

**CLAUSING SERVICE CENTER**

811 EISENHOWER DR., SO.  
P.O. BOX 877  
GOSHEN, IN 46526

**SERVICE & PARTS MANUAL**

MODEL NO. 22V

SERIAL NO. 501051

Phone 219-533-0371

Telex 258439



## **IMPORTANT!**

CLAUSING CORPORATION  
SERVICE CENTER  
811 EISENHOWER, SOUTH  
P.O. BOX 877  
GOSHEN, INDIANA 46526

Phone: (219) 533-0371

Telex: 258439

### **IS THE PLACE TO SEND – OR PHONE**

1. Repair parts orders – for all of our product lines
2. Technical Service questions concerning any of our products
3. Questions concerning the shipment of returned goods.

OPERATING INSTRUCTIONS  
and

PARTS LIST

# **CLAUSING**

20-inch DRILL PRESSES

VARIABLE SPEED DRIVE  
MODELS



**CLAUSING CORPORATION**

2019 N. PITCHER ST., KALAMAZOO, MI 49007



# CLAUSING CORPORATION

## SAFETY RULES FOR POWER TOOLS

### 1. KNOW YOUR POWER TOOL

Read the owner's manual carefully. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

### 2. GROUND ALL TOOLS

If tool is equipped with three-prong plug, it should be plugged into a three-hole receptacle. If adapter is used to accommodate two-prong receptacle, the adapter wire must be attached to a known ground. Never remove third prong.

### 3. KEEP GUARDS IN PLACE

and in working order.

### 4. REMOVE ADJUSTING KEYS AND WRENCHES

Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning on tool.

### 5. KEEP WORK AREA CLEAN

Cluttered areas and benches invite accidents.

### 6. AVOID DANGEROUS ENVIRONMENT

Don't use power tools in damp or wet locations. Keep work area well illuminated.

### 7. KEEP CHILDREN AWAY

All visitors should be kept a safe distance from work area.

### 8. MAKE WORKSHOP KID PROOF

— with padlocks, master switches, or by removing starter keys.

### 9. DON'T FORCE TOOL

It will do the job better and be safer at the rate for which it was designed.

### 10. USE RIGHT TOOL

Don't force tool or attachment to do a job it was not designed for.

### 11. WEAR PROPER APPAREL

No loose clothing or jewelry to get caught in moving parts.

### 12. USE SAFETY GLASSES

Also use face or dust mask if cutting operation is dusty.

### 13. SECURE WORK

Use clamps or a vise to hold work when practical. It's safer than using your hand, frees both hands to operate tool.

### 14. DON'T OVERREACH

Keep your proper footing and balance at all times.

### 15. MAINTAIN TOOLS IN TOP CONDITION

Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.

### 16. DISCONNECT TOOLS

before servicing and when changing accessories such as blades, bits, cutters.

### 17. AVOID ACCIDENTAL STARTING

Make sure switch is "OFF" before plugging in cord.

### 18. USE RECOMMENDED ACCESSORIES

Consult the owner's manual. Use of improper accessories may be hazardous.

The operation of any power tool can result in foreign objects being thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before commencing power tool operation.





DIVISION, ATLAS PRESS CO.  
KALAMAZOO, MICHIGAN

**LEVELING THE DRILL PRESS**

Drill press should be level and rest solidly on floor; place shims underneath the three foundation holes to level the drill press. Equal pressure should be applied to foundation bolts to prevent distorting the base.

**RAISING HEAD TO OPERATING POSITION WITH TABLE LIFT**

1. Loosen table lock (D, fig. 1).
  2. With lift crank (J), raise the table (E) to bottom of spindle (C). (Place block of wood between spindle and table.)
  3. Lock table *securely* with handle (D).
  4. Loosen two head lock nuts (A) and quill lock (K).
  5. Lift head by turning feed handle (B) counter-clockwise. While holding handle, tighten head lock nuts (A).
  6. Slide safety collar (M) up to bottom of head. Tighten screws (L) in collar.
- REPEAT OPERATIONS 1-6 until table has reached top of rack.
- RAISE RACK—steps 7-10.
7. Lock table with handle (D, fig. 1).
  8. Loosen two screws (G) in rack collar (F).
  9. Turn crank (J), raising rack (H) to bottom of collar (M).
  10. Securely tighten two screws (G) in rack collar.

