

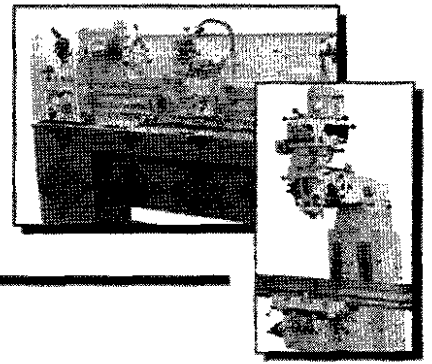


## **MACHINERY DIVISION**

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# **MODEL NFS-600 BANDSAW**

**THANK YOU FOR PURCHASING WITH KBC MACHINERY. ALL KBC MACHINES ARE BACKED BY OUR 1 YEAR PARTS REPLACEMENT WARRANTY. WHEN USED AS INTENDED, AND WITH PROPER MAINTENANCE THIS MACHINE WILL PROVIDE YOU WITH YEARS OF TROUBLE-FREE SERVICE. IF YOU NEED PARTS SIMPLY FILL OUT THE PARTS REQUEST FORM, AND FAX OR E-MAIL YOUR REQUEST. ALL OTHER QUESTIONS PLEASE CONTACT US @ :**

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# PARTS REQUEST FORM

YOUR COMPANY NAME: \_\_\_\_\_

STATE/PROVINCE \_\_\_\_\_

YOUR NAME \_\_\_\_\_

PHONE # + EXT \_\_\_\_\_

FAX # \_\_\_\_\_

MACHINE INFO:

MAKE/MANUFACTURER \_\_\_\_\_

MODEL NUMBER \_\_\_\_\_

YEAR MADE \_\_\_\_\_

SERIAL# \_\_\_\_\_

PARTS REQUESTED:

PART#

DESCRIPTION

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PLEASE INCLUDE COPY(S) OF THE PARTS DRAWING FROM THE  
MANUAL AND CIRCLE THE PARTS NEEDED

FAX PARTS REQUEST TO (800) 862-1740

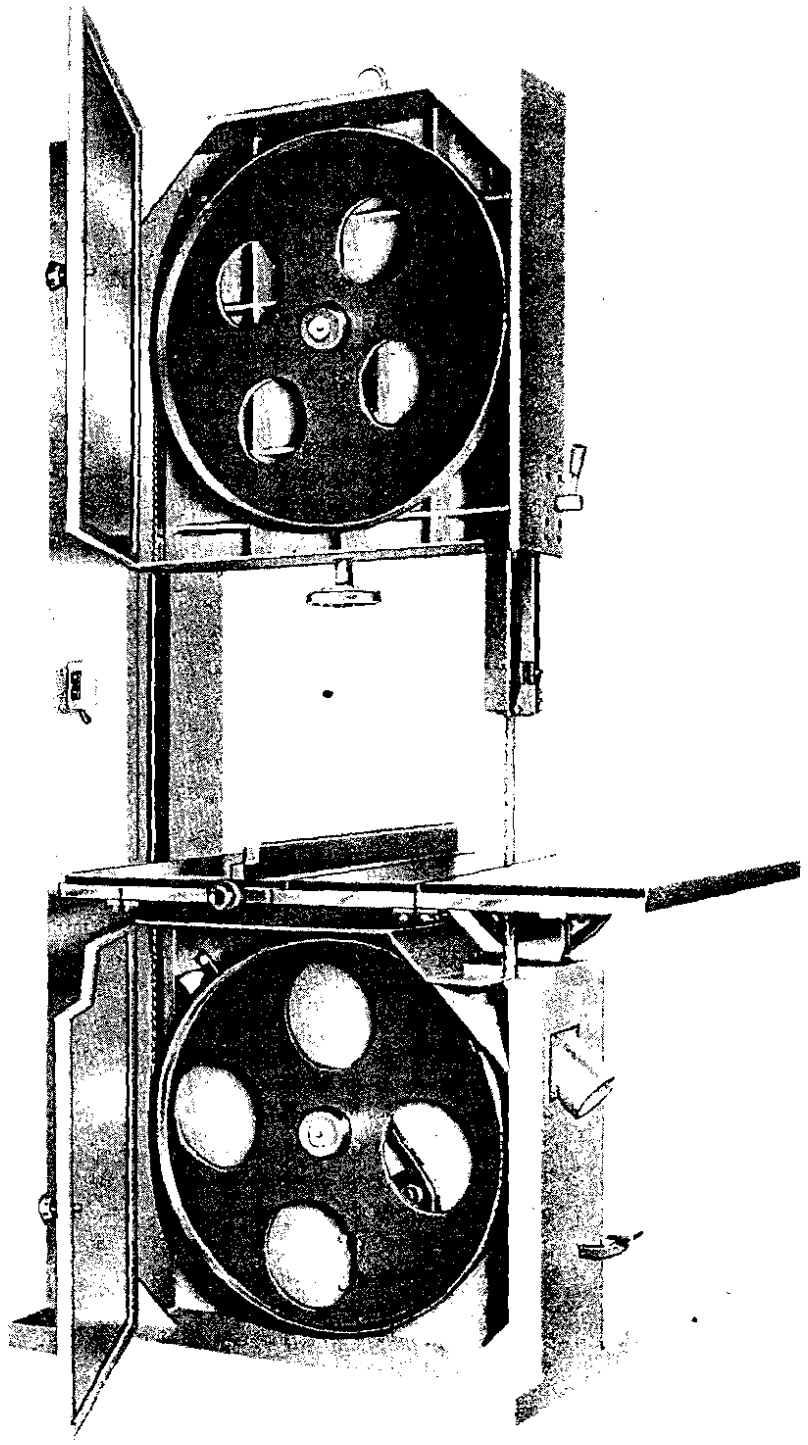
E-MAIL PARTS REQUEST TO: [machinery@kbctools.com](mailto:machinery@kbctools.com)

