GENERAL

MODEL 340

(38 cm) 15" DRILL PRESS

OPERATING AND MAINTENANCE INSTRUCTIONS

A Drill Press requires a reasonable amount of care and attention to insure perfect performance and accurate work and the operator must take reasonable care of it, if it is to give the best result and years of service. This instruction sheet will take only few minutes to read, but it can save hours of work.

INSTALLATION

Your 15'' Drill Press has been completely assembled and tested at the factory. Remove the crate and clean the surface of the table and column; but do not use paint solvent, as it will damage the paint. Loosen the handle that clamps the head to the column and slide the head up to the desired height.

Your Drill Press is now ready to be put in place and to receive the motor if it is a floor model. If you have the table model, mount on a suitable bench and bolt securely in place by the holes provided in the base.

MOTOR SELECTION

A 1/2 H.P. capacitor-start motor is recommended for medium work or for production. Select a ball bearing motor, when operating in a vertical position, a plain bearing cannot be adequately lubricated.

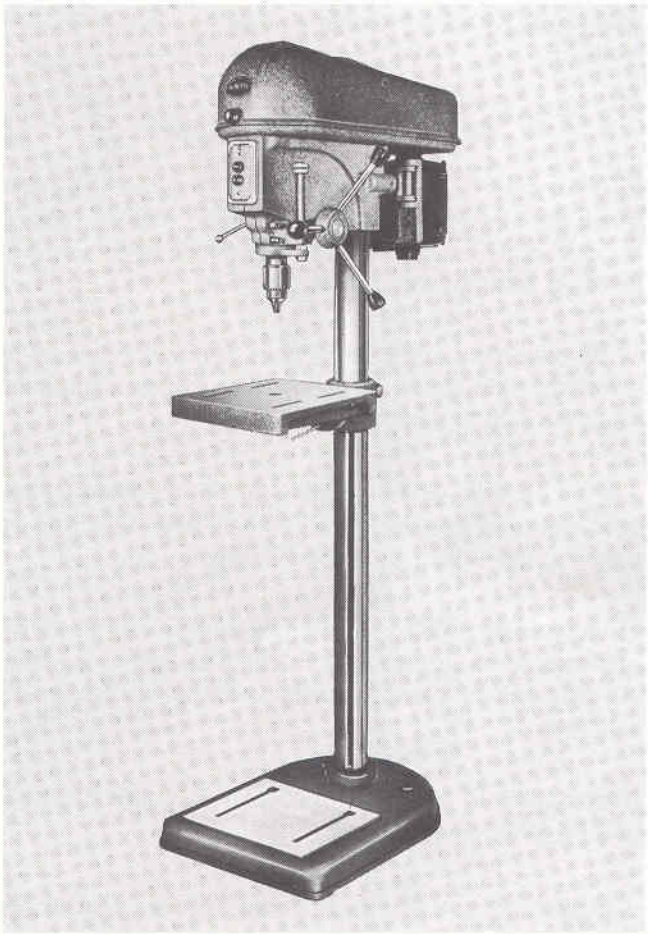
SPEED

This 15'' Drill Press is designed to use a 1725 R.P.M. motor, the spindle speeds with such a motor are: 460, 815, 1260, 1935, 2970, 4910 R.P.M. You will get the highest speed in engaging the belt on the largest groove of the motor pulley and on the smallest groove of the spindle pulley. The motor should turn in a clockwise direction when looked at from the top.

MOTOR INSTALLATION

The following rules are recommended to mount your motor:

1.—Mount the motor on the motor bracket #349B, leaving the bolts loose.



2.—Install the motor pulley #3483-1, the smallest groove facing down, lock the pulley in place on motor shaft by the set screw in pulley.

3.—Line up the motor pulley with the spindle pulley by using a straight edge and tighten the four bolts holding the motor to the motor plate.

4.—Loosen the 2 set screws #P-7 which retain motor plate pins. Push your motor toward the drill press.