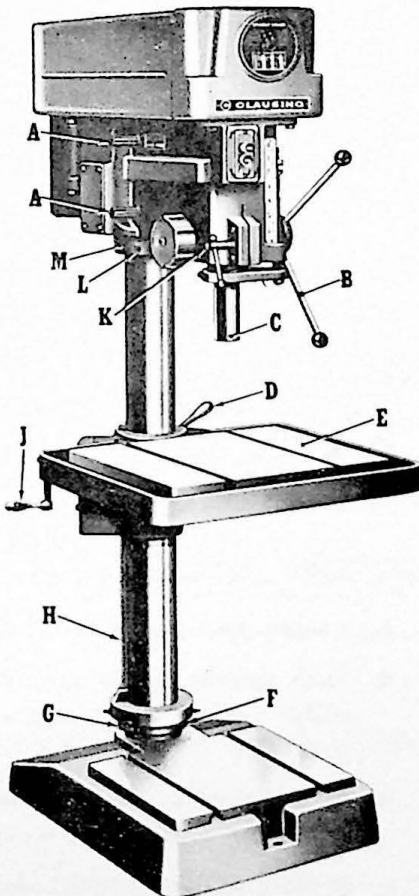


Figure 1

**20" DRILL PRESSES**

**VARIABLE SPEED DRIVE**

SERIES - 22V

FROM SERIAL No. 500456 TO 501382

MODELS 2251 THROUGH 2288

JUNE, 1961 - FILE No. 2271-2

1.2  
2.1  
3.2  
4.1  
5.1  
6.1  
7.2  
8.1

**LUBRICATION**

1. SPINDLE PULLEY DRIVE — use a light grease occasionally on spindle splines (A, fig. 2).
2. LOWER QUILL BEARING (C) — lubricate daily with a few drops of S.A.E. No. 20 oil. (All other ball bearings in head are lubricated-for-life.)
3. FEED SHAFT (B) oil once a week with S.A.E. No. 20 oil.
4. Keep QUILL (J) and COLUMN (H) covered with a light film of oil.
5. TABLE LIFT SHAFT (F) — oil once a week with S.A.E. No. 20 oil.
6. LIFT RACK (G) — lubricate regularly with S.A.E. No. 20 oil. Before oiling, clean rack with brush and kerosene.
7. TABLE LIFT GEARS — once a year, clean and repack with gear grease.

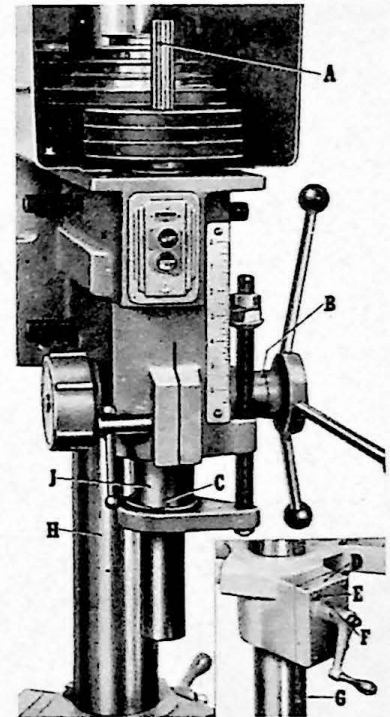


Figure 2

**LUBRICATING VARIABLE DRIVE**

1. Oil hole in fork (A, fig. 3) — oil once a week with S.A.E. No. 20 oil.
2. Oil post (B) and rod (D) occasionally with S.A.E. No. 20 oil.
3. *Do not oil pulley bearings (C).*
4. Once a year, clean and grease (medium cup grease) cam in handwheel (C, fig. 4). To disassemble — loosen screw (A) and remove plate (B); remove handwheel by taking out center bolt.

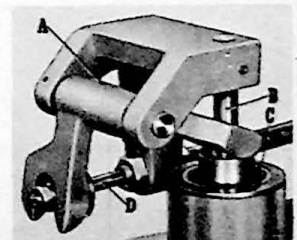


Figure 3

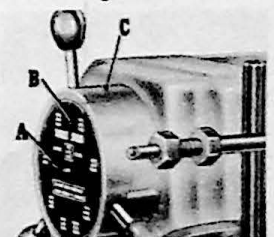


Figure 4

## CHANGING SPINDLE SPEEDS

To change speeds on variable drive, turn handwheel control until pointer shows desired speed.

**CAUTION:** Do not turn handwheel control unless motor is running.

### REPLACING BELTS

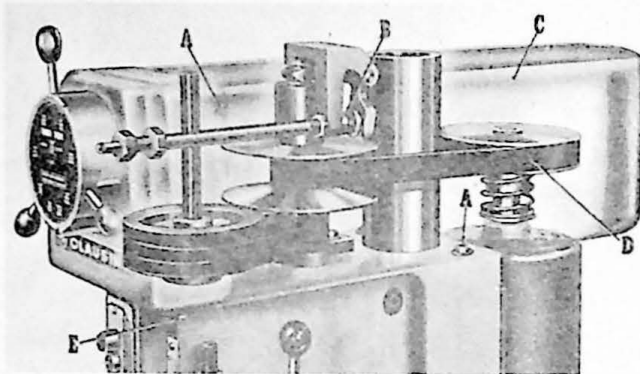


Figure 5

### VARIABLE COG BELT

1. Remove belt guard (C, fig. 5).
2. Remove two screws (E). Loosen nut (B) and remove guard, handwheel and tube assembly.
3. Remove variable speed belt (D).
4. Replace belt and reassemble.

