

# Operations & Parts Manual



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## P630HV

### SINGLE SURFACE PLANER

Please ensure you have your serial number available when contacting us for parts or service.

Cantek America Inc. | 1.888.982.2683 | **Parts:** [sales@cantekamerica.com](mailto:sales@cantekamerica.com) | **Service:** [service@cantekamerica.com](mailto:service@cantekamerica.com)

# OPERATING INSTRUCTIONS

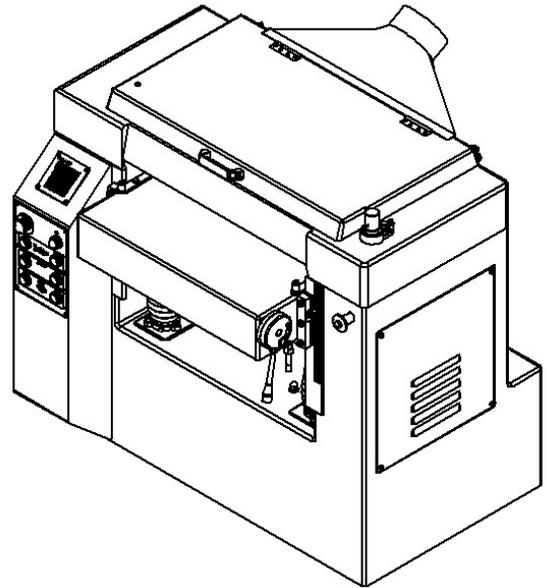
Before operating the unit, please read this manual thoroughly, and retain it for future reference.

## OWNER'S RECORD

The model and serial numbers of your set are located at the front. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your dealer regarding this product.

**MODEL NO.** \_\_\_\_\_

**SERIAL NO.** \_\_\_\_\_



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# SPECIFICATIONS

## **ELECTRICS:**

Planer Motor .....	10HP 3PH 30AMP
Feed Motor .....	1HP 3PH 3AMP
Table Lift Motor .....	1/2HP 3PH 1.5AMP
Total Required Amperage .....	34.5AMP

## **CAPACITY:**

Max. Width Of Stock .....	630mm (24-13/16")
Max. Thickness Of Stock .....	300mm (11-13/16")
Max. Depth Of Cut .....	8mm (5/16")
Min. Length(uncutted) .....	220mm (8-11/16")

## **CUTTERHEAD:**

Number Of Knives .....	4pcs
Diameter .....	98mm (3-27/32")
Cutting Circle .....	102mm (4-1/64")
Speed .....	5500R.P.M

## **TABLE SIZE:**

Width.....	685mm (26-31/32")
Length.....	870mm (34-5/16")

## **FEED ROLLERS:**

Infeed (One Sectional) Dia .....	76mm (3")
Outfeed (Two Solid) Dia .....	60mm (2-3/8")
Table Roller (Two Smooth) Dia .....	68mm (2-11/16")
Feed Rate (Variable Speed).....	19 FPM to 39 FPM

**MACHINE SIZE (LxWxH)** ..... 1247mm x 865mm x 1249mm (49"x34"x49")

**PACKING SIZE (LxWxH)** ..... 1320mm x 1020mm x 1320mm(52"x41-1/8"x52")

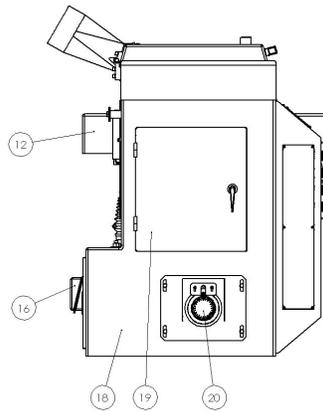
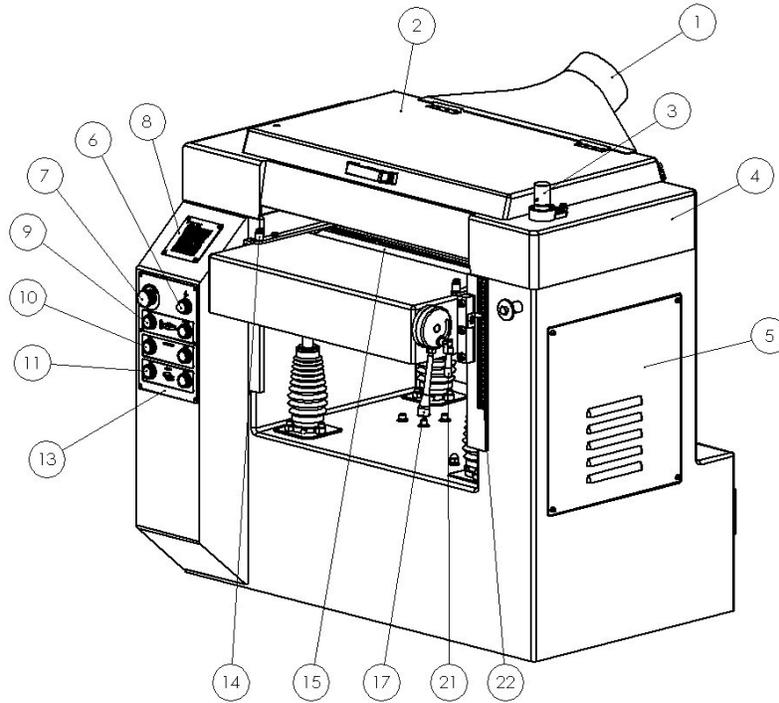
**NET WEIGHT** .....820KGS (1804LBS)

**GROSS WEIGHT** .....920KGS (2024LBS)

## **STANDARD EQUIPMENT**

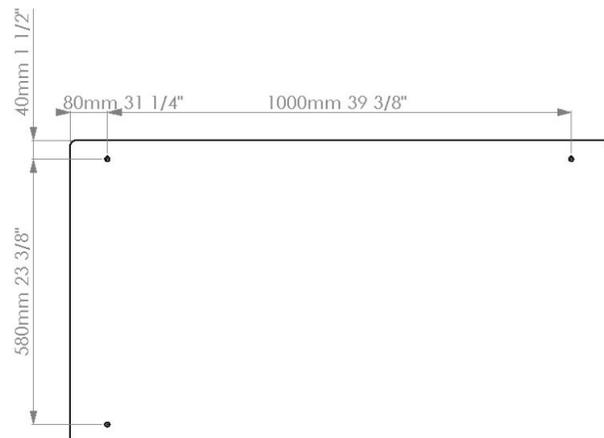
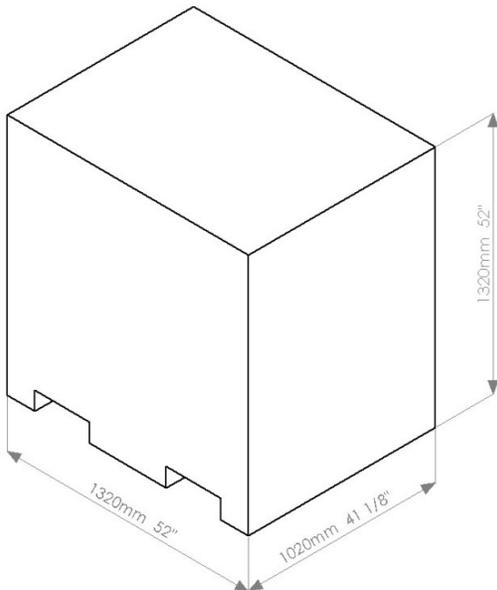
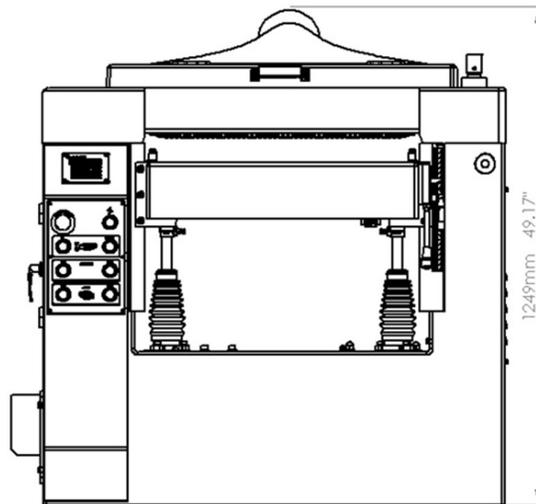
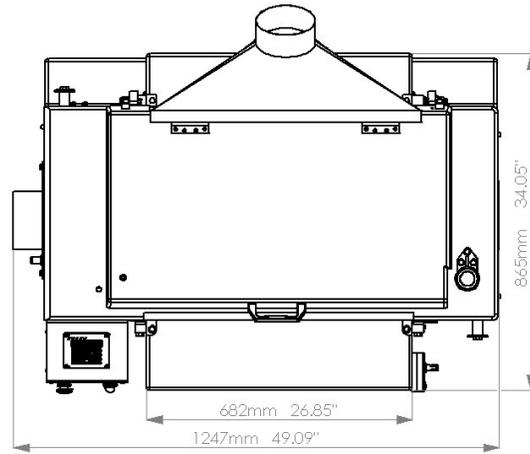
1. Two rollers, table with micro-metric adjustment.
2. Variable feed speed system with 1HP motor.
3. Power table, rise and fall with 1/2HP motor.
4. Segmented infeed roller.
5. Sectional chipbreakers.
6. 4-Knife cutterhead.
7. Easy operation knife setting gage.
8. Digital counter.
9. Lifting table on four strong screws.
10. Magnetic switch.
11. Dust extraction hood.
12. Adjusting tools & operations manual.
13. Main motor: 10HP 3PH 220/440V 60cycle
14. Cast iron frame.

# FEATURES OF YOUR 24" PLANER



- |                               |                              |                                    |                                  |
|-------------------------------|------------------------------|------------------------------------|----------------------------------|
| 1. Dust Hood                  | 7. Emergency Stop Button     | 13. Control Panel                  | 20. Variable Speed Dial          |
| 2. Top Cover                  | 8. Digital Scale And Control | 14. Limit Block, Width             | 21. Table Roller Adjustment Lock |
| 3. Thickness Micro Adjustment | 9. Table Raising Button      | 15. Table Roller                   | 22. MM/INCH Scale                |
| 4. Frame Cover                | 10. Start Button, Planer     | 16. Wiring Terminal Box            |                                  |
| 5. Right Side Cover           | 11. Start Feeding Button     | 17. Table Roller Adjustment Handle |                                  |
| 6. Power Indicator Light      | 12. Work Table               | 18. Machine Base                   |                                  |
|                               |                              | 19. Access Door                    |                                  |

# DIMENSIONS



## GENERAL SAFETY INSTRUCTIONS

1. **Keep Guards In Place:** Safety guards must be kept in place and in working order.
2. **Remove Adjusting Keys And Wrenches:** Before turning on machine, check to see that the keys, chucks and adjusting wrenches are removed.
3. **Reduce The Risk Of Unintentional Starting:** Make sure switch is in the off position before plugging in the machine.
4. **Do Not Force Machines:** They will do a job better and safer at the rate for which they were designed.
5. **Use Right Tool:** Do not force a machine or an attachment to do a job for which it was not designed.
6. **Secure Work:** Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate machines.
7. **Maintain Machines With Care:** Keep machines sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
8. **Disconnect Machines From Power:** Before servicing or when changing accessories such as bits, blades, cutters, etc. disconnect from power.
9. **Use Recommended Accessories:** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injuries.
10. **Check Damaged Parts:** Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect the machine's operation. A guard or other part that is damaged should be properly repaired or replaced.
11. **Turn Power Off:** NEVER LEAVE MACHINE RUNNING UNATTENDED. Do not leave machine until it comes to a complete stop.
12. **Keep Work Area Clean:** Cluttered areas and benches invite accidents.
13. **Do Not Use In Dangerous Environment:** Do not use power machines in damp or wet locations, or expose them to rain. Keep work area well lighted.
14. **Keep Children Away:** All visitors should be kept at a safe distance from the work area.
15. **Make Workshop Child Proof:** Use padlocks, master switches, and remove starter keys.
16. **Wear Proper Apparel:** Loose clothing, gloves, neckties, rings, bracelets or other jewelry may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
17. **Always Use Safety Glasses And Dust Masks:** Use face or dust mask if cutting operation is dusty. Every day eyeglasses only have impact resistant lenses, they ARE NOT safety at all times.