THANKS; KBC MACHINERY - MICHIGAN

# OPERATION MANUAL

WOOD CUTTING BANDSAW

NFS 450/600



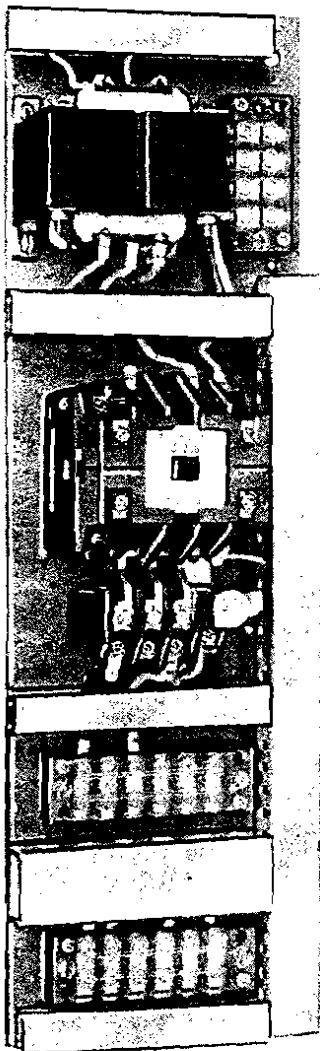


FIG. 1.

### Motor and Wiring:

Electric wiring is connected to motor wiring in conduit box fig. 1 mounted on the side of the column.

On-off switch is provided on the band saw column to the left of the table, as shown in fig. 2.

Motor should be inspected and checked for rotation before operating machine.

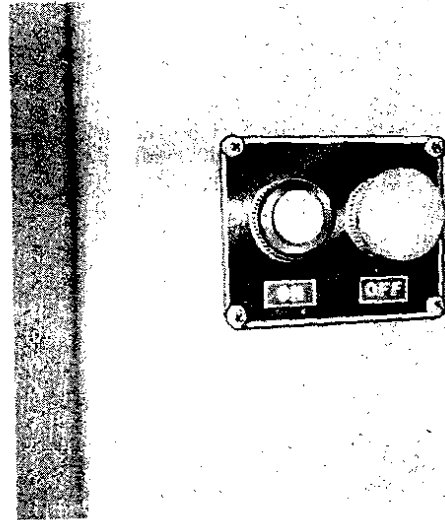
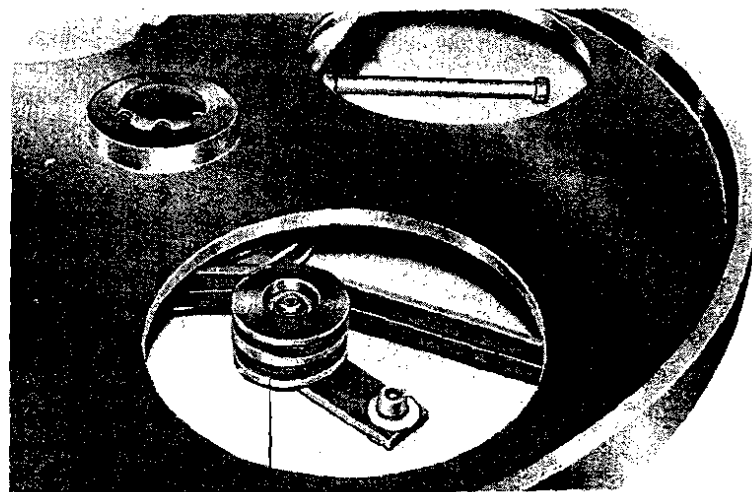


FIG. 2.