**NOTE:** Belt is properly tensioned if outside is slightly convex where it contacts the pulley.

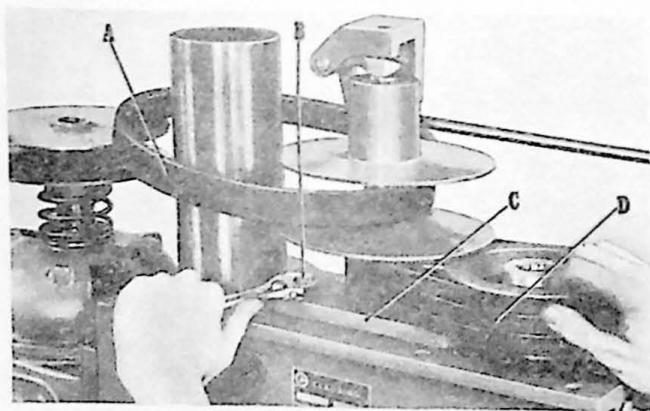


Figure 6

### SPINDLE BELTS

1. Remove belt guard (C, fig. 5).
2. Remove two screws (E). Loosen nut (B) and remove guard, handwheel and tube assembly.
3. Remove variable speed belt (A, fig. 6).
4. Loosen two screws (B) in countershaft housing (C), slide housing towards front of head.
5. Remove the spindle belts (D).
6. Replace belts and reassemble.

**NOTE:** For proper spindle belt tension, belts should depress  $\frac{1}{8}$ " with light finger pressure.

## ADJUSTING DEPTH STOP

1. When setting drill depth, position pointer (B, fig. 7) at depth required and tighten nuts (C).
2. Loosen screws (A) and with quill at maximum travel, position scale so pointer is at  $6\frac{3}{4}$ ", then tighten screws.

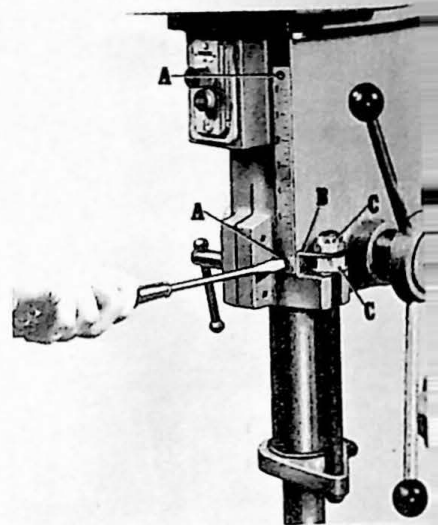


Figure 7

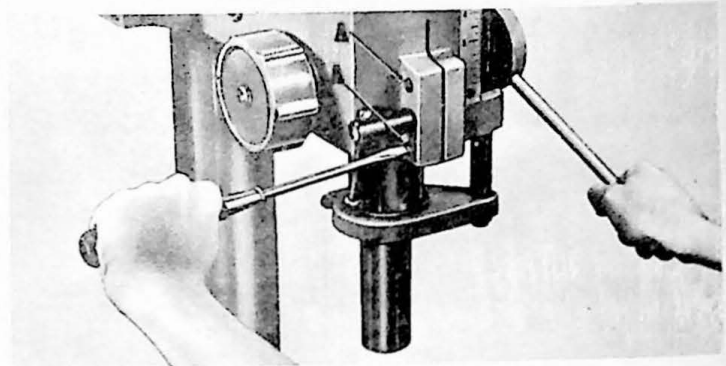


Figure 8

### QUILL TAKE-UP

Head of drill press head is split — has two take-up screws set at factory to provide accurate fit between head and quill. This setting should not be disturbed unless play develops between quill and head. To eliminate play, tighten screws (A, fig. 8) — using correct size screw driver — until play has been removed. Move quill up and down in head to make sure it slides freely.

### ADJUSTING SPINDLE RETURN SPRING

To increase tension, lower quill to bottom of stroke, turn the spring cap counter-clockwise. To release tension, pull out spring cap (fig. 8) and turn clockwise.

### ADJUSTING SPINDLE END PLAY

1. Release spindle return spring tension (fig. 8).
2. While holding spindle to prevent its falling, remove hex nut on bottom of depth stop rod. Remove spindle and quill assembly from head.
3. Loosen set screw in collar directly above quill.
4. Push spindle firmly against bottom of quill. Force collar against top of quill and lock collar in this position.
5. Rotate spindle by hand to make sure it turns freely — **DO NOT** have adjustment too tight.
6. Replace spindle — quill assembly.