5.—Install the V-belt on the selected speed. Push your motor backward allowing the right tension on the belt. Tighten the set screws. Your drill is now ready to operate.

TABLE ADJUSTMENT

To adjust table up or down loosen handle #3415 on the table bracket and retighten it at the desired height. The table can be set accurately vertical by inserting the pin in the holes, through the bracket. To return the table to horizontal position, reverse the procedure reinserting the pin in its hole, and lock in place. The table may also be tilted to any degree between horizontal and vertical positions.

SPINDLE ADJUSTMENT

The spindle is lowered and raised by the handle #3429, which turns pinion shaft #3418, meshing with the rack on the quill #3417. The quill can be locked at any position in its travel by tightning handle #2413A.

The adjusting screw #P-282 is set at the factory to insure the right sliding fit and need no further adjustment when the drill is received.

After years of service, some wear can develop between quill and head casting. This can be easily corrected by tightning the adjusting screw #P-282.

The spindle is automatically returned upward after drilling by a spiral coil spring #P-290. This spring has been properly adjusted at the factory and need no further adjustment.

However, if something occurs and readjustment is needed, proceed as follow:

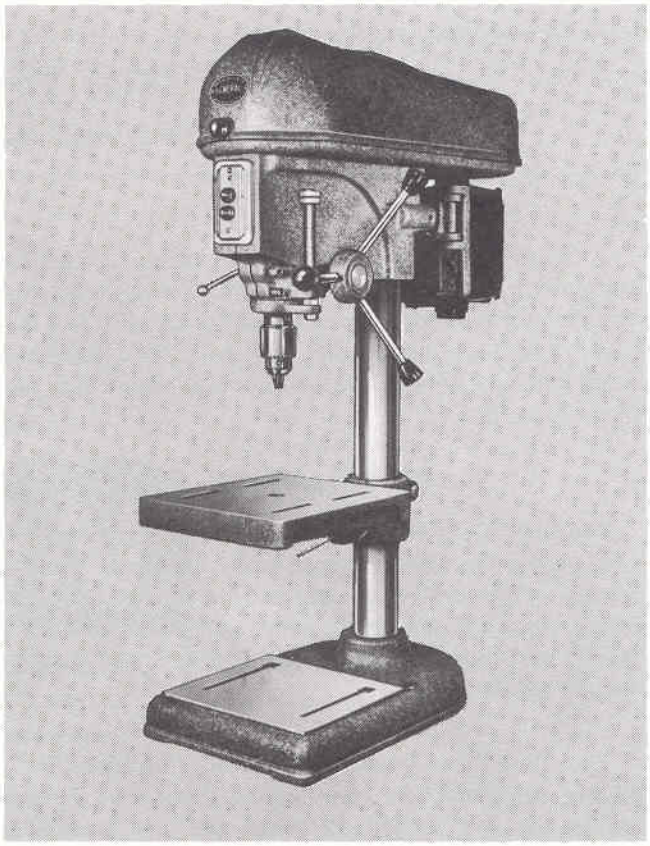
Loosen set screws P-7 in collar #2424, holding the allen wrench tight to prevent any slipping. To increase tension turn clockwise and to loosen turn counterclockwise. The spring should be tight enough to return the quill up. Be sure that the handle #2413A is loose when making adjustment.

DEPTH - SCREW

When a number of holes are to be drilled to the same depth, use the lock nuts #2427 on the depth screw, scale the depth of the hole on the depth screw, set the lower locknut #2427 at the required dimension, tighten the other locknut #2427 against the first one, all holes will be drilled to the same depth.

HOW TO CHANGE THE SPINDLE

For any reason if the spindle needs to be replaced follow these rules:



1.—Swing the table out of the way.

2.—Remove the key chuck.

3.—Loosen set screw #P-7 on spring collar #2424 and remove locknuts #2427.

4.—Pull out the pinion #3418 then pull the quill downward and out.