A

FIG. 3.

### Power Drive:

The motor is mounted on the base of the machine. Two a section belts drive the lower band wheel.

If V belts are too loose, please adjust pulley (A) fig. 3 to provide more pressure on to them.

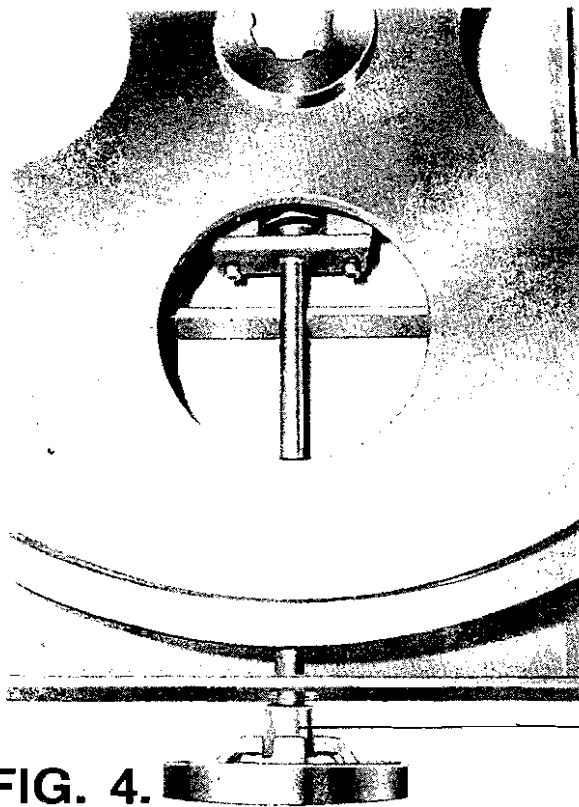
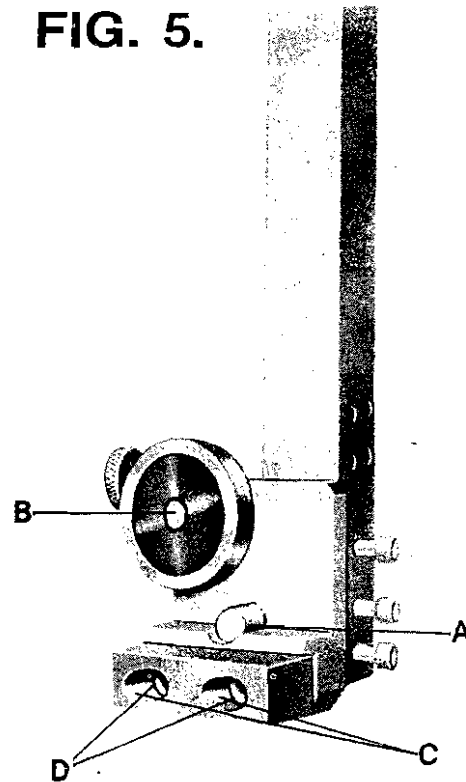


FIG. 4.

### Installing Blade:

To install band saw blade, remove table insert from table; open top and bottom doors. Take the blade in both hands and slide through table slot and over band wheels. With the blade placed in the center of the band wheels, increase tension on upper wheel with tension screw (A) fig. 4 located under upper wheel. Set upper and lower saw guide so they will clear the saw blade. Turn band wheels by hand to see that saw blade tracks properly. For accurate work and maximum blade life it is important that the blade runs centered on the wheels, the blade will track; that is, it will run steadily in the same line.

FIG. 5.



### Blade Guide Adjustment:

For proper operation, the saw blade must be supported by an upper and lower saw guide. The lower guide is mounted under the table and the upper guide on a counter-balanced bar above the table. The purpose of the saw guide is to support the blade for cutting. It is very important that the guides be set in proper relation to the saw blade. To set the guides to saw blade, set tension on blade and start the saw to check tracking on band wheel. Set dowel pin (A) and bearing (B) fig. 5  $\frac{1}{64}$ " from the back edge of saw blade when blade is running not loaded, and then set the side blocks (C) fig. 5 as close to the

saw as possible without causing friction or binding. Guide blocks are held in place with socket head set screws (D) fig. 5 the guides should be set so that edge of the guides are just behind saw teeth gullets. The blade guides are fully and independently adjustable for blade width and thickness to permit the exact settings required for accurate work and long blade life.