18. **Never Stand On Machine:** Serious injuries could occur if a moving part is unintentionally contacted.

## ADDITIONAL SAFETY RULES FOR YOUR PLANER

1. This machine has been designed with as many safety features as humanly possible, however, always remember that a planer is only as safe as its operator.
2. Before starting the planer, be sure to check the following:
  - A. Table must be completely free of all foreign matter.
  - B. Cutterhead knives **MUST** be inspected before each operation. Check for tightness in cutterhead and make certain knives are not fractured in any place. Flying knives are **DANGEROUS**.
  - C. Check knives for sharpness.
3. Check material thickness and depth of cut desired. **NEVER** overload planer, or try to cut beyond its capacity.
4. As material is fed into machine, stand to side of board near switch (never directly behind). "Kick-back" is caused by improper grip of lumber by infeed roll and chipbreaker, can cause serious injury.
5. **NEVER** stand directly behind or work behind machine when it is running. Direction of cutterhead rotation usually throws chips or any foreign material from rear of machine.
6. In case it is necessary to stop material as it is through machine, switch off feed system and turn machine off. **WAIT** until cutterhead has completely stopped before lowering table to remove material. Attempted removal while cutterhead is turning may cause "Kick-back".
7. **NEVER** horse around a running planer. "Play" should absolutely be forbidden as 9 out of 10 accidents are the results of carelessness and playing with machine as though it were atoy.
8. Always stop machine for adjustment of when leaving immediate area. Disconnect power source when working on or around any moving parts.
9. **CAUTION**-Kickback can result and board flies from machine with high velocity. When sectional infeed rolls and chipbreakers are installed, it is possible to feed several narrow boards through machine.
10. Use only factory authorized replacement parts and knives.
11. Keep all guards in place at all times.
12. Extra care should be taken when running short pieces, but with another piece of material of equal thickness and stand **ASIDE**.
13. Do **NOT** tie strings to the table elevating screws or remove the protective rubber boots. The screws will be rusty and plastic embeds on the screws. Failure to comply with the above warnings may cause personal injury and/or damage to the machine.

## UNPACKING AND CLEAN-UP

To ensure maximum performance from your planer, clean it properly, and install it accurately before use. As soon as you receive the planer, we recommend you follow the procedures:

1. Inspect packing crate for damage in transit. Record damage and report it immediately to shipper.
2. Open crate and check that machine arrived in good condition. If not, let the distributor know immediately.
3. Before lifting machine, remove all bolts from its shipping base.
4. Transport machine to location with a hand truck or dolly.
5. **\*\* IMPORTANT \*\***  
**REMOVE THE PROTECTIVE COATING FROM THE TABLE, TABLE ROLLERS, FEED ROLLERS, CUTTERHEAD AND LOOSE ITEMS PACKED WITH THE MACHINE.**
6. The coating may be removed with a soft cloth moistened with Kerosene.  
**NOTE: DO NOT USE ACETONE, GASOLINE, OR LACQUER THINNER FOR THIS PURPOSE**
7. DO NOT use solvents on plastic parts; they will dissolve plastic.
8. **\*\* CAUTION \*\***  
**CARE MUST BE TAKEN WHEN CLEANING THE CUTTERHEAD.** The knives are in the cutterhead and are very sharp.
9. For lifting, please refer to Fig. 1

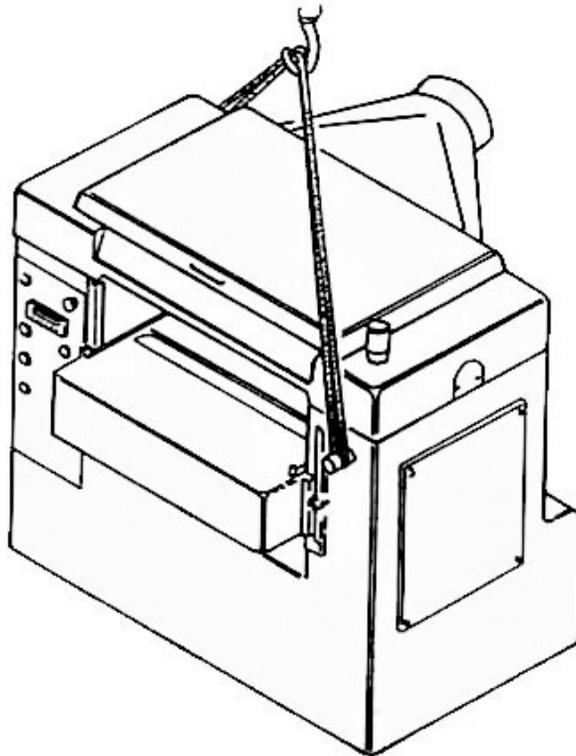


Fig. 1

# INSTALLATION INSTRUCTIONS

IMPORTANT(PALESE READ CAREFULLY)

## Installing

Mount machine securely to solid, even base foundation. Concrete base mounting preferred. Locate in clean, dry, well lighted and well ventilated building if possible. With machine in position, test table surface lengthwise and crosswise with machinist level. Place metal shims under low corners. Check that all four corners are supported.

## Grounding Information And Power Connections

### 1. **\*\* IMPORTANT \*\***

Before connecting to the power source, be sure that the voltage is the same characteristics as tied on terminal box.

### RUNNING ON WRONG VOLTAGE WILL INJURY THE MOTOR

2. The necessary wiring to the power source should be completed by a competent electrician.  
For personal safety, this machine must be properly grounded. Base of machine should be grounded to central grounding system.
3. NOTE: After wiring into the power source, run motor without load to check the direction of rotation.
4. Please refer to Fig. 2, Fig. 3 of Control Panel and Connections To Power source.

## CONTROL PANEL

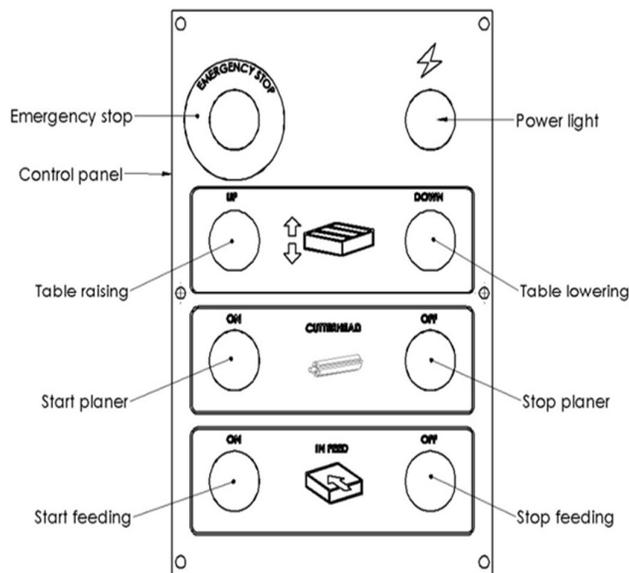


Fig. 2

## CONNECTION TO POWER SOURCE

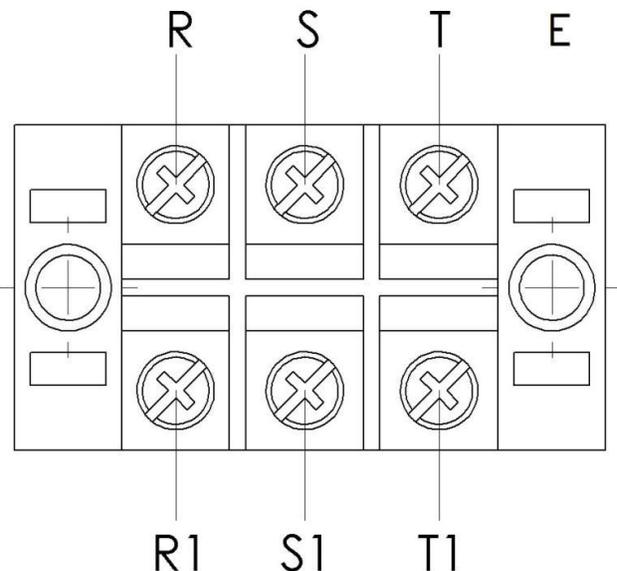


Fig. 3

NOTE: SELECT WIRE SIZE TO MEET TOOL  
REQUIRED AMPERAGE OF  
34.5AMP/220V  
17.25AMP/440V

# ADJUSTMENTS AND OPERATION

Disconnect machine from the power source before adjusting this machine.

## OPERATING ADJUSTMENTS.

**WARNING:** Before checking adjustments, always make sure the planer is disconnected from the power source.

### Work Table

The work table is mounted on the frame and is raised or lowered on four screws mounted on thrust bearings. The work table is raised or lowered by 1/2HP motor power control or micro adjustment. The work table **MUST BE** parallel to the cutterhead. This can be checked by lowering the work table to permit placing a small square block between the work table and the cutterhead at the extreme right side of the table. Raise the table with the handle until the block just touch the cutterhead and move the block to the left side of the table and check the cutterhead. If the table is not parallel to the cutterhead, perform the adjustment procedures as follow:

1. **Disconnect the machine from the power source.**
2. Remove the boot (C) for access to screw,
3. Loosen lock bar (A) and turn acme screw (B) in clockwise direction, then adjust it to accurate position as shown in Fig. 4.

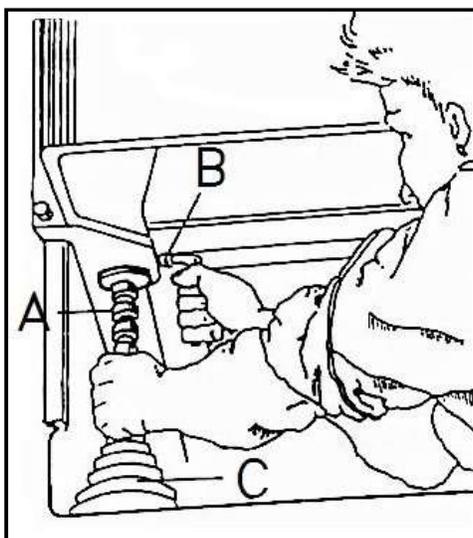
Limitation for work table raising or lowering, there is a limit switch (A) for each direction of table movement. The power table switches off to prevent damage in maximum high and low position as shown in Fig. 5 (B) is a limit block, micro-switch block.

(A) Limit switch

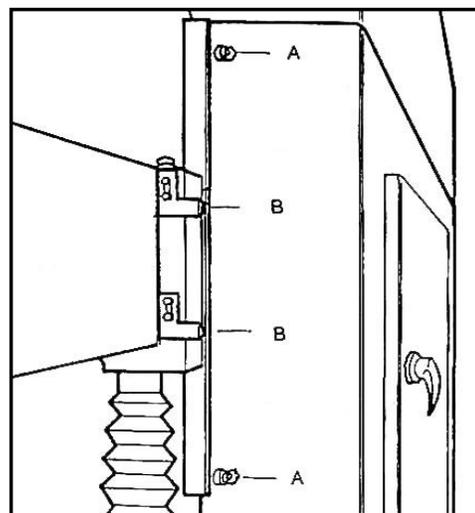
(B) Limit switch stop

**NOTE:** The most accurate way to check cutter alignment with table parallel is with the use of a dial indicator mounted on a surface gage.

Fig. 4



- A. Lock Bar
- B. Rubber Dust Boot
- C. Acme Screw



Disconnect machine from the power source before adjusting this machine.

### Table Rollers

The table rollers are adjusted to the proper height with the quick-set handle mounted on the right side of the work table. As a general rule, when planing rough stock, the table rollers should be set at high position, and when planing smooth stock, the table rollers should be set at low position.

**NOTE:** The table rollers must always be set parallel to the work table.

1. Quick adjustment for planing rough stock and smooth stock:
  - A. Loosen lock handle (A) and move adjusting handle (B) up to the expected position as shown in Fig. 6
  - B. Lock handle (A).
2. Table rollers can be adjusted depending on working situation. However, the Max adjustment height is .125" as shown in Fig. 7.

### The Depth of Cut

This planer is equipped with easy-to-read digital thickness display and a thickness scale. Cutting thickness is up to 11-13/16". Power table up and down travel makes it easy to select desired material thickness.

