"
GRINDING WHEEL		
Diameter	7"	7"
Thickness	1/2"	1/2"
Hole Diameter	1-1/4"	1-1/4"
SPINDLE SPEED	3450 RPM	3450 RPM
HANDWHEEL GRADUATIONS		
Vertical	.0005	.0005
Crossfeed	.001	.001
LONGITUDINAL TABLE SPEED	0-50 F.P.M.	0-50 F.P.M.
AUTOMATIC CROSS FEED	0-1/8" Per Stroke	0-1/8" Per Stroke
HYDRAULIC WHEEL DRESS TRAVEL	0"-48" Per Min.	0"-48" Per Min.
SPINDLE MOTOR	1 H.P.	1 H.P.
HYDRAULIC PUMP MOTOR	1/2 H.P.	1/2 H.P.
FLOOR SPACE	44" x 38"	56" x 38"
HEIGHT	62"	62"
WEIGHT (with Heavy Duty Stand)		
Net	791 lb.	857 lb.
Shipping	1016 lb.	1082 lb.
WEIGHT (with Heavy Duty Dust Collector)		
Net	866 lb.	932 lb.
Shipping	1091"	1157"

GENERAL INSTRUCTIONS

HANDLING

Remove the top and sides of the machine crate.

Lift the machine by means of the cross feed handwheel housing and the two lifting studs located on each side toward the rear of the machine base.

Lifting the machine in any other manner than prescribed may damage the machine. The lifting studs may be unscrewed when the machine is permanently situated.

INSTALLATION

Locate machine in desired position, then using special wrenches provided, level the machine by adjusting the legs of the stand or dust collector. The machine must be level to permit the lubrication system to operate properly. DO NOT loosen or try to adjust the bolts holding the machine to the base. These bolts have been adjusted and tightened at the factory - any adjustment can impair the grinding accuracy of the machine.

Remove the grinder table from its crate and clean thoroughly. Oil the ways and grease the rack with recommended lubricants. Clean the table carriage ways and table pinion. Carefully set the grinder table in place, moving it back and forth until the table pinion engages the rack.

Connect the cylinder rod to the table connector housing. The table connector housing is located on the underside of the table at its right end. To engage the cylinder rod, raise the retainer knob that protrudes thru the table and insert the ball end of the cylinder rod into the table connector housing. Move the table to the right slowly, by means of the table handwheel, until the cylinder rod is locked into place. Release the retainer knob.