### Saw Wheels:

The rubbers on the pulleys should be cleared daily to prevent accumulation of sawdust which could cause the blade to run out of true. The saw pulleys must be kept in accurate balance to avoid vibration. It is essential that the rubbers on the faces are kept at an even thickness by truing up occasionally. This is done by revolving the pulleys and holding a wooden block covered in emery cloth or sandpaper against them. Care should be taken to ensure that, after truing, the wheels have a curved surface with the highest point in the center of wheel rim. This is most important for correct tracking of the saw blade. Badly worn rubbers should be replaced by new ones. If the machine is used with badly worn rubbers the saw will vibrate, resulting in bad sawing and saw breakages.

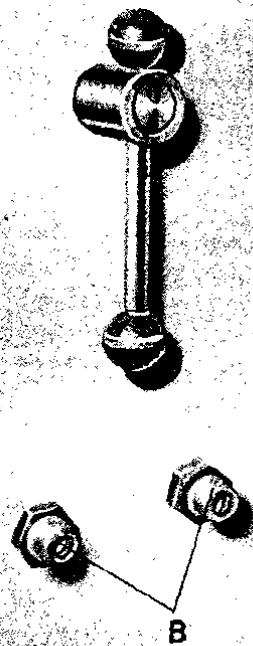


FIG. 6.

### Upper Wheel Tilting:

Loose socket head screws (B) fig. 6; turn bar (A) fig. 6 clockwise for left hand side tilting or turn counter-clockwise for right hand side tilting. Turn band wheels and see blade tracks properly, then tighten the screws (B) fig. 6 up.

### Blade Tension:

Correct blade tension is very important for efficient operation. The wider and thicker blades require more tension than narrow blades. Tension may vary on heavier and/or thicker blades. Blade tension does not vary with different length blades.

## Wheel Alignment:

Band wheels are properly aligned at the factory and should operate correctly. However, the original adjustments may have moved necessitating realignment.

## Table Adjustments:

The table is mounted on an extremely heavy duty single action trunion that rests on trunion base.

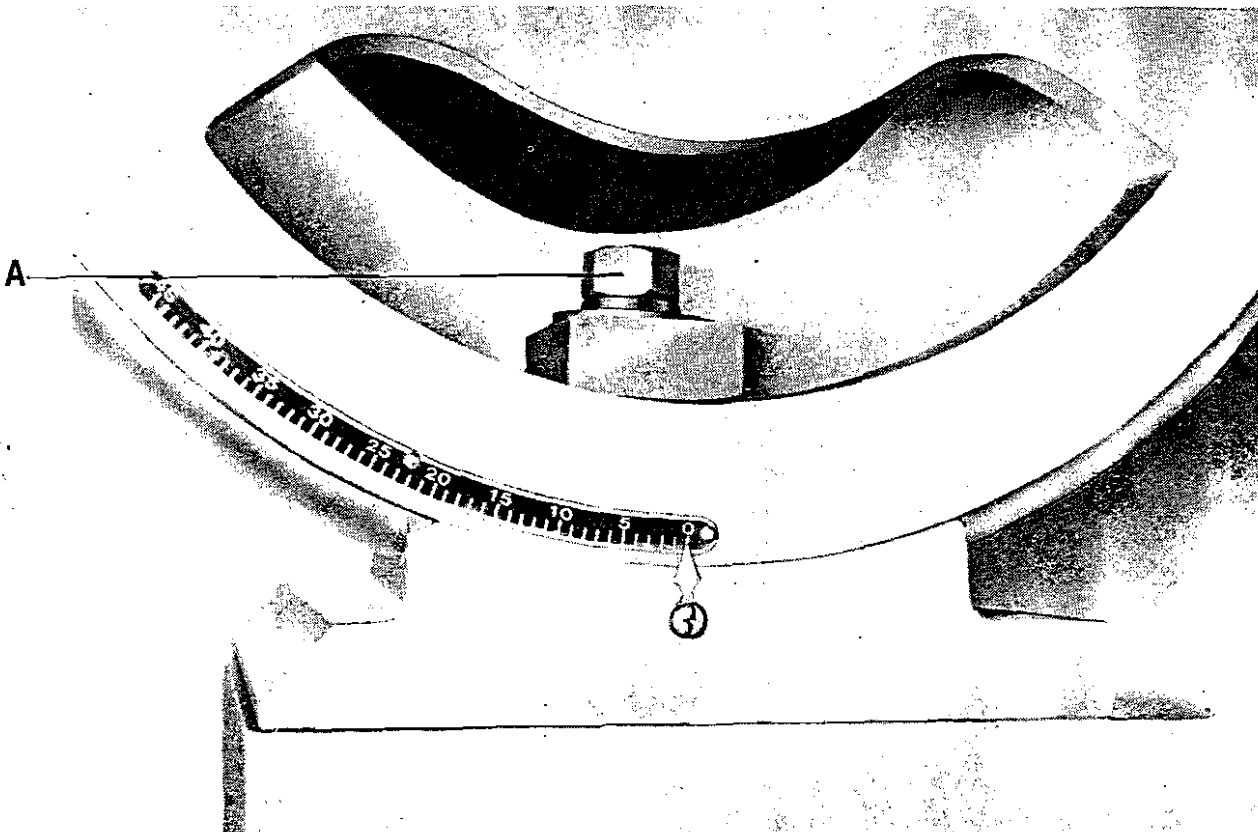
The table is locked in position with screw inside trunion. The table can be tilted to the right 45 degrees by losing the nut (A) fig. 7; push down