# PARTS INDEX

for

## 20" CLAUSING DRILL PRESSES

### VARIABLE SPEED DRIVE

### MODELS 2251 THROUGH 2288

### 22V - SERIES

## FROM SERIAL NO. 500456 TO 501382

#### FLOOR DRILLS

Column, Table and Base . . . . .	4.1
Head Parts . . . . .	5.1
Pulley Parts . . . . .	6.1
Guard & Push Rod Assy. Parts . . . . .	7.2

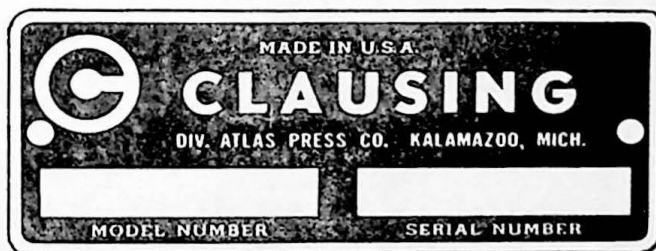
#### MULTIPLE SPINDLE DRILLS

Oil Table and Leg Parts . . . . .	8.1
2216 Head Positioning Mechanism Parts . . . . .	8.1
2295 Column Mounting Flange Parts . . . . .	8.1

### INSTRUCTIONS FOR ORDERING REPAIR PARTS

It is important to furnish the following information in addition to QUANTITY required:

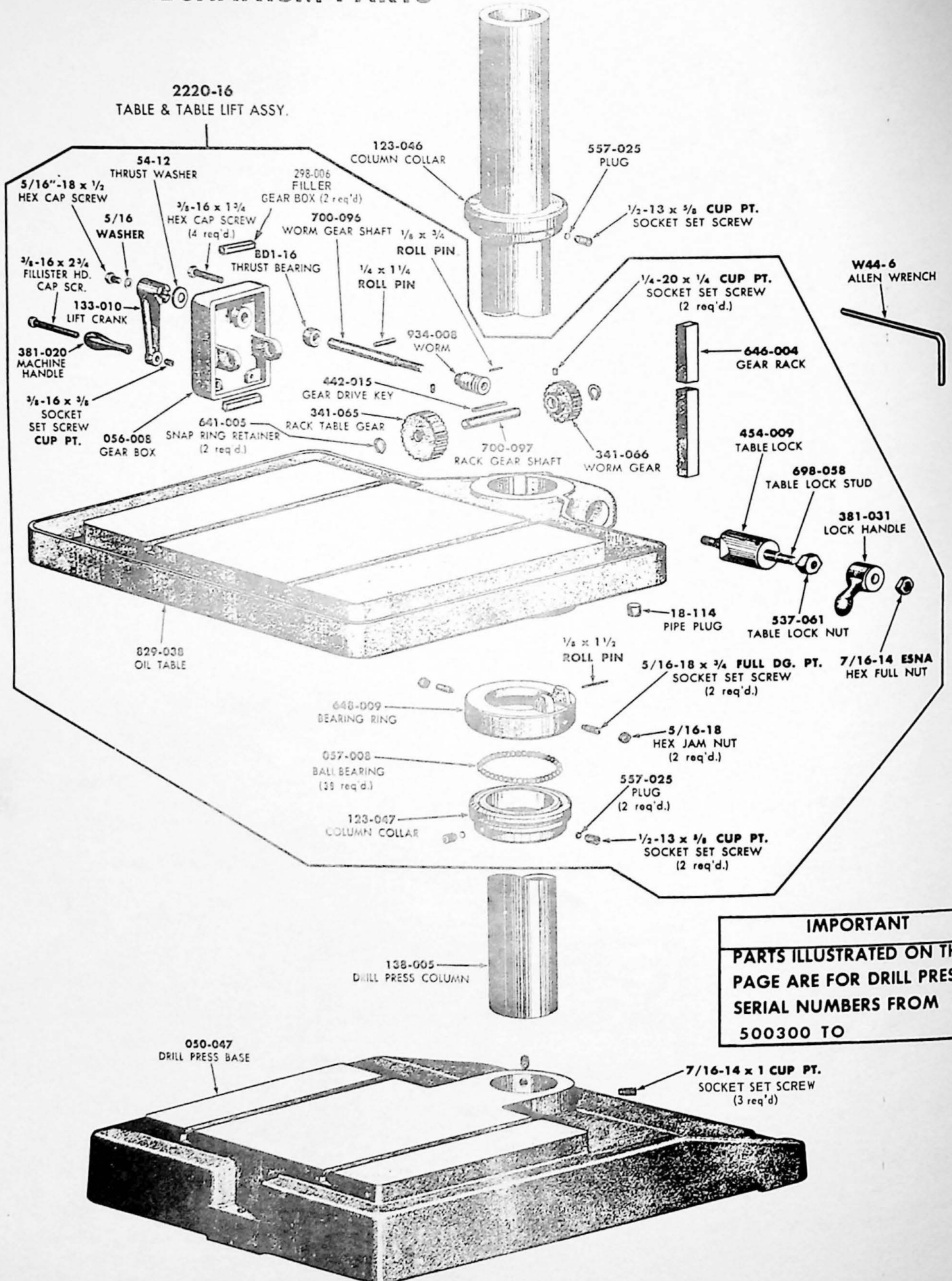
1. PART NUMBER
2. PART NAME
3. MODEL and SERIAL NUMBER of machine tool -- you'll find both on the metal plate attached to machine -- note illustration below.



Be sure to give Model and Serial Number on this plate.

NOTE: Screws and nuts shown without part numbers should be purchased locally. We reserve the right to make changes in design and specifications without notice.