When power table reaches the approximate material size, using the micro adjustment adjust (A) for manual positioning. The digital display displays increments of .001" see Fig. 8

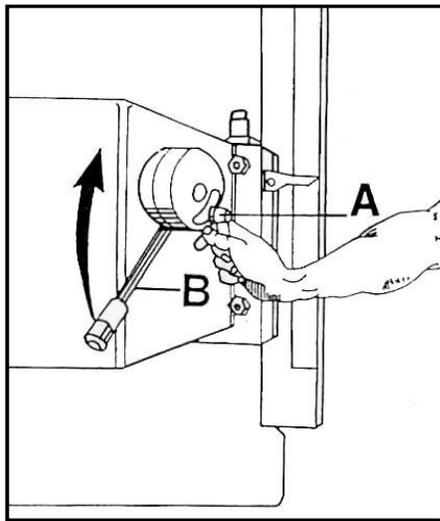


Fig. 6

- A. Lock Handle
- B. Adjusting Handle

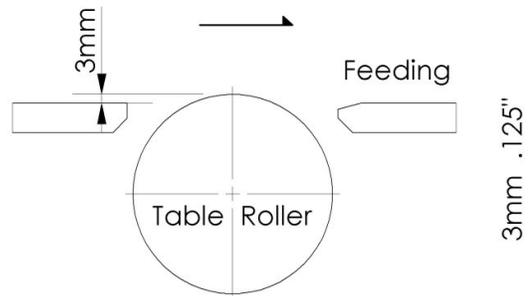


Fig. 7

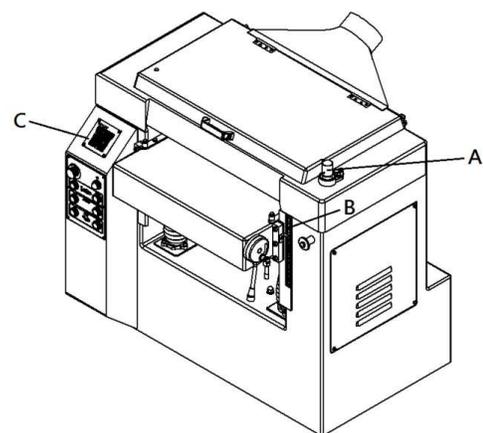


Fig. 8

- A. Manual Micro Adjustment
- B. Thickness Scale
- C. Digital Display

## Cutterhead

The cutterhead is equipped with four knives. It is important that knives should be kept sharp. The knives do all of the work and they will not work if they are DULL. The set of knives are matched and balanced at the factory. When the knives are sharpened, care should be taken that they are kept in balance. If the knives are removed for sharpening, care must be exercised in replacing and resetting them, proceed as follows:

### \*\*CAUTION\*\*

1. Disconnect the machine from the power source.
2. Clean the cutterhead
3. To remove knives, loosen the knife gib (D), by turning the square head screw (E) into the knife gib (D) then remove the knife gib (D), knife (C) and two lifting springs (F) which located under the knife. Please take note that the springs may pop out while removing the knife. Fig. 10
4. Remove the remaining three knives in the same manner.
5. Thoroughly clean the knife slots, knife gibs, springs and square head locking screws. Check the screws if they appear worn or if the heads are becoming rounded, replace them.
6. In sequence to insert springs, knife, and knife gib into slot of the cutterhead. Backing out square head screws just enough to hold the knife in the cutterhead.
7. Place the knife setting gage (B) over the knife. Loosen all square head screws by turning them into the knife gib until cutting edge of knife comes into contact with the protrusion of gage. Then lightly back out the square screws against the slot.

**\*\*NOTE: AT THIS TIME, ONLY TIGHTEN THE SCREWS JUST ENOUGH TO HOLD THE KNIFE IN POSITION.**

8. Replace and reset the other three knives in the same manner.
9. After all four knives are set in position, back out and tighten the square head screws against the slot starting with the end screws first and the center screws until the knife is securely held in the cutterhead. Tighten the remaining three knives in the same manner.

**\*\*NOTE: Double check all screws for tightness**

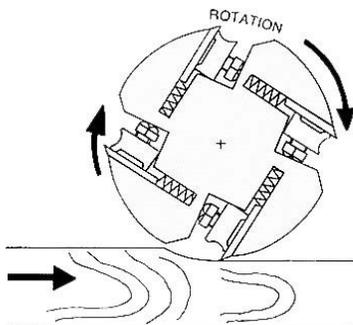


Fig. 9

Always Feed Against the Cutter Rotation As Shown In Fig. 9

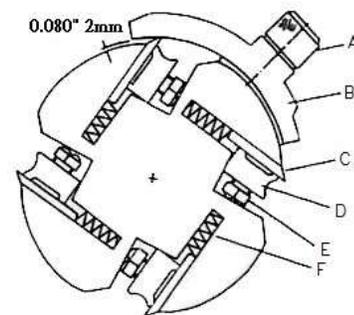


Fig. 10

- |    |                    |    |                   |
|----|--------------------|----|-------------------|
| A. | Knob               | D. | Knife Gib         |
| B. | Knife setting gage | E. | Square head screw |
| C. | Knife              | F. | Lifting spring    |

## Infeed Roller, Chipbreaker, Pressure Bar, And Outfeed Roller

The infeed roller, chipbreaker, pressure bar, and outfeed rollers are adjusted at the factory. The infeed roller and the chipbreaker are to be set .020" below the cutting circle, the pressure bar is to be set .040" below the cutting circle and the outfeed rollers are to be set .020" below the cutting circle, as shown in Fig.11 For example to check and adjust the outfeed roller below the cutting circle .020", proceed as follows:

1. Disconnect machine from the power source.
2. Make sure the knives are adjusted properly.
3. Place a square block on the table directly underneath the cutterhead. Place a feeler gage on top of the square block. Raise the work table until the knife tip just touches the feeler gage. Do not move the work table any more until the outfeed roller is adjusted as shown in Fig. 12.
4. If an adjustment to the outfeed roller is necessary, loosen the lock nut (A) and turn screws (B) until the outfeed roller just touches the square block. Then tighten lock nut (A) as shown in Fig. 13.
5. Check and adjust opposite end of the outfeed roller in the same manner.

## Tension Adjustment Of Infeed And Outfeed Rollers

Adjust the spring tension of the infeed and outfeed rollers by turning the spring tension adjustment screw (F) as shown in Fig. 13.

- A. Lock nut
- B. Adjustment screw
- C. Roller
- D. Bushing housing
- E. Spring
- F. Spring tension screw

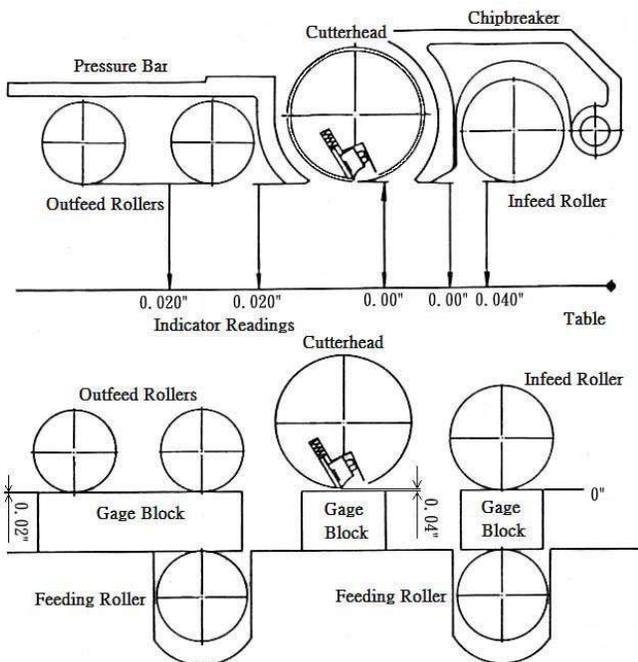


Fig. 12

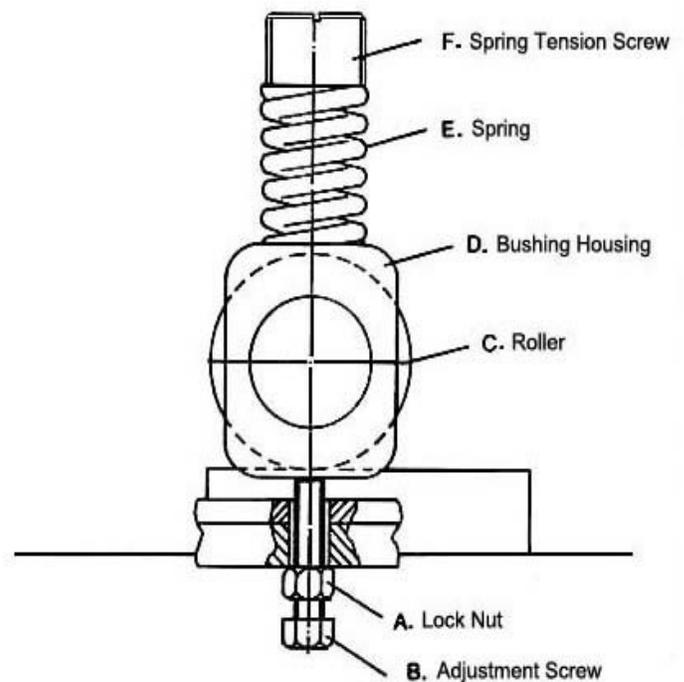


Fig. 13

## Feed Speed Control

This planer is equipped with a separate 1HP feed motor and variable feed speed control system. The feed rates are from 19 FPM to 39 FPM which meets the different requirement of soft stock and hard stock. It is easy to adjust by turning the dial knob (A) as shown in Fig.14. The variable speed adjustment dial (A) turns clockwise for low speed feeding and counterclockwise for higher speed selection.

## Feed Drive System

### 1. Chain Drive

Feeding transmission instruction:

Please adjust (C) when drive chain become loose, as shown in Fig. 15.

### 2. V-Belt Drive

Adjust (A) to have a proper position when belt becomes loose by lowering motor frame.

- A. Drive pulley variable drive
- B. Drive pulley variable drive
- C. Chain tension idler.

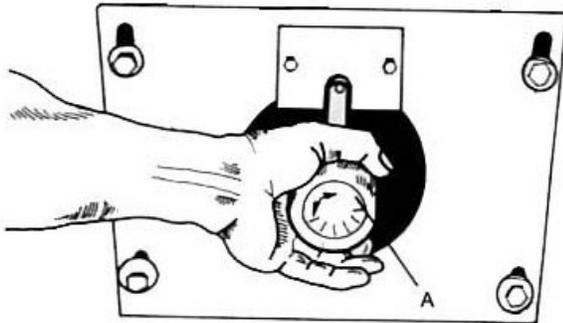


Fig. 14

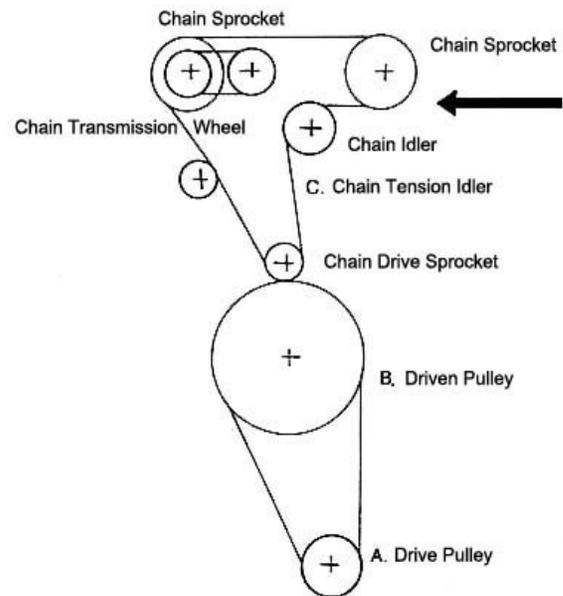


Fig. 15

# MAINTENANCE

BEFORE STARTING MAINTENANCE OR LUBRICATION, PLEASE DISCONNECT MACHINE FROM THE POWER SOURCE.