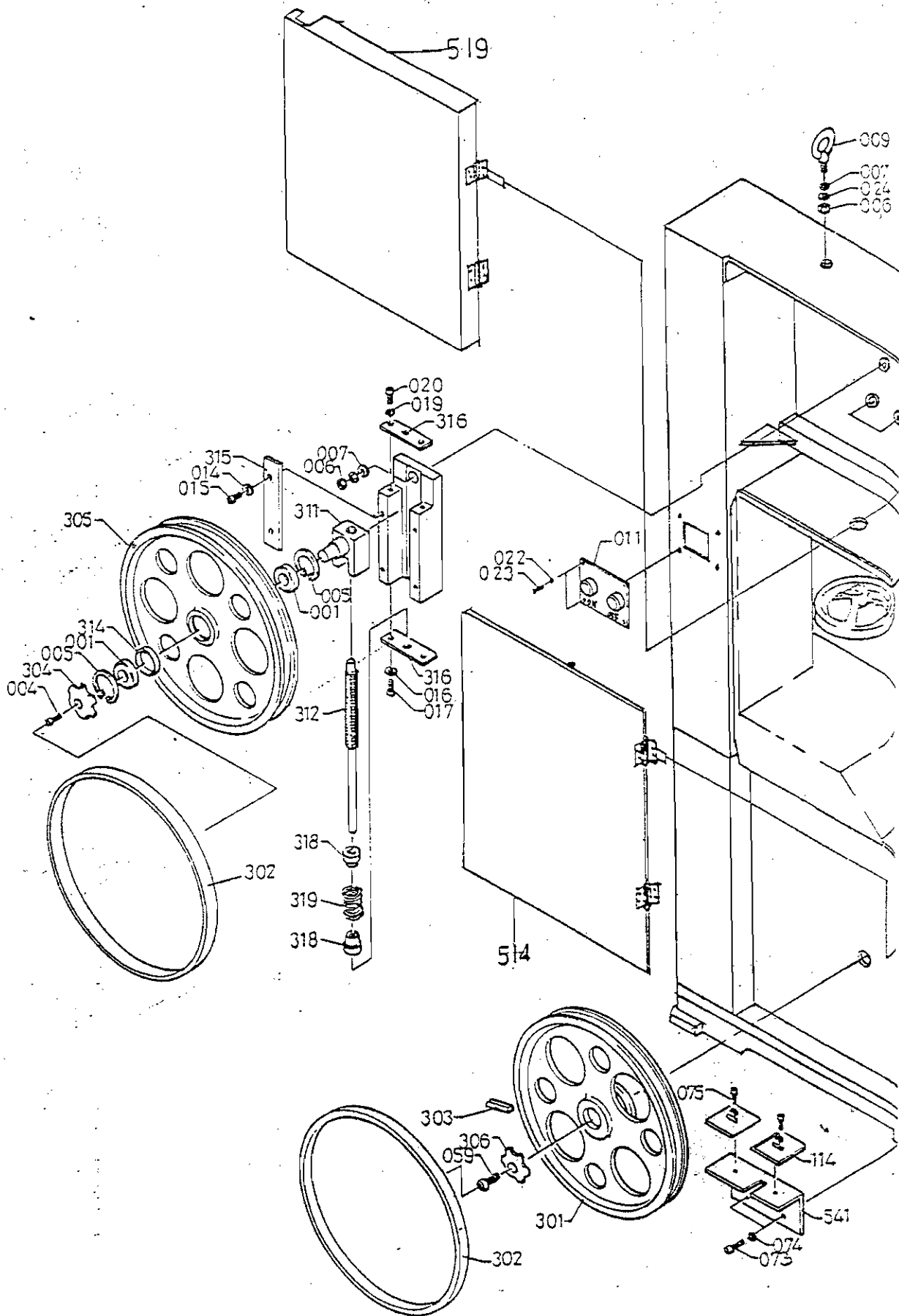
the table from right hand side and then tighten it up.