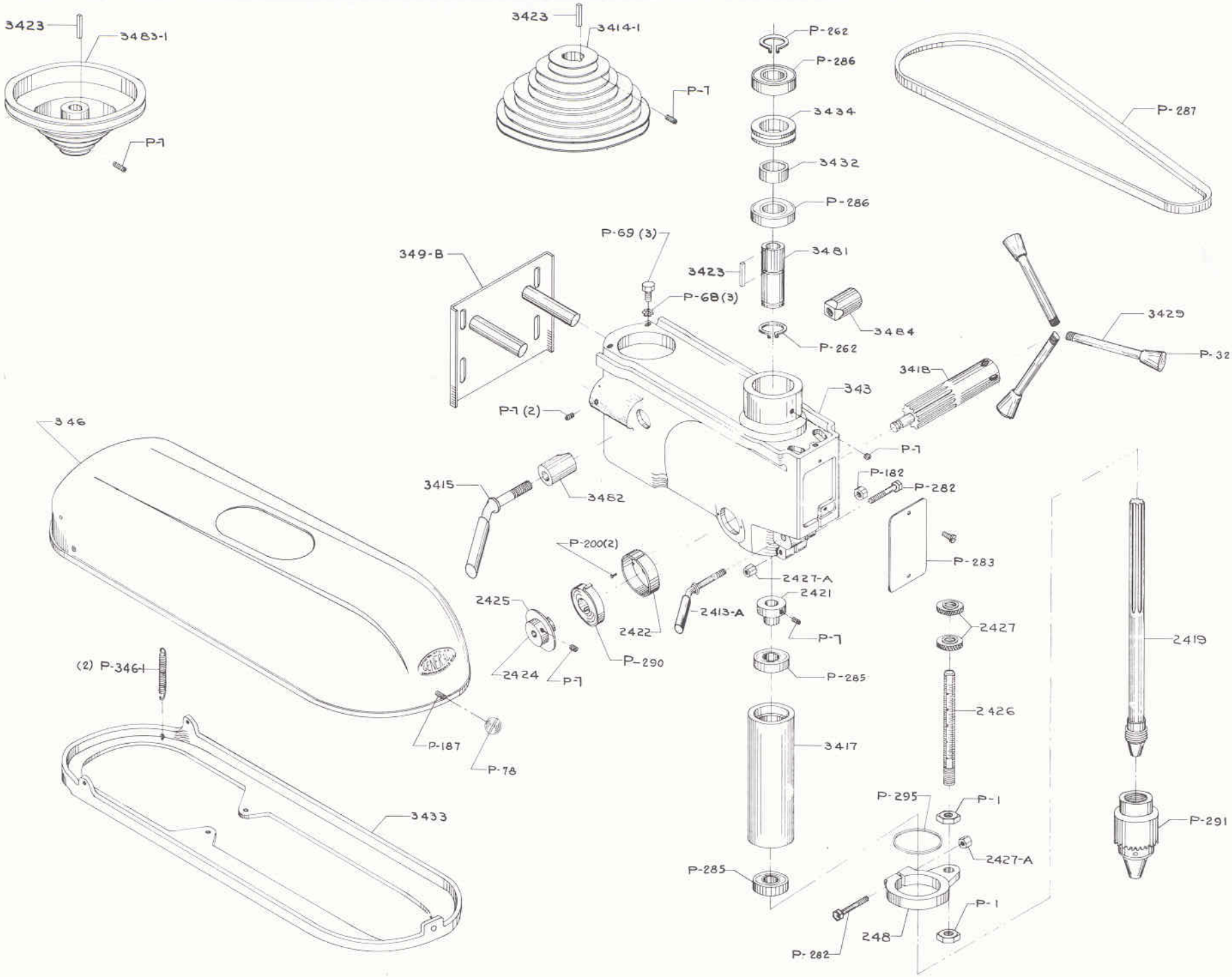
5.—Loosen the set screw #P-7 in bearing adapter #2421.