## 1. Daily Maintenance:

Make sure all nuts and bolts are tight and retainer springs are secured. Keep knives sharp. Observe all safety precautions. Care should be taken to prevent dust from embedding on moving parts in the machine. It is worth to do regular and careful cleaning of machines that can forestall many of the common drawbacks that arise during running, as well as helping cut maintenance costs. Clean the machine after the end of shift.

## 2. Lubrication:

Lubricate the lub points as shown in Fig. 16  
Lubrication Guide Of Your Planer

Index	Position	Interval	Type Of Oil
A.	Feed Roller Bushings	Oil Daily	SAE-30
B.	Table Life Screws(4)	Frequently	Grease
C.	Table Side Ways(4)	Frequently	SAR-30

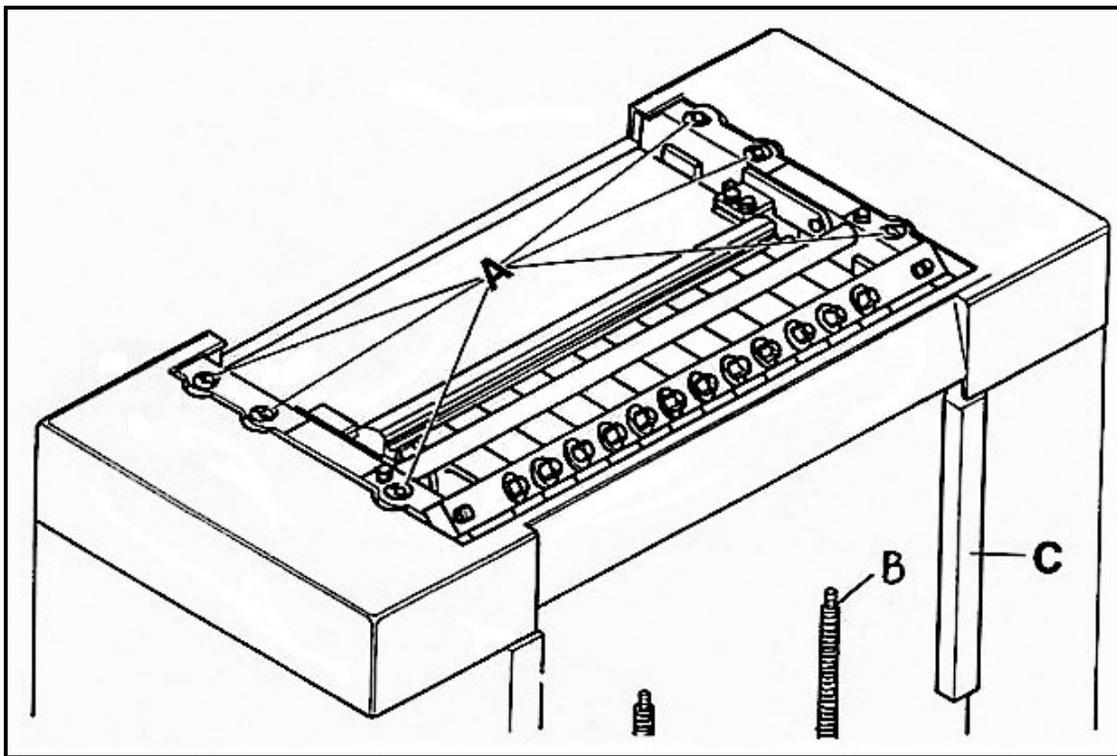


Fig. 16

### 3. Belt Tension:

Maintain proper belt tension to cutter rotor. New belts must be checked the first 3 days of operation until they are seated.

Increase belt tension as shown in Fig. 17 by lowering the adjustment bracket.

- A. Motor support bar
- B. Mounting bracket
- C. Tension adjustment screw
- D. Adjustment bracket

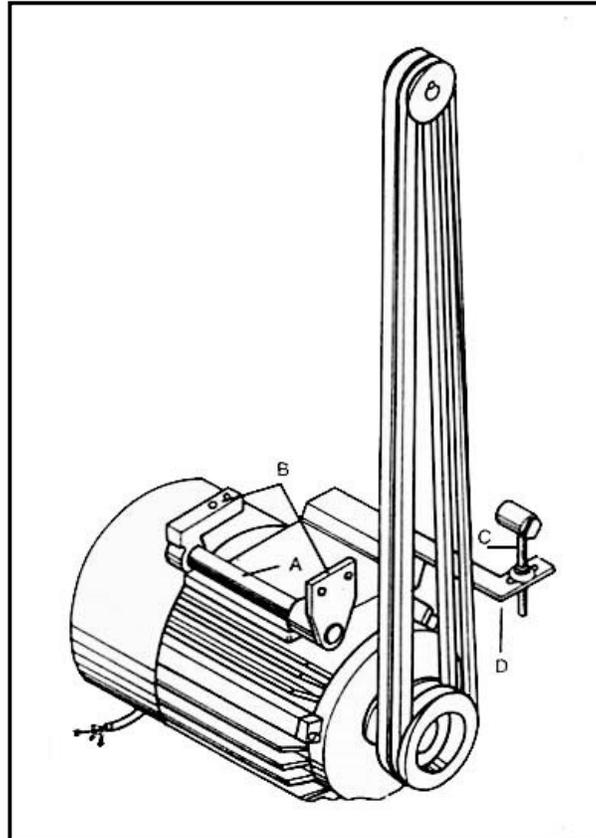


Fig. 17

# TROUBLE SHOOTING

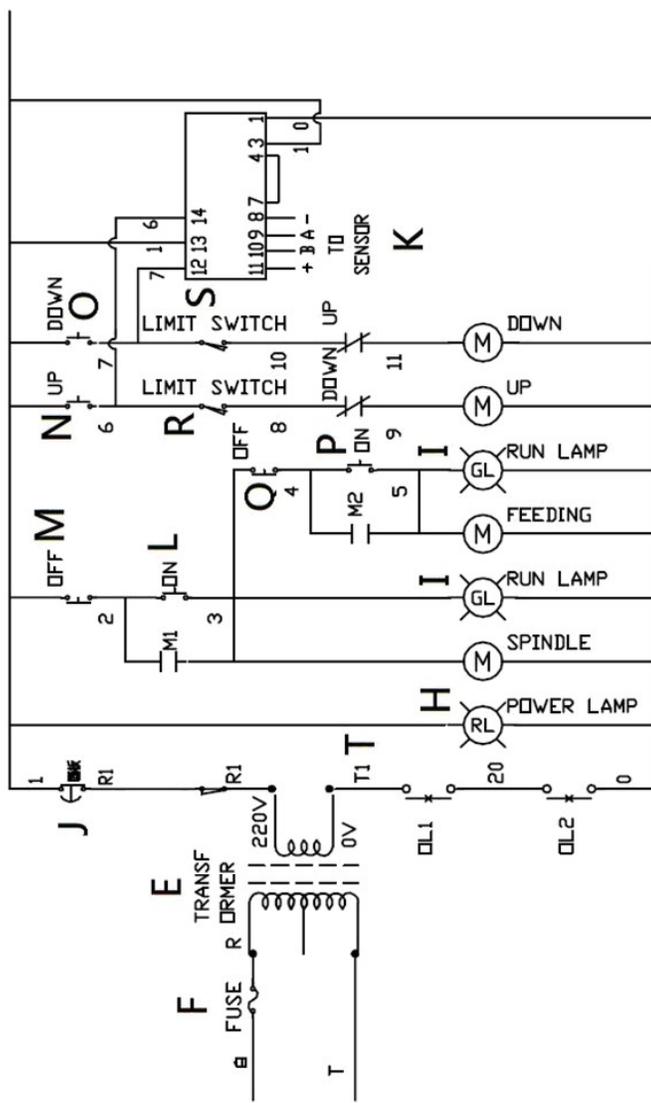
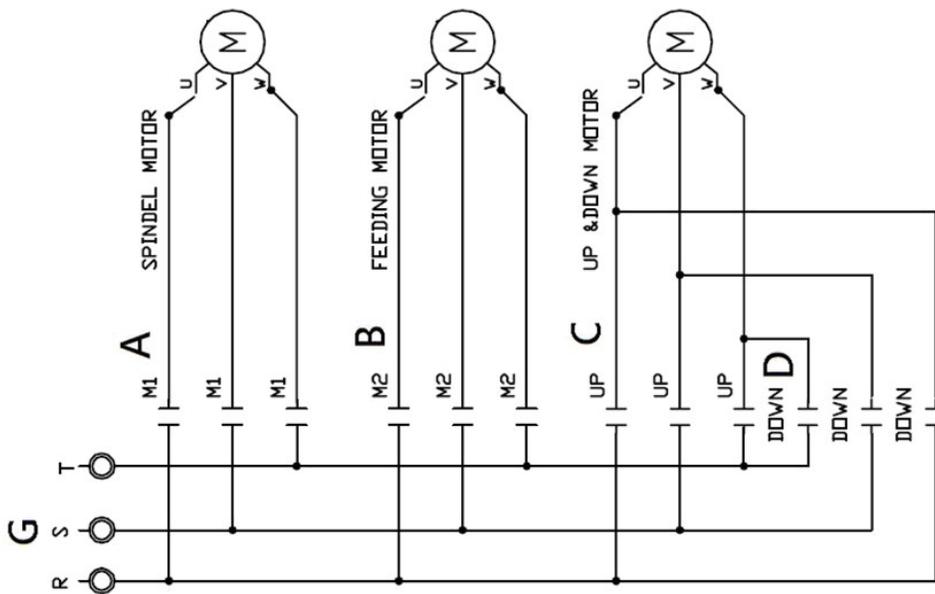
Symptom	Possible Causes And Check
1. If clip or snip appears at beginning of stock.	<ul style="list-style-type: none"> <li>● Pressure bar may be set too low.</li> <li>● Chipbreaker may be set too high.</li> <li>● Upper infeed sectional roller may be set too high.</li> <li>● Table infeed roller may be set too high.</li> <li>● Spring tension may be too light on pressure bar.</li> <li>● Table rollers may be too high.</li> </ul>
2. If clip or snip appears on end of stock.	<ul style="list-style-type: none"> <li>● Pressure bar may be set too high.</li> <li>● Table outfeed roller may be set too high.</li> <li>● Upper outfeed roller may be set too low.</li> <li>● Stock may not be butted.</li> <li>● Grain may be running against knives.</li> <li>● Table rollers may be too high.</li> </ul>
3. If knives tear out stock.	<ul style="list-style-type: none"> <li>● Feed may be too fast.</li> <li>● Moisture content may be too high.</li> <li>● Cut may be too heavy.</li> <li>● Cutting angle may be too large.</li> <li>● Grain may be running against knives.</li> <li>● Knives are dull.</li> </ul>
4. If knives raise the grain.	<ul style="list-style-type: none"> <li>● Feed may be too fast.</li> <li>● Cutting angle may be too large.</li> <li>● Moisture content of stock may be too high.</li> <li>● Cut may be too heavy.</li> <li>● Knives need sharpening.</li> </ul>
5. If chip marks appear on stock.	<ul style="list-style-type: none"> <li>● Blower system may not be strong enough. No suction.</li> <li>● Feed may be too fast.</li> <li>● Exhaust pipe may connect with too large on angle to main blower pipe.</li> <li>● Check knife edge.</li> </ul>
6. If panels are taper across the width	<ul style="list-style-type: none"> <li>● Planer bed out of parallel with cutterhead.</li> <li>● Knives not set even in cutterhead.</li> </ul>
7. If undesired glossy finish appears.	<ul style="list-style-type: none"> <li>● Knives may be dull.</li> <li>● Feed may be too slow.</li> </ul>