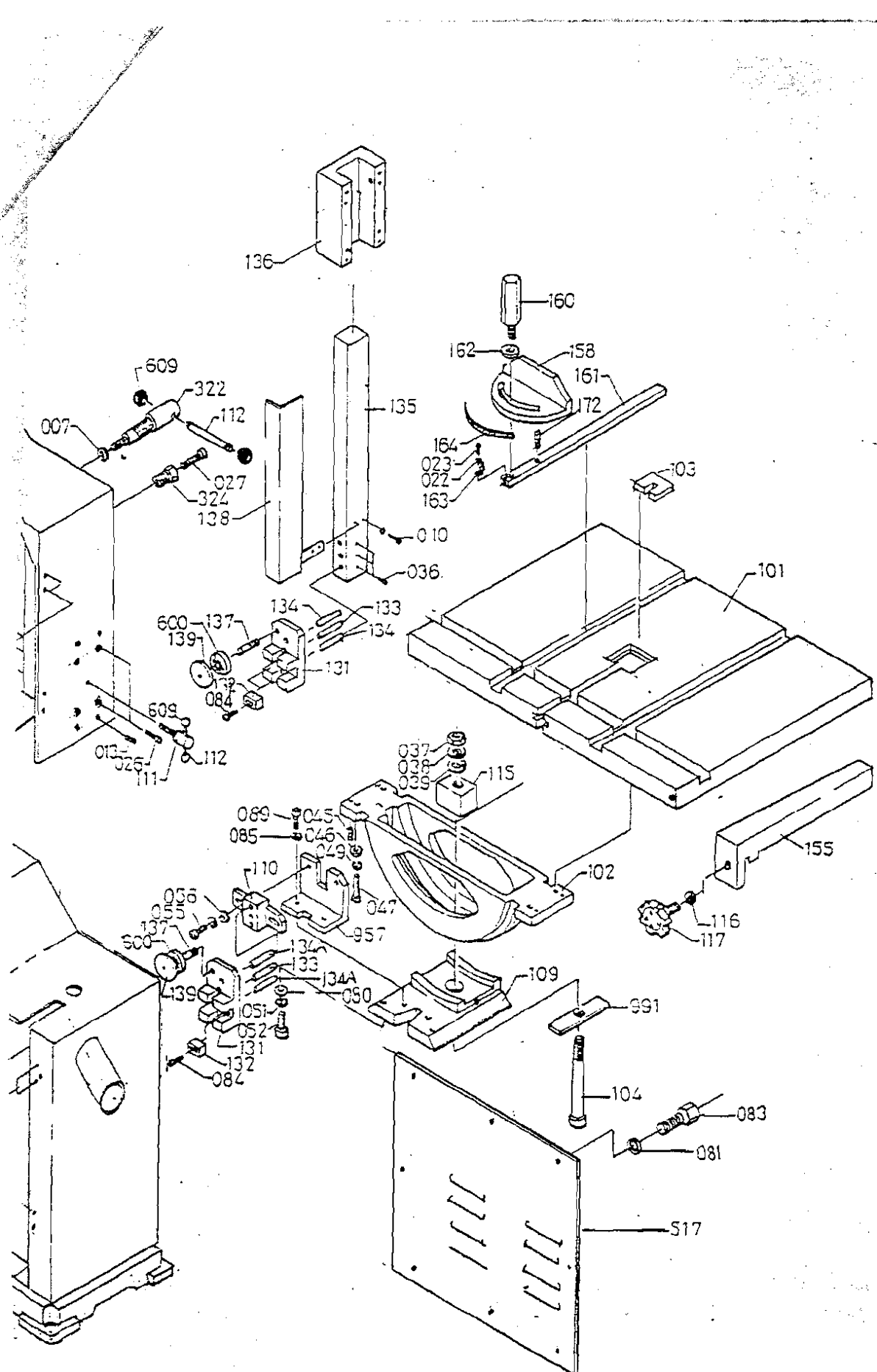
## Lubrication:

The bearing on top and bottom shaft are sealed for life requiring no lubrication. But the slides, adjusting screws and trunion should be lubricated at regular intervals to insure proper operation.