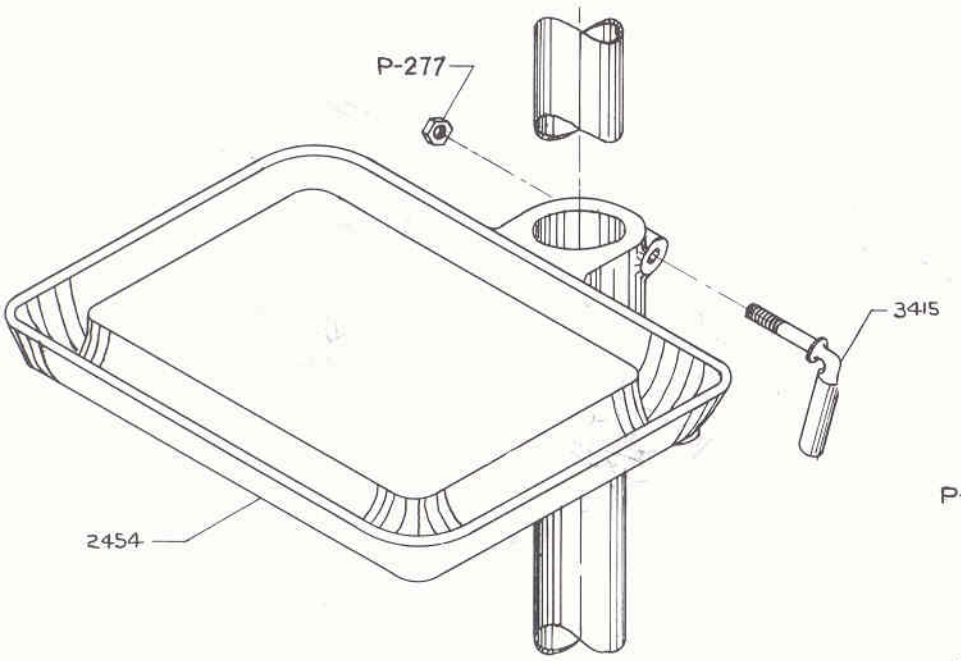
6.—On an arbor press push the spindle out.

7.—For mounting the spindle reverse the procedure.