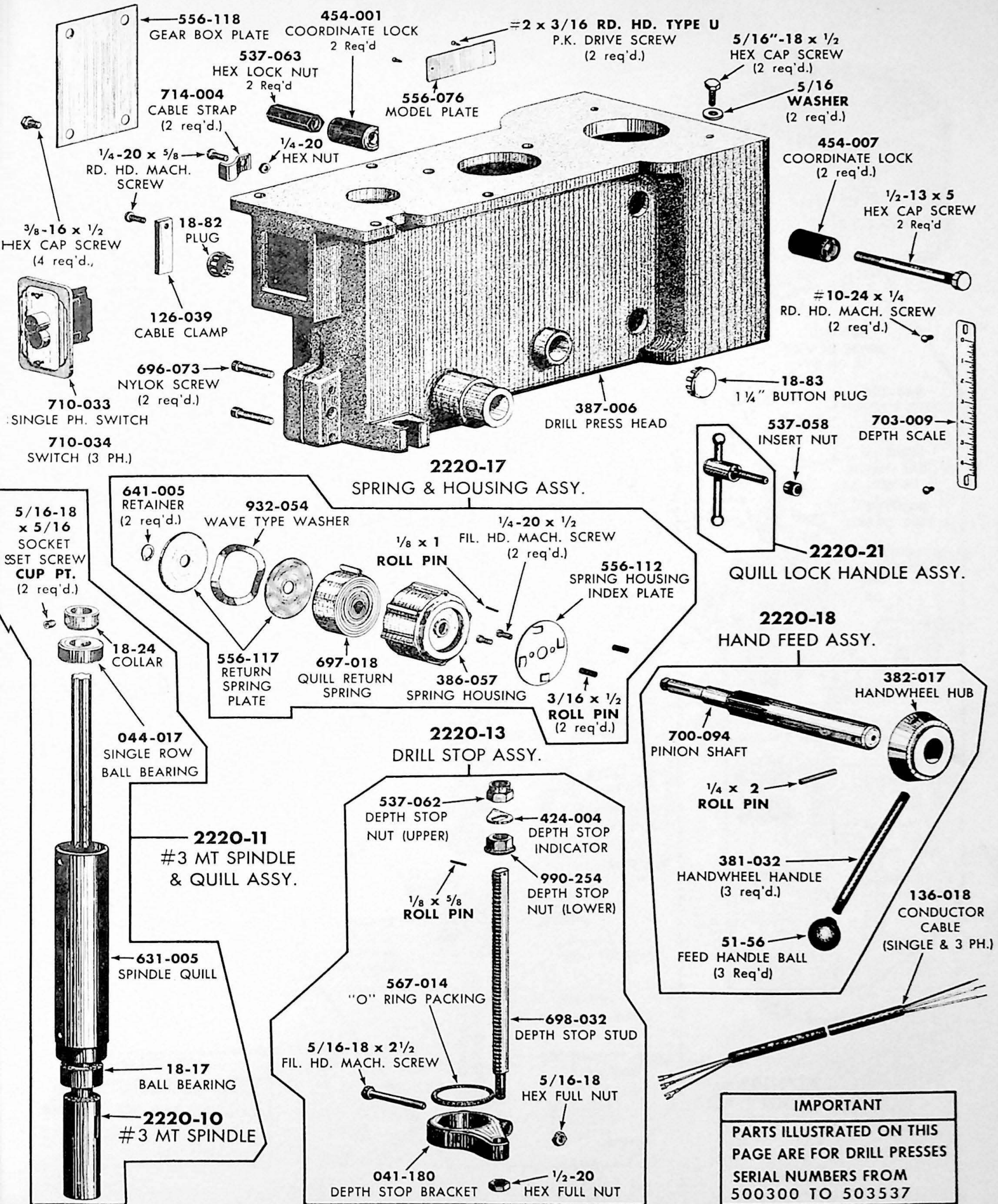
# COLUMN, TABLE, BASE and TABLE POSITIONING MECHANISM PARTS