# TROUBLE SHOOTING

Symptom	Possible Causes And Check
8. If washboard finish appears.	<ul style="list-style-type: none"> <li>● Knives may have been driven back into the head.</li> <li>● Machine may be completely out of adjustment.</li> <li>● Planer bed loose and rocking in ways.</li> </ul>
9. If revolution mark shows up.	<ul style="list-style-type: none"> <li>● Knives may be ground poorly.</li> <li>● Knives not set properly or evenly.</li> </ul>
10. If lines appear at right angles to the knife marks.	<ul style="list-style-type: none"> <li>● Knives may have nicked by overgrinding and taking temper out of steel.</li> <li>● Chips may have wedged between rolls and tables.</li> <li>● Pressure bar may be dragging</li> </ul>
11. If stock twists in machine.	<ul style="list-style-type: none"> <li>● Pressure bar may be cocked.</li> <li>● Upper outfeed roller may be cocked.</li> <li>● Upper outfeed roller may have uneven spring tension.</li> <li>● Table rollers may be cocked.</li> </ul>
12. If machine is noisy, vibrate and pounds.	<ul style="list-style-type: none"> <li>● Knives may be too dull.</li> <li>● Machine may not be leveled correctly.</li> <li>● Machine may not be on solid foundation.</li> <li>● Pressure bar may be set too low.</li> </ul>
13. If stock sticks or hesitates in machine	<ul style="list-style-type: none"> <li>● Pressure bar may be set too low.</li> <li>● Table rollers may be set too low.</li> <li>● Feed rollers may not be set low enough.</li> <li>● Cut may be too heavy.</li> <li>● A push board may help stock through machine.</li> <li>● Check moisture content</li> </ul>
14. If motor kicks out	<ul style="list-style-type: none"> <li>● Knives may be dull, thus overloading motors</li> <li>● Pressure bar may be set too low, putting drag on motors.</li> <li>● Motors may be drawing high current because other machinery in the plant in use has pulled down the voltage.</li> <li>● Machine may be out of adjustment.</li> <li>● Table rollers may be set too low.</li> <li>● Too heavy cuts with continued work load.</li> </ul>

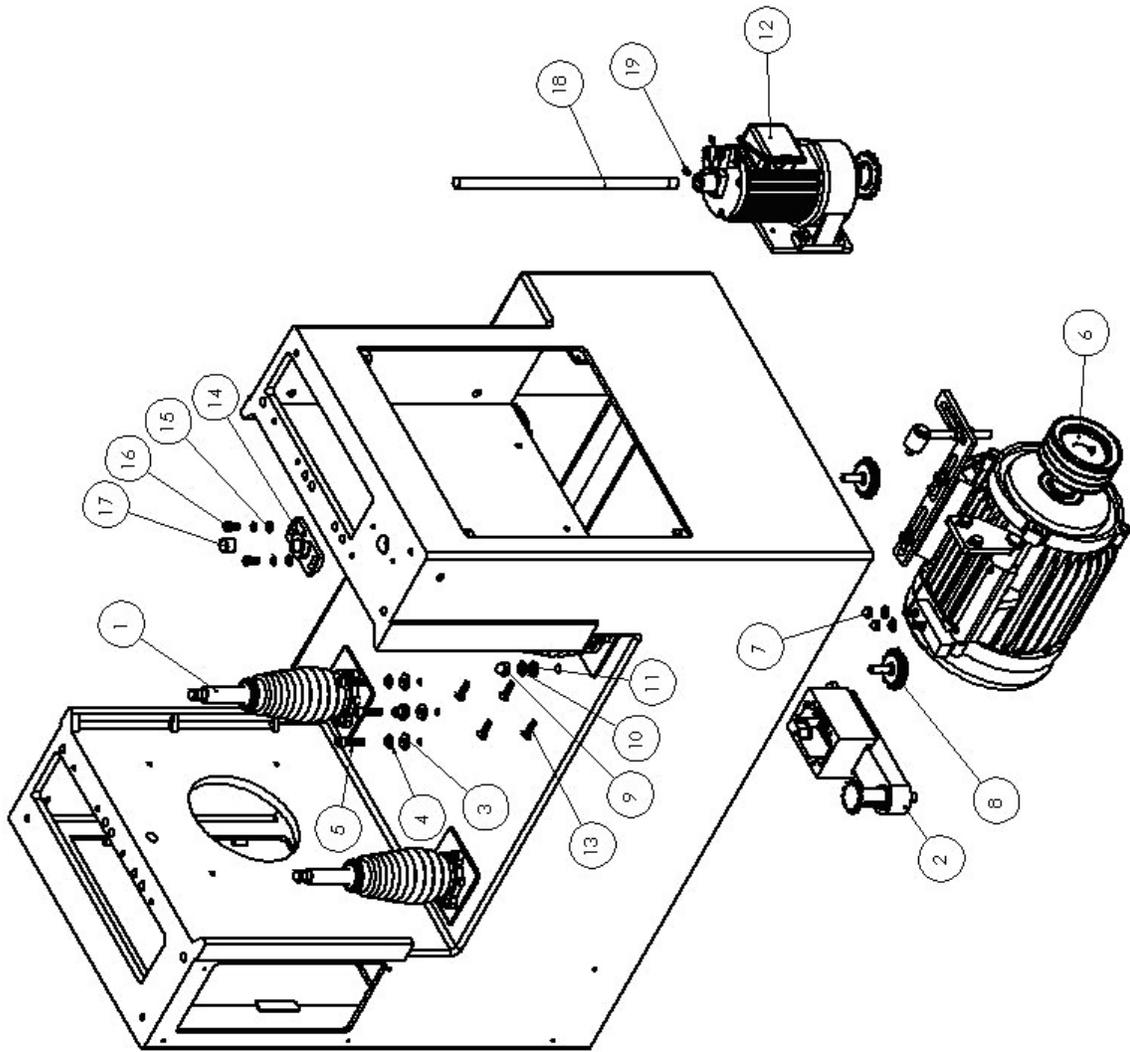
## Wiring Diagram

- 
- A. 10Hp Magnetic switch
  - B. 1Hp Magnetic switch
  - C. 1/2 Reversible switch
  - D. 1/2 Reversible switch
  - E. Transformer
  - F. Fuse
  - G. Terminal
  - H. Power Lamp  $\phi$  30
  - I. Run Lamp  $\phi$  30
  - J. Emergency stop bottom  $\phi$  30
  - K. Sensor X2 PL-05NB-S
  - L. Green Bottom  $\phi$  30
  - M. Red Bottom  $\phi$  30
  - N. Yellow Bottom  $\phi$  30
  - O. Yellow Bottom  $\phi$  30
  - P. Green Bottom  $\phi$  30
  - Q. Red Bottom  $\phi$  30
  - R. Limited switch TZ-7311
  - S. Limited switch TZ-7311
  - T. Timer TRD-N
-



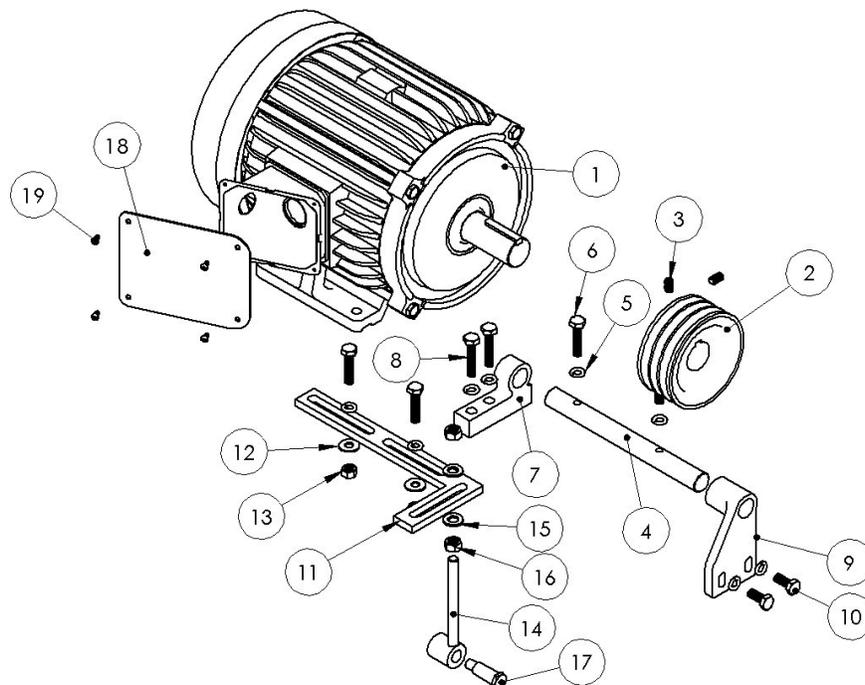
## PARTS LIST:Base Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	T003026	Elevator Bolt Assembly	1
2	T013062	Adjustment Chain Wheel Assembly	1
3	S282011	Washer, $\phi$ 10.5	4
4	S284008	Spring Washer, $\phi$ 10.2	4
5	S203040	Hex. Socket Head Screw, M10-P1.5	4
6	T002035	Motor Assembly	1
7	S277005	Cap Nut, M10-P1.5	2
8	T013070	Chain Wheel Assembly	2
9	S277006	Cap Nut, M12-P1.75	2
10	S284009	Spring Washer, $\phi$ 12.2	2
11	S282012	Washer, $\phi$ 13	2
12	T005030	Motor, Table Raising, 1/2HP 3PH	1
*	T005071	Motor, Table Raising, 1/2HP 1PH	1
13	S248005	Flat Head Socket Screw, M8-P1.25	4
14	C015045	Support	1
15	S282010	Washer, $\phi$ 8.4	2
16	S136020	Hex. Head Screw, M8-P1.25	2
17	P051001	Bushing	1
18	C046139	Shaft, Table Hand Raising	1
19	S213008	Fixed Screw, M8-P1.25	2
20	S307218	Chain, #40-P218	1



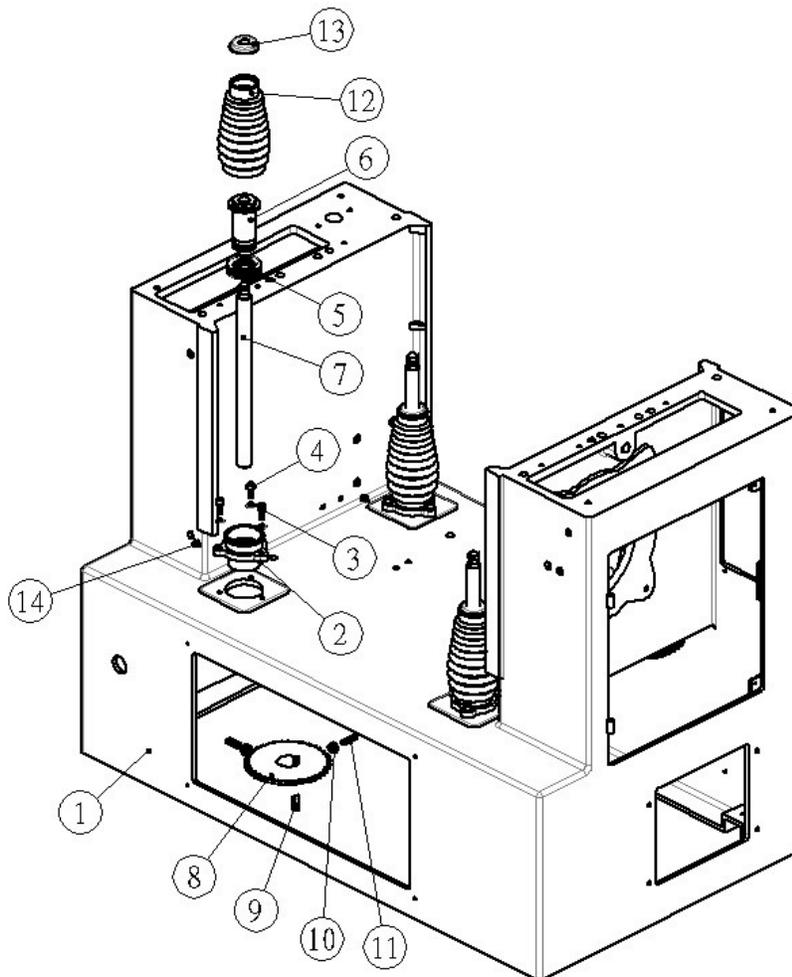
# PARTS LIST:Motor Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	P041207R	Motor, 7 1/2HP 3PH	1
*	P041208R	Motor, 10HP 3PH	1
*	P040208R	Motor, 10HP 1PH	1
2	C064027	Pulley, 60HZ	1
*	C064216	Pulley, 50HZ	1
3	S214001	Fixed Screw, M10-P1.5	2
4	C046027	Shaft	1
5	S284008	Spring Washer, $\phi$ 10.2	8
6	S137045	Hex. Head Screw, M10-P1.5	4
7	C063012	Support, Back	1
8	S137050	Hex. Head Screw, M10-P1.5	2
9	C063044	Support, Front	1
10	S137025	Hex. Head Screw, M10-P1.5	2
11	C049207	Plate	1
12	S282011	Washer, $\phi$ 10.5	2
13	S273010R	Nut, M10-P1.5	2
14	C034030	Fixed Bolt	1
15	S282012	Washer, $\phi$ 13	2
16	S273012R	Nut, M12-P1.75	2
17	C034031	Set Screw	1
18	C062096	Cover, Terminal Box	1
19	S225008	Rounded Head Screw, M5-P0.8	4