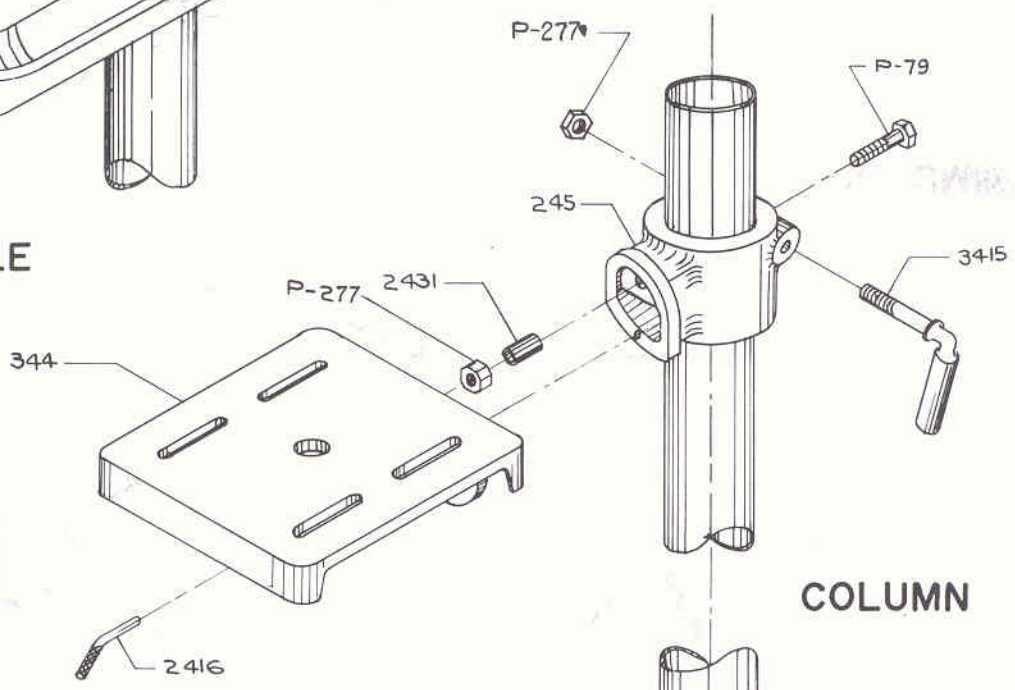
LUBRICATION

The ball-bearings of the quill and of the splined sleeves are packed with enough lubricant to last the life of the bearings. The pinion shaft and the quill should be oiled peridiocally for smooth operation and to prevent wear.


3423
3483-1
P-7
3423
3414-1
P-7
P-262
P-286
3434
3432
P-286
P-287
P-69 (3)
349-B
3423
3481
P-68 (3)
3484
P-262
3425
P-32
3418
343
P-7 (2)
P-7
346
3415
3482
P-182
P-282
P-200(2)
P-283
2427-A
2421
2425
2413-A
2422
P-7
2427
2419
P-290
2424
P-7
P-285
(2) P-346-1
2426
3417
P-187
P-78
P-295
P-1
2427-A
3433
P-285
P-1
248
P-282
P-291