**IMPORTANT**  
PARTS ILLUSTRATED ON THIS PAGE ARE FOR DRILL PRESSES SERIAL NUMBERS FROM 500300 TO 500300



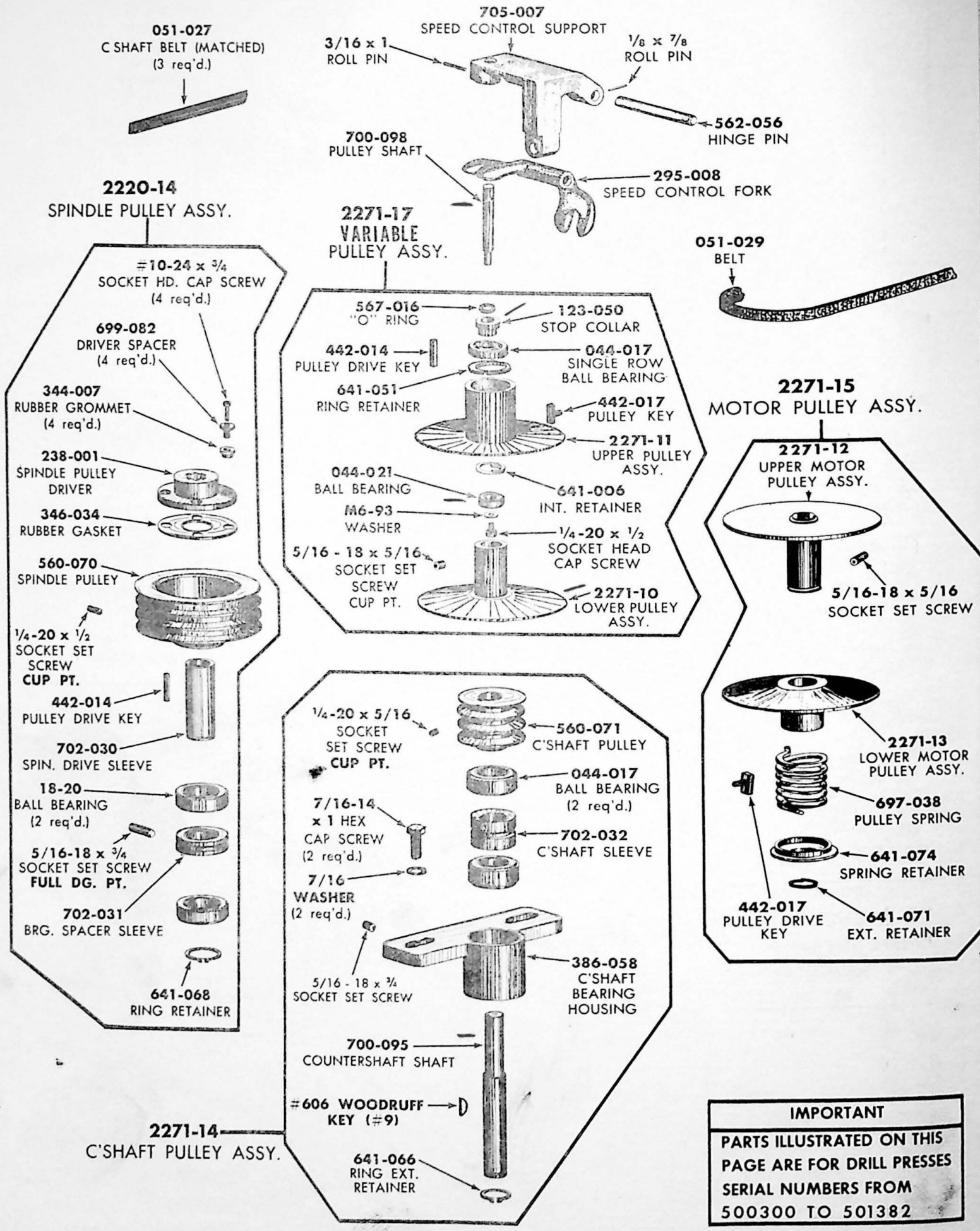
# 20" DRILL PRESS HEAD PARTS



**IMPORTANT**

PARTS ILLUSTRATED ON THIS PAGE ARE FOR DRILL PRESSES SERIAL NUMBERS FROM 500300 TO 503537