FIG. 7.



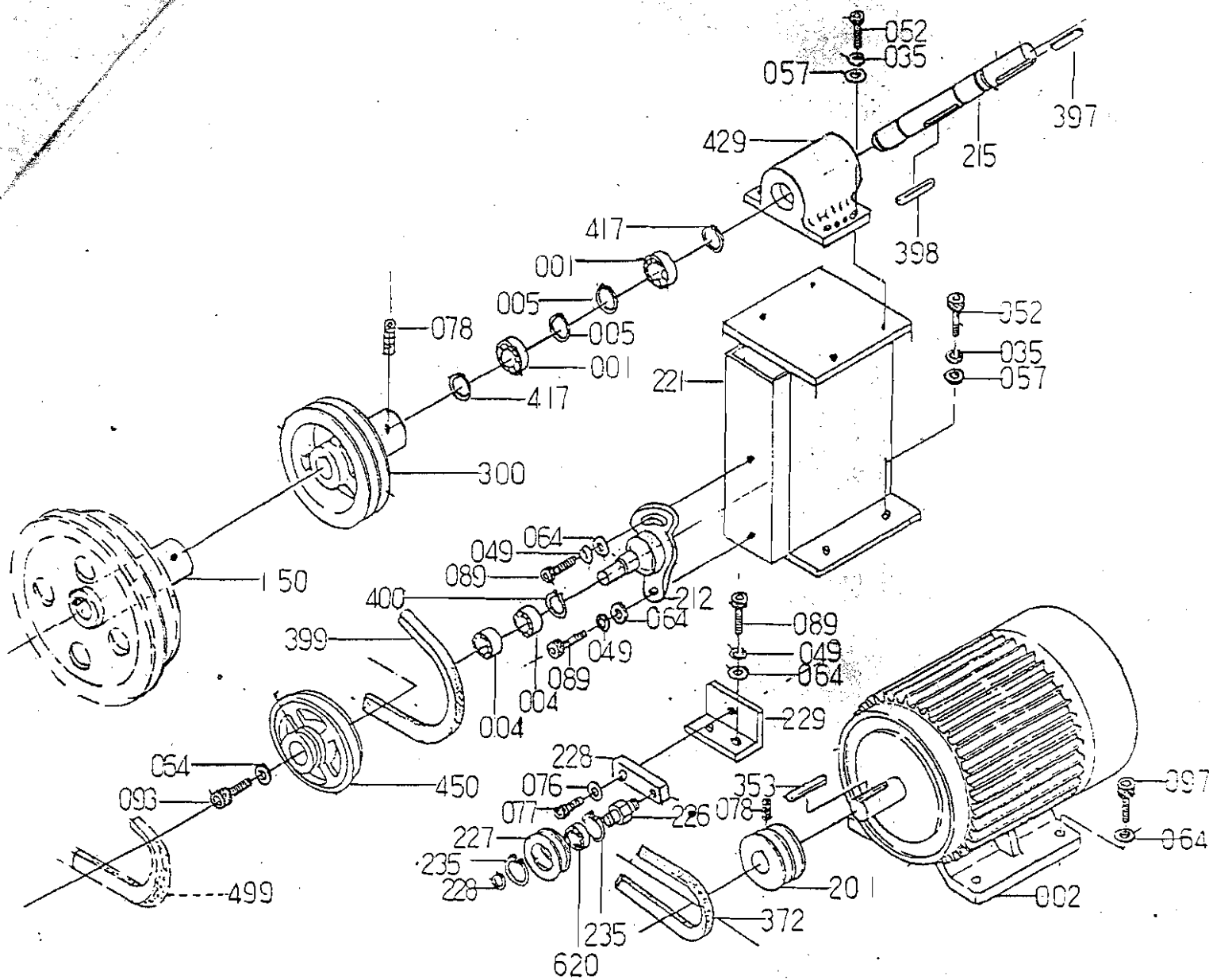




## Parts List

001 Bearing	043 Hex. Socket Set Screw
002 Motor	045 Headless Set Screw
003 Blade Tension Adjuster	046 Spring Washer
004 Hex. Socket Set Screw	047 Hex. Socket Set Screw
005 Retainer	048 Hex. Socket Set Screw
006 Nut	049 Spring Washer
007 Washer	050 Hex. Socket Set Screw
008 Spring	051 Spring Washer
009 Hook	052 Hex. Socket Set Screw
010 Hex. Socket Set Screw, Flat Head	053 Hex. Socket Set Screw
011 On/off Switch	054 Spring Washer
012 Spring Pin	055 Hex. Socket Set Screw
013 Headless Set Screw	056 Spring Washer
014 Spring Washer	057 Spring Washer
015 Hex. Head Cap Screw	058 Hex. Socket Set Screw
016 Spring Washer	059 Hex. Socket Set Screw
017 Hex. Socket Set Screw	060 Spring Washer
018 Hex. Head Cap Screw	061 Hex. Socket Set Screw
019 Spring Washer	062 Hex. Socket Set Screw
020 Hex. Socket Set Screw	063 Hex. Socket Set Screw
022 Spring Washer	064 Spring Washer
024 Spring Washer	065 Hex. Socket Set Screw
025 Hex. Socket Set Screw	067 Hex. Socket Set Screw
026 Hex. Socket Set Screw	068 Spring Washer
027 Hex. Socket Set Screw	069 Hex. Socket Set Screw
028 Hex. Socket Set Screw	070 Spring Washer
030 Hex. Head Cap Screw	072 Headless Set Screw
031 Spring Washer	073 Hex. Socket Set Screw
032 Hex. Socket Set Screw	074 Spring Washer
033 Spring Washer	075 Hex. Socket Set Screw
034 Hex. Socket Set Screw	076 Hex. Socket Set Screw
035 Spring Washer	077 Spring Washer
036 Hex. Socket Set Screw	078 Headless Set Screw
037 Nut	081 Spring Washer
038 Hex. Socket Set Screw	083 Hex. Head Cap Screw
039 Spring Washer	084 Hex. Socket Set Screw
040 Spring Washer	085 Spring Washer
042 Hex. Socket Set Screw	086 Hex. Head Cap Screw

091 Hex. Socket Set Screw	156 Bar, Rip Fence Rail