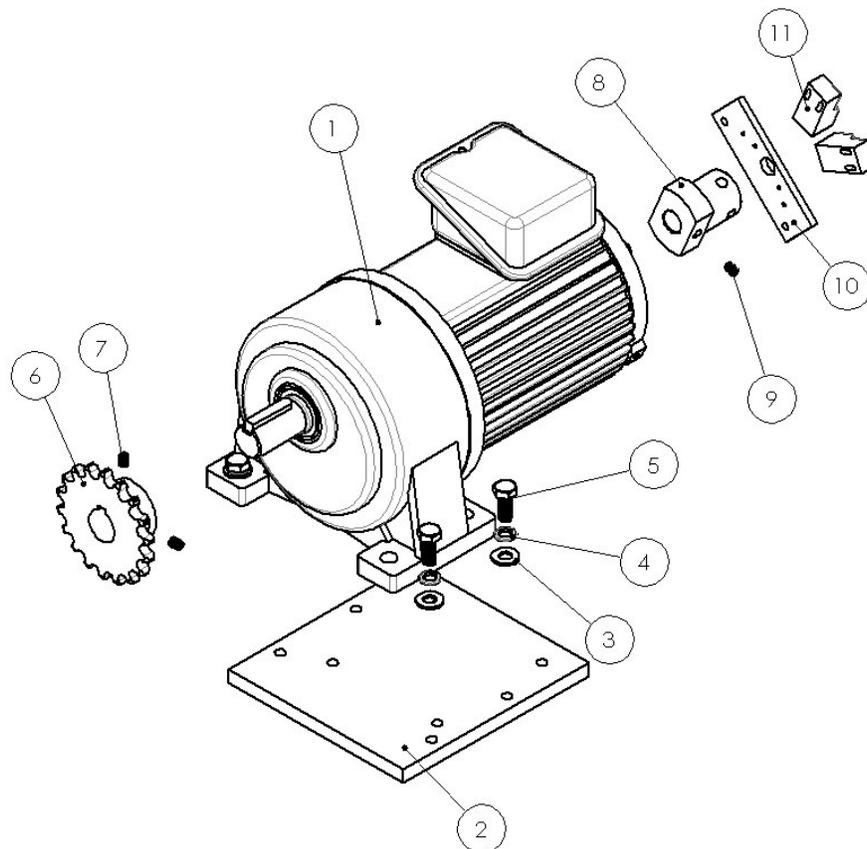
# PARTS LIST:Elevator Bolt Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1.	C001094	Base, Motor3PH	1
*	C001100	Base, Motor1PH	1
2	C009026	Support, bottom	4
3	S284007	Spring Washer, $\phi$ 8.2	12
4	S202020	Hex. Head Screw, M8-P1.25	12
5	S043008	Thrust Bearing, #2908	4
6	C037004	Elevator Nut	4
7	C035004	Elevator Screw	4
8	C067019	Chain Sprocket	4
9	S003170	Key	4
10	S214030	Fixed Screw, M10-P1.5	8
11	S273010R	Nut, M10-P1.5	8
12	C078003	Screw boot	4
13	C053029	Washer	4
14	S319201	L Type Oil Fitting	4



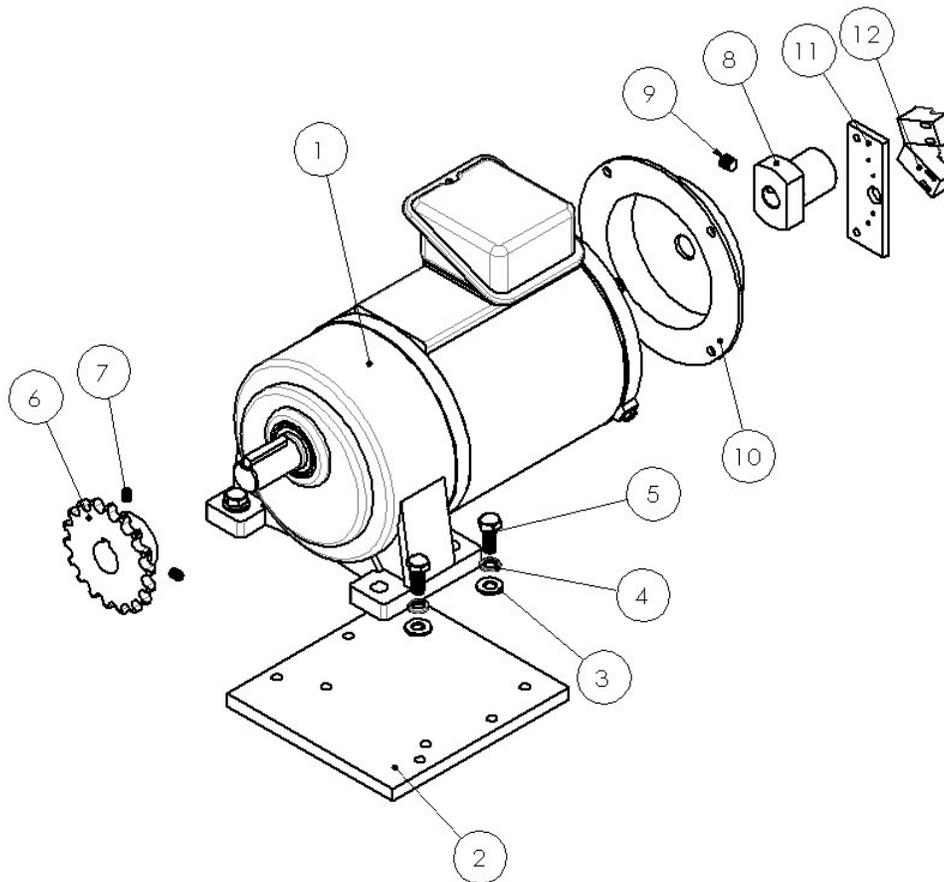
# PARTS LIST:Motor, Table Raising, 1/2HP 3PH

NO.	PARTNO.	DESCRIPTION	Q"TY
1.	P045206TE15	Motor, Table Raising, 1/2HP	1
2	C063046	Plate, Motor	1
3	S282022	Washer, $\phi$ 8.4	4
4	S284007	Spring Washer, $\phi$ 8.2	4
5	S136020	Hex. Head Screw, M8-P1.25	4
6	C067087	Chain Sprocket	1
7	S212008	Fixed Screw, M6-P1.0	2
8	C062178	Support, hand Shaft	1
9	S211008	Fixed Screw, M5-P0.8	1
10	C062179	Plate, Sensor	1
11	P085201	Sensor, PL-05NB-4M	2



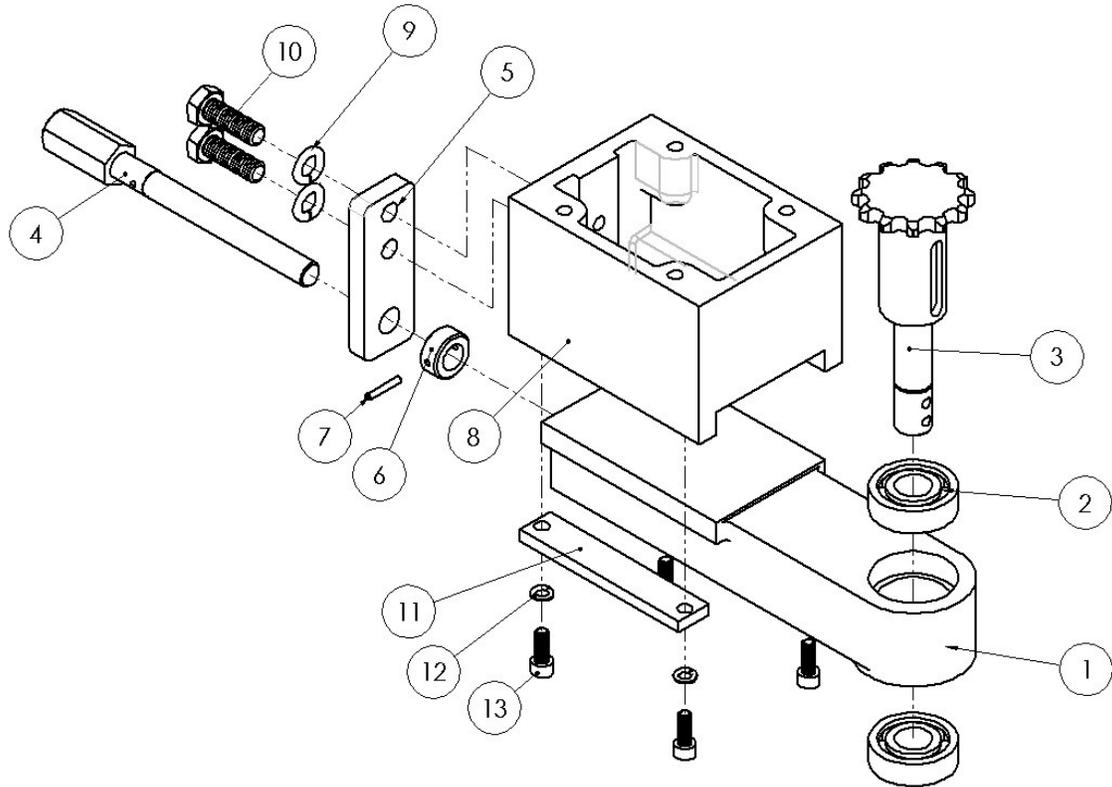
# PARTS LIST:Motor, Table Raising, 1/2HP 1PH

NO.	PARTNO.	DESCRIPTION	Q"TY
1.	P045206STE	Motor, Table Raising, 1/2HP	1
2	C063046	Plate, Motor	1
3	S282022	Washer, $\phi$ 8.4	4
4	S284007	Spring Washer, $\phi$ 8.2	4
5	S136020	Hex. Head Screw, M8-P1.25	4
6	C067087	Chain Sprocket	1
7	S212008	Fixed Screw, M6-P1.0	2
8	C062178	Support, hand Shaft	1
9	S213008	Fixed Screw, M8-P1.25	1
10	C244001	Cover, Motor 1PH	1
11	C062179	Plate, Sensor	1
12	P085201	Sensor, PL-05NB-4M	2