# 20" DRILL PRESS VARIABLE DRIVE PULLEY PARTS

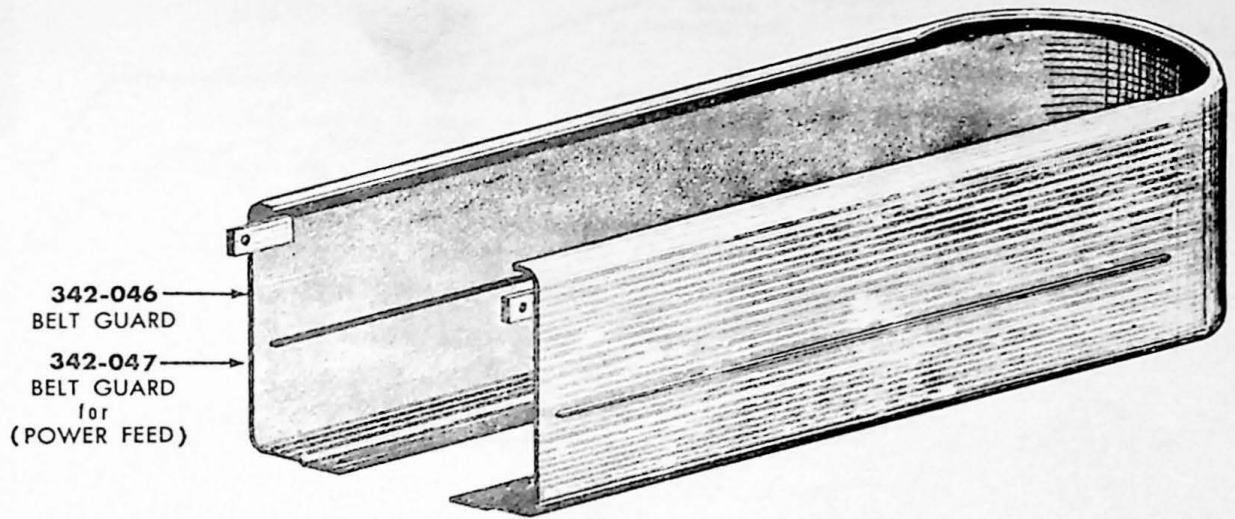


**IMPORTANT**

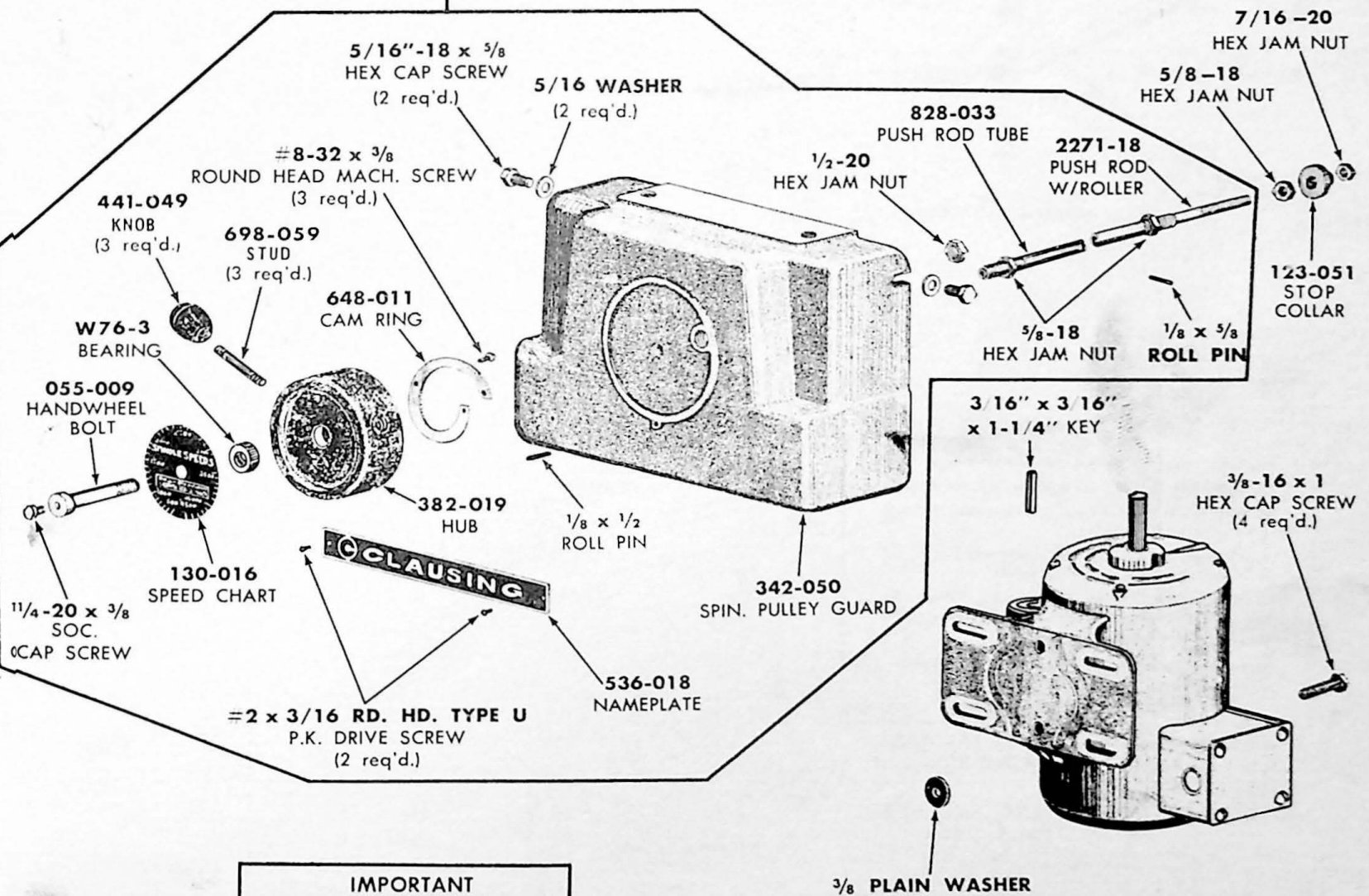
PARTS ILLUSTRATED ON THIS PAGE ARE FOR DRILL PRESSES SERIAL NUMBERS FROM 500300 TO 501382