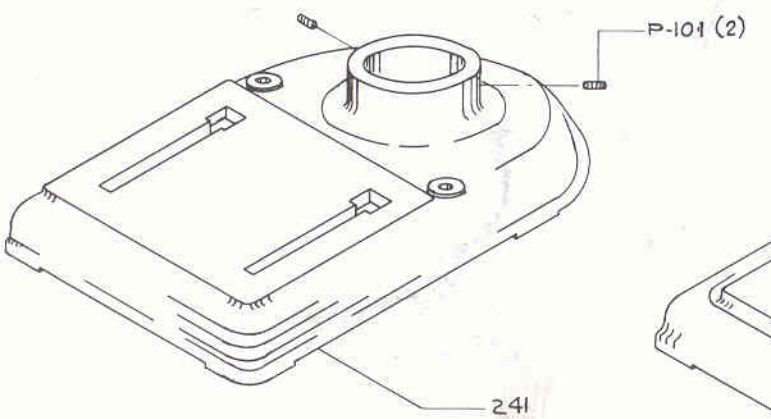


PRODUCTION TABLE

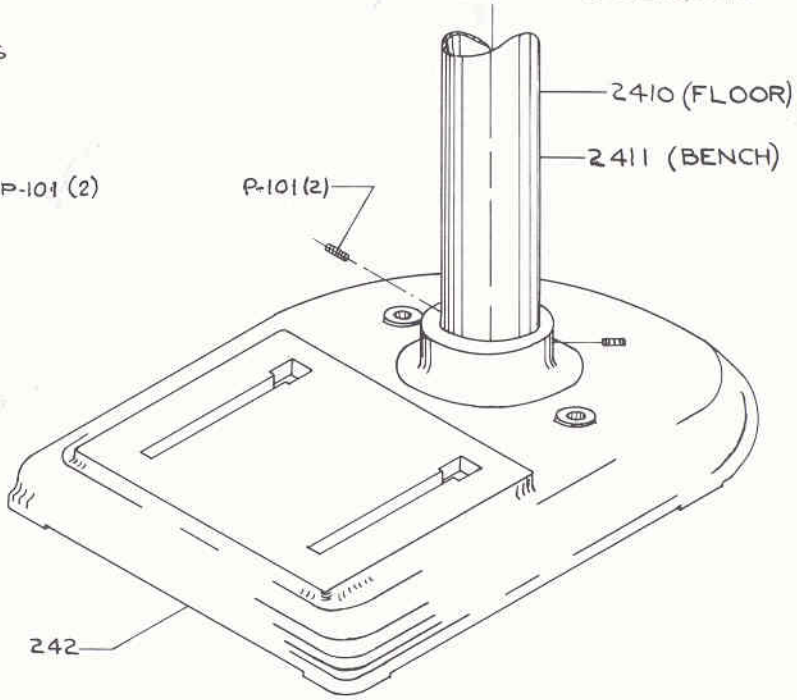


STANDARD TABLE

COLUMN



BENCH BASE



FLOOR BASE

REPLACEMENT PARTS

IMPORTANT: ALWAYS GIVE PART NUMBER AND DESCRIPTION OF EACH ITEM WHEN ORDERING - ALSO GIVE SERIAL NUMBER OF DRILL PRESS

Part No.	Description	Quant.
	HEAD PARTS	
343	Head	1
3415	Handle (Column locking)	1
2413-A	Handle (Quill locking)	1
P-182	5/16 Hex. Nut	1
P-282	1/4 x 2-1/4 Hex. H. Screw	1
2427-A	Special Nut	1
P-7	5/16 x 5/16 Socket Set Screw	3
349-B	Motor plate	1
3482	Locking Sleeve	1
3484	Locking Sleeve	1
P-283	Cover (Switch Opening)	1
	QUILL PARTS	
3417	Quill	1
P-295	O-Ring	1
2426	Depth Screw (in inches)	1
2426-M	Depth screw (in mm)	1
2427	Locknut	2
2427-A	Hex. Nut	1
P-1	1/2 Hex. Jam Nut	2
P-282	1/4 x 2-1/4 Hex. H. Mach. Screw	1
248	Quill Collar	1
	SPINDLE PARTS	
2419	Spindle	1
2421	Bearing Adapter	1
P-285	6203-Z Bearing	2
P-7	5/16 x 5/16 Socket Set Screw	1
P-291	1/2 Key Chuck	1
	PINION SHAFT PARTS	
3418	Pinion Shaft	1
3429	Handle	3
P-32	Knob	3
P-7	5/16 x 5/16 Socket Set Screw	1
2424	Collar	1
2425	Cover (Spring)	1
2422	Spring Cup	1
P-290	Clock Spring	1
P-200	10-32 x 3/8 Pan. H. Mach. Screw	2

Part No.	Description	Quant.
	PULLEY PARTS	
3414-1	Spindle Pulley (6 grooves)	1
3483-1	Motor pulley (6 grooves)	1
P-287	V-belt	1
3423	Square key 3/16 sq x 1-3/8" lg	1
P-286	6205-Z Bearing	2
3432	Bearing Spacer	1
3434	Locking Spacer	1
P-262	5100-98 Truarc Ring	2
3481	Splined Sleeve	1
P-7	5/16 x 5/16 Socket Set Screw	2
	GUARD PARTS	
346	Belt guard	1
P-69	5/16 x 5/8 Hex. H. Mach. Screw	3
P-68	5/16 Shake-Proof Washer	3
3433	Guard Pan	1
346-1	Tension Spring	2
P-78	Locking Ball	1
P-187	5/16 x 1/2 Round H. Mach. Screw	1
	STANDARD TABLE PARTS	
344	Table	1
245	Table Bracket	1
3415	Handle (Column locking)	1
P-277	1/2 Hex. Nut	2
2431	Sleeve	1
P-79	1/2 x 2-1/4 H.H. Cap Screw	1
2416	Index Pin	1
	BASE PARTS	
241	Base (Bench)	1
242	Base (Floor)	1
P-101	3/8 x 5/8 Socket Set Screw	2
2410	Column (Floor)	1
2411	Column (Bench)	1
	PRODUCTION TABLE PARTS	
2454	Production table	1
3415	Handle (Column locking)	1
P-277	1/2 Hex. Nut	1
P-276	1/2 Pipe plug	1