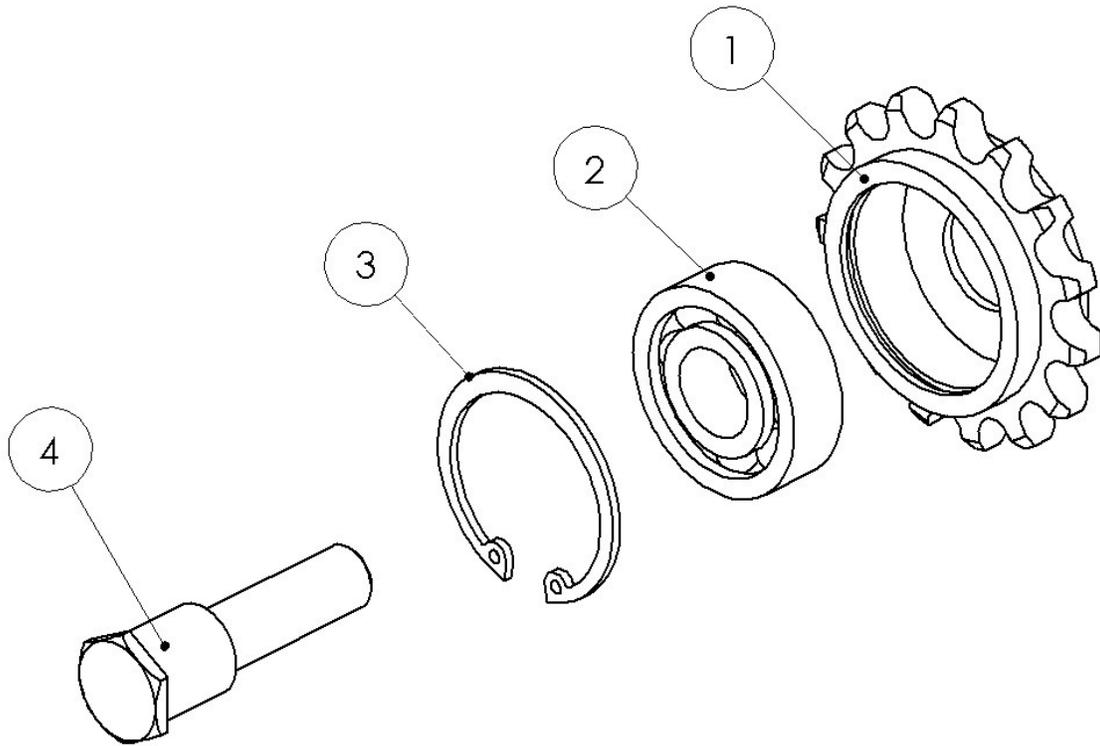
# PARTS LIST:Adjustment Chain Wheel Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1.	C016077	Support	1
2	S026203ZZ	Bearing	2
3	C067028	Chain Sprocket	1
4	C035046	Bolt	1
5	C045059	Plate	1
6	C051071	Collar	1
7	S267308W	Spring Pin	1
8	C016076	Stand	1
9	S284008	Spring Washer, $\phi$ 10.2	2
10	S137030	Hex. Head Screw, M10-P1.5	2
11	C007051	Plate	2
12	S284006	Spring Washer, $\phi$ 6.1	4
13	S201016	Hex. Head Screw, M6-P1.0	4



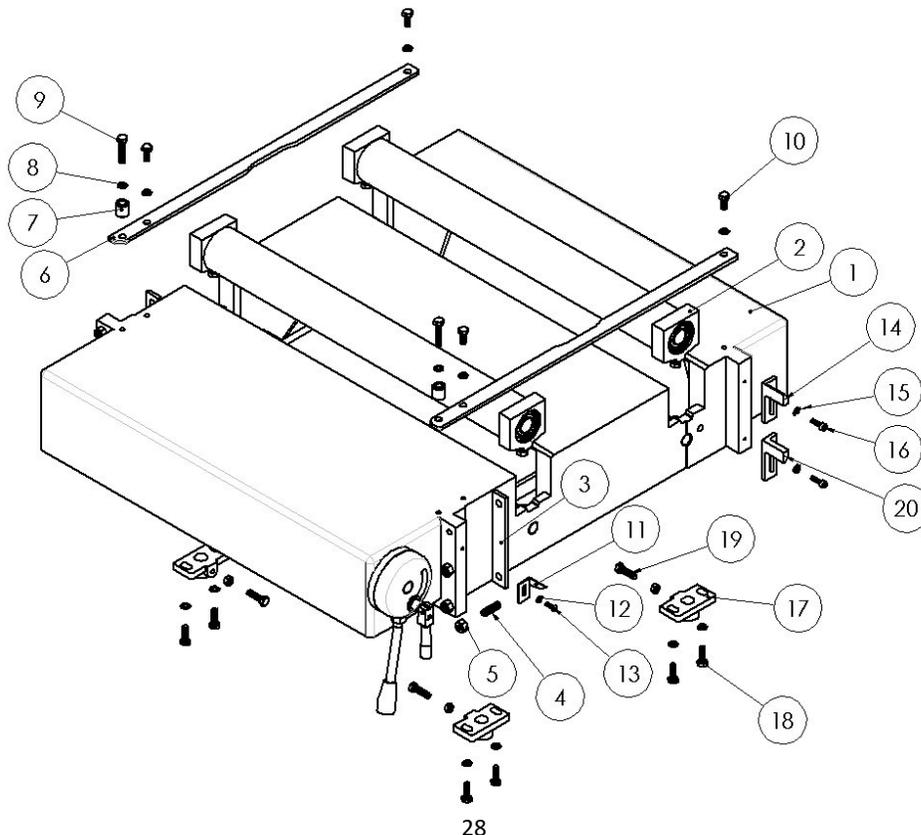
# PARTS LIST:Sprocket Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1.	C067017	Chain Sprocket	1
2	S026203ZZ	Bearing	1
3	S298125	C-Ring	1
4	C034029	Shaft	1



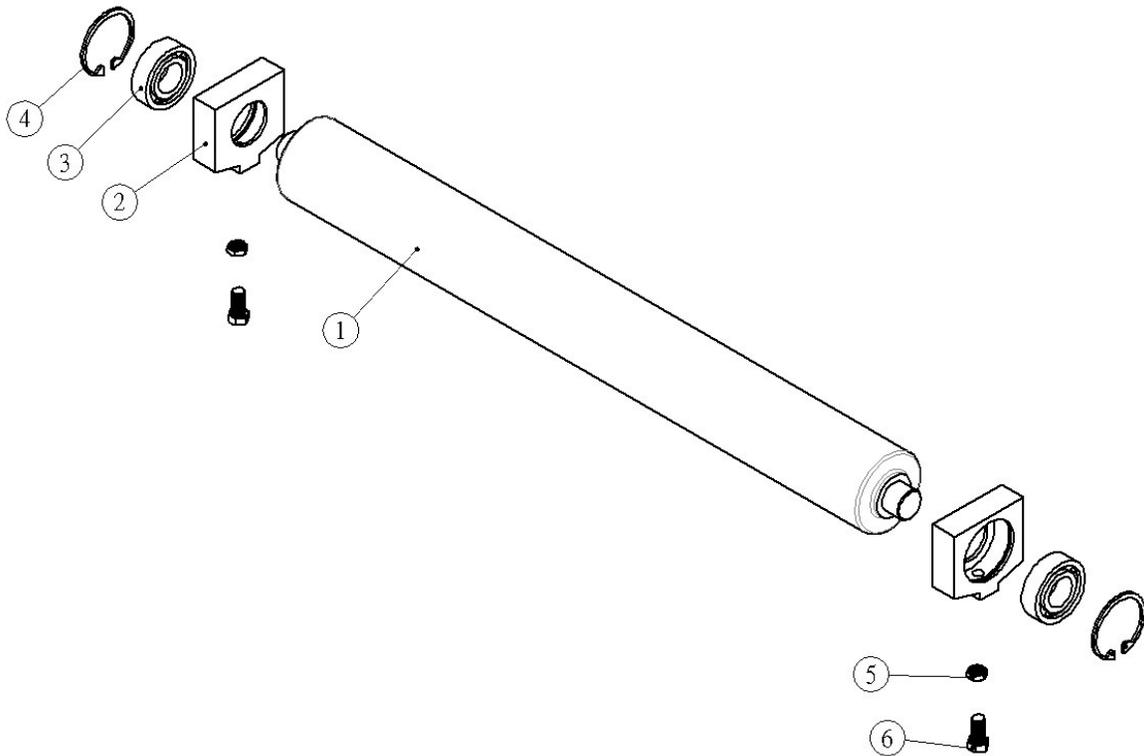
# PARTS LIST:Work TableAssembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	T013011	Work Table, Table Roller Assembly	1
2	T013010	Table Roller Assembly	2
3	C007100	Gib	2
4	S214030	Fixed Screw, M10-P1.5	6
5	S273010R	Nut, M10-P1.5	10
6	C020008	Datum Plate	2
7	C051019	Collar	2
8	S284007	Spring Washer, $\phi$ 8.2	14
9	S136040	Hex. Head Screw, M8-P1.25	2
10	S136020	Hex. Head Screw, M8-P1.25	4
11	C070003	Indicator	1
12	S282008	Washer, $\phi$ 5.3	1
13	S225020	Round Head Screw, M5-P0.8	1
14	C022030	Up Touch Plate, Switch	1
15	S282009	Washer, $\phi$ 6.4	2
16	S201020	Hex. Head Screw, M6-P1.0	2
17	C015043	Stand, Bolt	4
18	S136025	Hex. Head Screw, M8-P1.25	8
19	S137025	Hex. Head Screw, M10-P1.5	4
20	C022124	Down Touch Plate, Switch	1



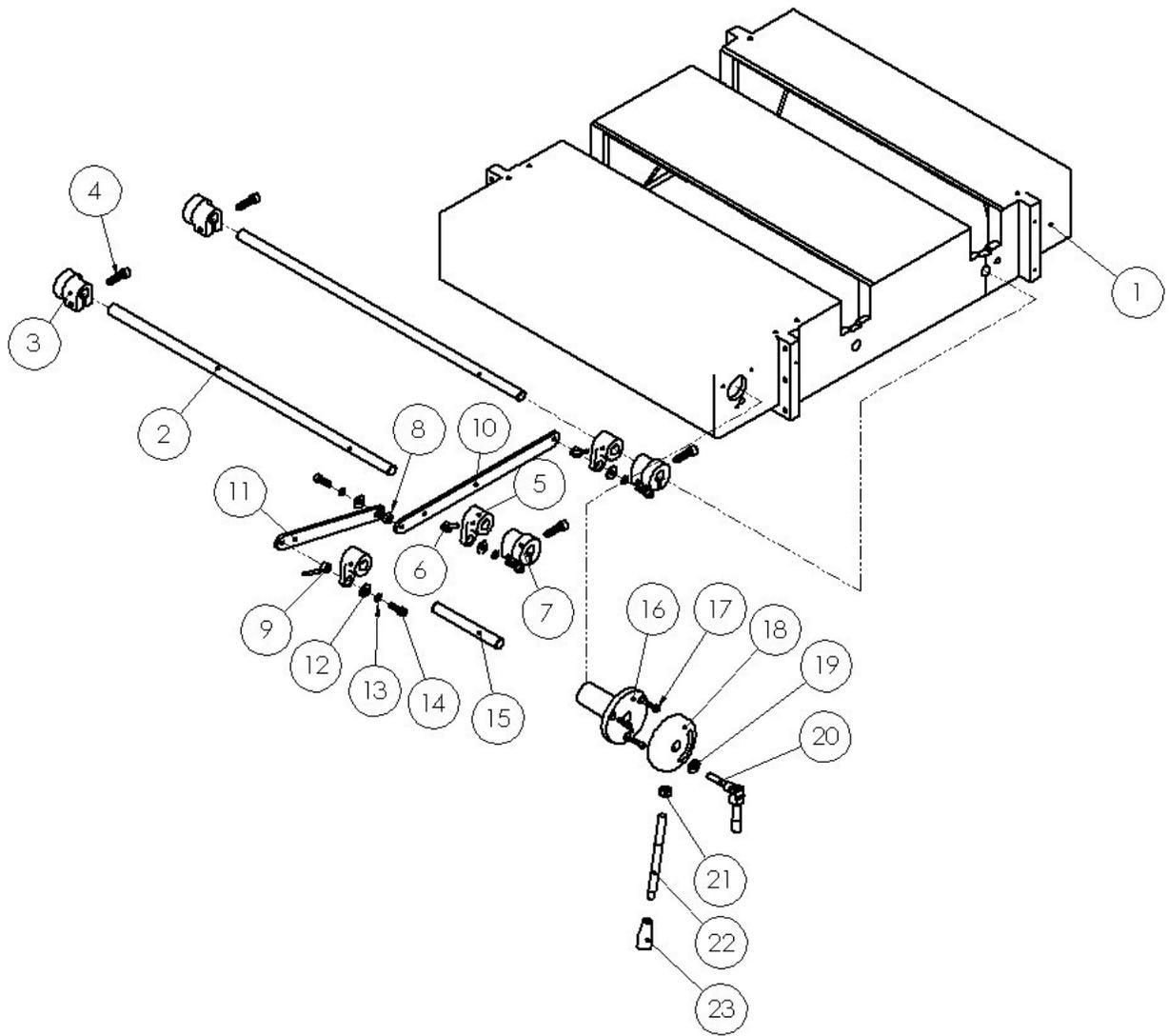
# PARTS LIST:Table Roller Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C040008	Table Roller	1
2	C009008	Bearing Housing	2
3	S026205ZZ	Bearing	2
4	S298130	C-Ring	2
5	S273010-1	Nut, M10-P1.5	2
6	S137320-1	Hex. Head Screw, M10-P1.5	2