# 20" DRILL PRESS VARIABLE DRIVE GUARD & PUSH ROD ASSY. PARTS

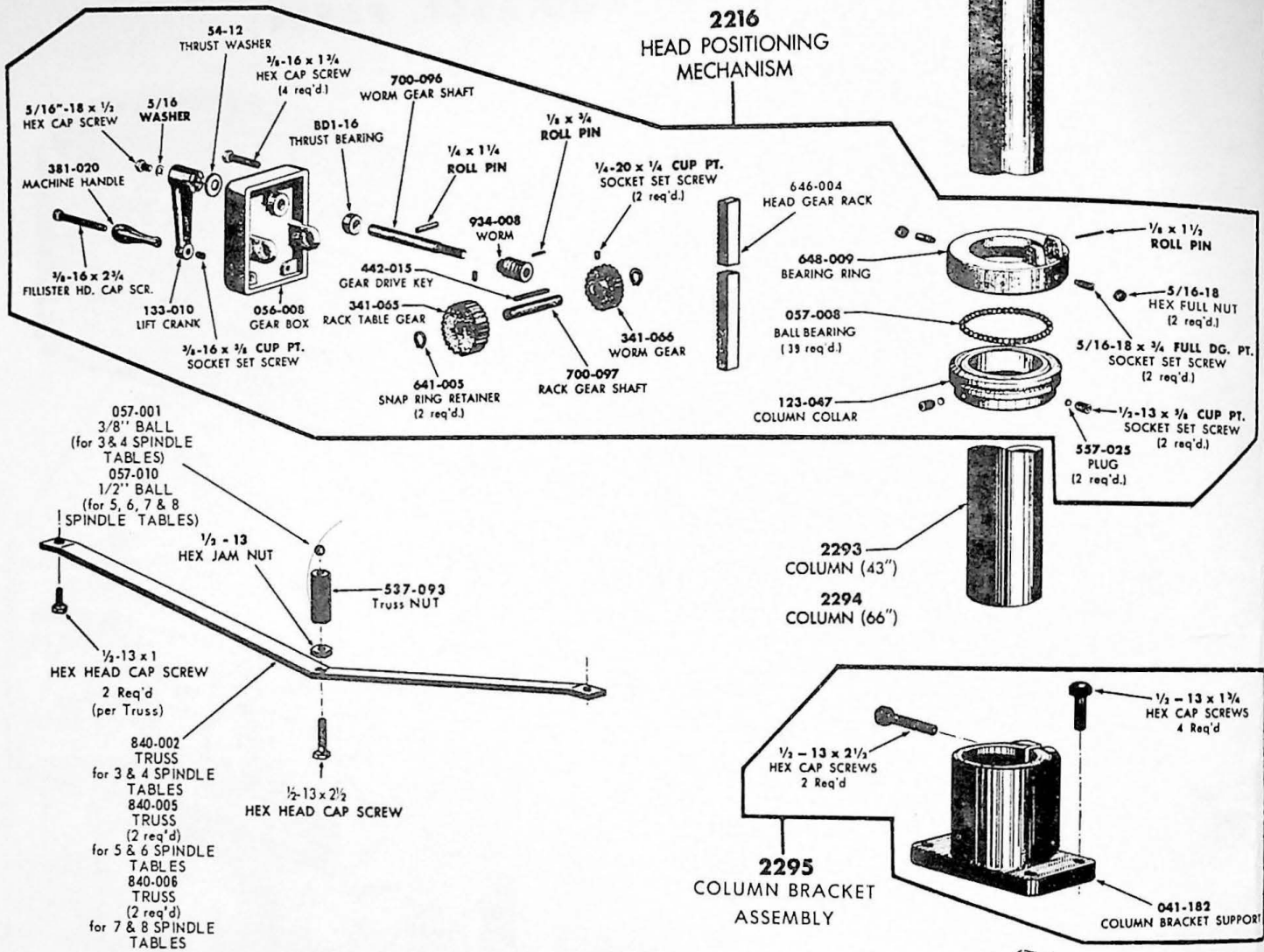


## 2271-20 HANDWHEEL PUSH ROD ASSY.



**IMPORTANT**  
 PARTS ILLUSTRATED ON THIS  
 PAGE ARE FOR DRILL PRESSES  
 SERIAL NUMBERS FROM  
 500456 TO 511000

# 20" MULTIPLE SPINDLE DRILL PRESS PARTS



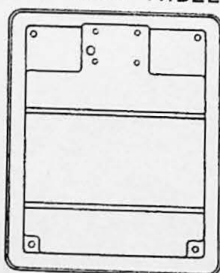
## OIL TROUGH TABLES

- No. 2292 Table. 24" x 40" working surface. Takes two 20" heads.
- No. 2296 Table. 24" x 80" working surface. Takes four 20" heads.
- No. 2297 END SECTION. Two sections provide 24" x 120" working surface for six 20" heads.
- No. 2298 MID SECTION. 24" x 40" working surface. Takes two 20" heads. Use with two No. 2297 End Sections.
- No. 2299 TABLE LEG. Two legs required for Nos. 2292 and 2296. Three legs required for two No. 2297 with one No. 2298.

Tables are drilled for legs. Holes for column mounting brackets drilled in order to customer's specifications

HEAD AND COMPONENT PARTS ARE ILLUSTRATED ON PARTS PAGES IN THE FRONT OF THIS SECTION.

NOTE: FASTENERS ARE INCLUDED WITH TABLE LEGS



050-151 BASE, PRODUCTION