092 Spring Washer	157 Connector, Rip Fence Mounting
093 Hex. Socket Set Screw	158 Miter Gauge
094 Hex. Socket Set Screw	159 Bracket, Rip Fence Mounting
095 Spring Washer	160 Lock Nut, Miter Gauge Assembly
096 C Ring	161 Slot Bar, Miter Gauge Assembly
101 Table	162 Washer
102 Trunnion, Table Tilting	163 Pointer
103 Table Insert	164 Name Plate
104 Bolt	201 Pulley
109 Bracket, Trunion, Table Tilting	219 Driving Wheel Adjuster
110 Seat, Blade Guide Assembly	221 Driving Unit Saddle
111 Set Screw	226 Shaft
112 Bar	227 Pulley
114 Wood Plate, Dust Collecting Assembly	228 Rock Arm Block
115 Locking Block	301 Driving Wheel
121 Fixing Insert	302 Rubber Belt
122 Pin, Fixing Insert	303 V Belt
131 Bracket, Blade Guide Assembly	304 Lock Nut
132 Blade Guide	305 Driven Wheel
133 Pin, Dowel	306 Lock Nut
134 Supporting Pin	313 Hand Wheel
135 Slide Bar	314 Bushing
136 Slide Guide	318 Spring
137 Supporting Pin	322 Adjusting Knob, Driven Wheel Adjuster Assembly
138 Blade Guard	323 Spacer
140 Worm Fixing Plate	324 Hex. Head Cap Screw
141 Worm	514 Door, Driving Wheel
142 Worm Gear	517 Rear Cover
143 Guide Post Stopper	519 Door, Driven Wheel
144 Fixing Plate	541 Frame, Saw Dust Collector
145 Spring	551 Brake Pedal
146 Worm Shaft	552 Brake Shoe & Lining
147 Gear Rack	553 Brake Shoe Connector
148 Hand Wheel	556 Motor Frame
149 Hand Bar	957 Blade Guide Saddle
155 Rip Fence	



Part No.	Description	Number Required
097	Hex. Head Cap Screw M8 x 40	4
150	Pulley, Low Speed	1
212	Saddle, Idle Wheel	1
215	Shaft	1
229	Saddle, Tension Wheel	1
235	C Ring	2
300	Pulley, High Speed	1
353	Key M8 x 8 x 30	1
372	V-Belt, A44"	1
397	Key M6.35 x 6.35 x 30	1
398	Key M6.35 x 6.35 x 50	1
399	V-Belt, High Speed Pulley, A39"	1
400	C Ring	1
417	C Ring	4