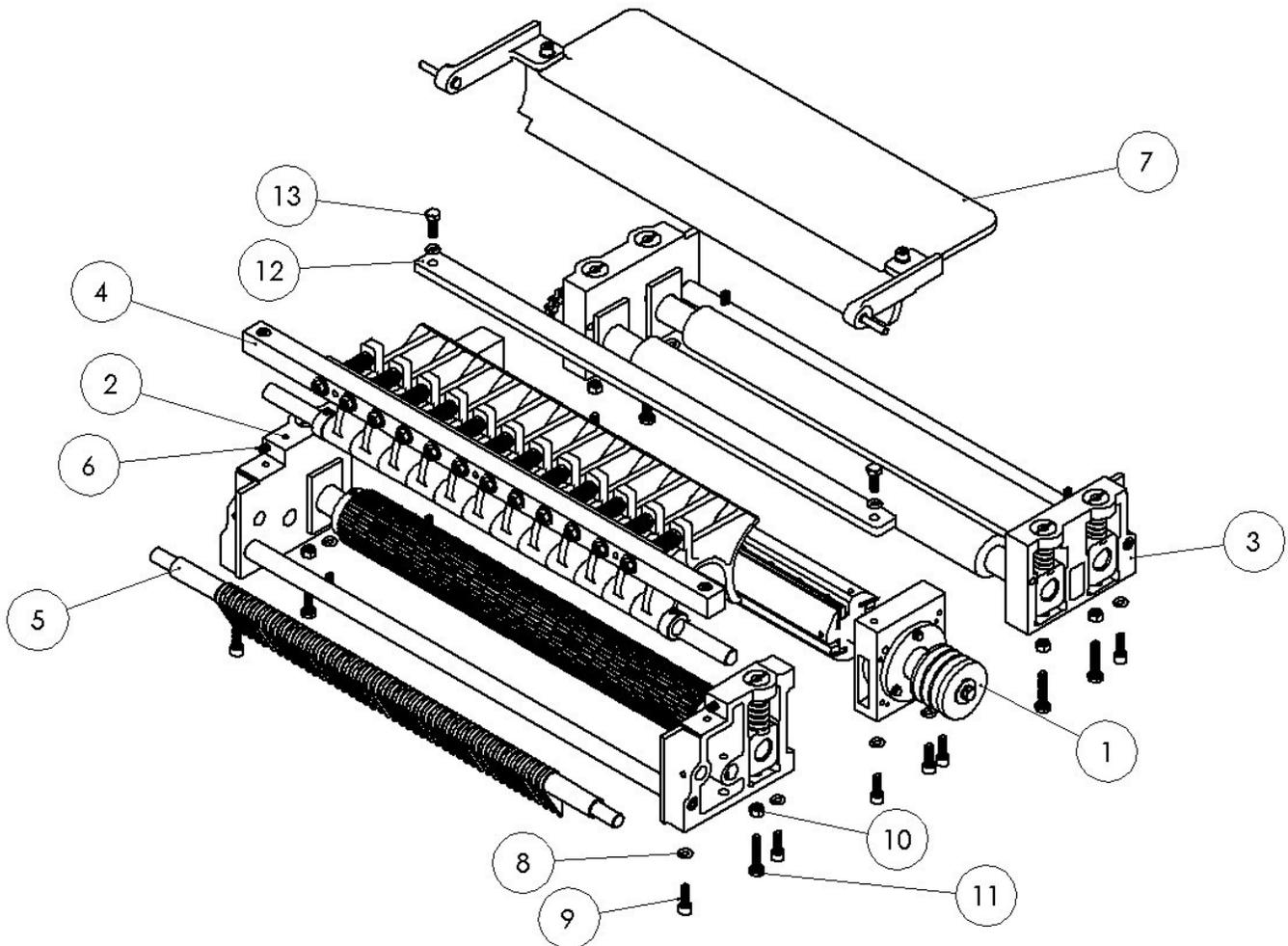
## PARTS LIST:Work Table, Table Roller Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C006023	Work Table	1
2	C048015	Shaft	2
3	C017023	Left Support, Roller Elevator	2
4	S203035	Hex. Head Screw, M10-P1.5	4
5	C017030	Arm, Roller Elevator	3
6	S267512W	Spring Pin	3
7	C017029	Right Support, Roller Elevator	2
8	C051022	7L Alive Bushing	1
9	C052027	10L Alive Bushing	3
10	C049032	Long Plate, Roller Elevator	1
11	C049027	Short Plate, Roller Elevator	1
12	S282109	Washer, $\phi$ 8.2	4
13	S284007	Spring Washer, $\phi$ 8.2	4
14	S202025	Hex. Head Screw, M8-P1.25	4
15	C046030	Shaft	1
16	C015055	Support, Adjust Axle	1
17	S201020	Hex. Head Screw, M6-P1.0	3
18	C017014	Shaft Support	1
19	S282111	Washer, $\phi$ 10.2	1
20	P028001	Lock Handle	1
21	S273012R	Nut, M12-P1.75	1
22	C057006	Handle, Roller Elevator	1
23	P029214Y	Knob	1



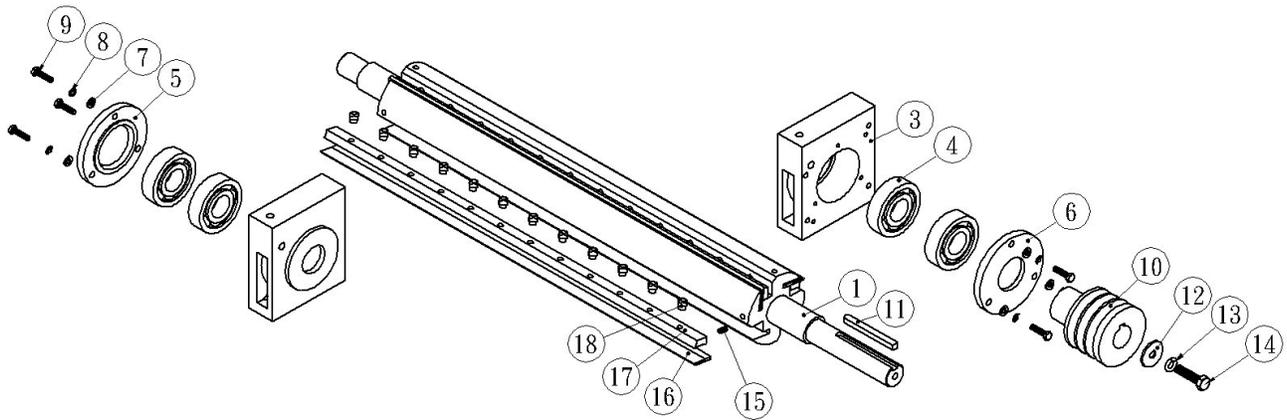
# PARTS LIST:Infeed, Outfeed, Cutterhead, Chipbreaker and Pressure bar Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	T001009	CutterheadAssembly	1
*	T001117	HelicalCutterhead Assembly	1
2	T010009	Infeed Roller Assembly	1
3	T011004	Outfeed Roller Assembly	1
4	T009163	Chipbreaker Assembly	1
5	T009057	Anti- Kickback Assembly	1
6	S214010	Fixed Screw, M10-P1.5	4
7	T009012	Pressure bar Assembly	1
8	S284008	Spring Washer, $\phi$ 10.2	16
9	S203030	Hex. Head Screw, M10-P1.5	12
10	S273010R	Nut, M10-P1.5	6
11	S137050	Hex. Head Screw, M10-P1.5	6
12	C045056	Stopper, Return	1
13	S137030	Hex. Head Screw, M10-P1.5	2



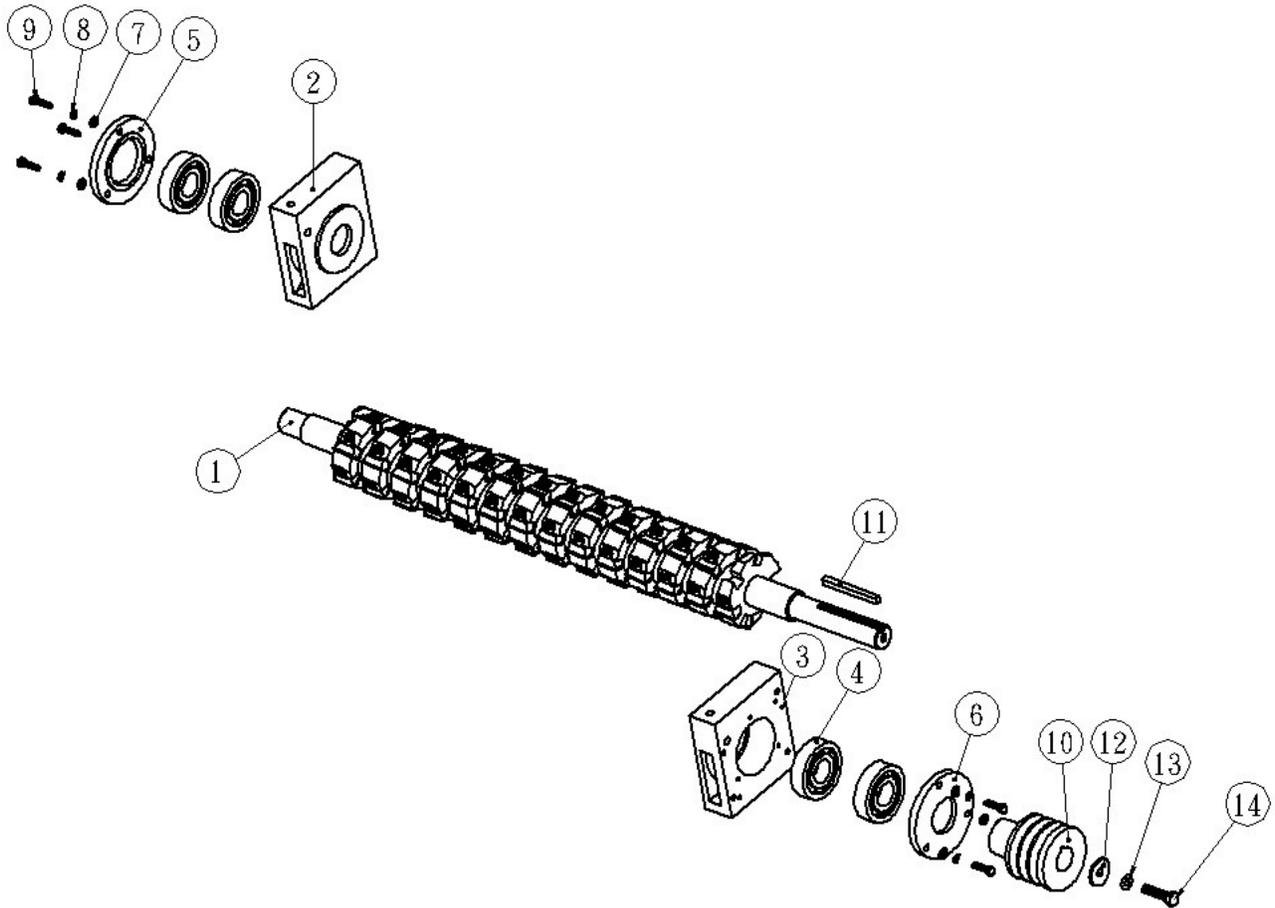
# PARTS LIST:Cutterhead Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C011007	Cutterhaed	1
2	C009027	Support, Bearing (LH)	1
3	C009068	Support, Bearing (RH)	1
4	S026306ZZ	Bearing	4
5	C010010	Support, Cover (LH)	1
6	C010009	Support, Cover (RH)	1
7	S282009	Washer, $\phi$ 6.4	6
8	S284006	Spring Washer, $\Phi$ 6.1	6
9	S135025	Hex. Head Screw, M6-P1.0	6
10	C064030	Pulley	1
11	S003184	Key	1
12	S282112	Washer, $\phi$ 10.5	1
13	S284008	Spring Washer, $\phi$ 10.2	1
14	S137640	Hex. Head Screw, M10-P1.5	1
15	C060014	Spring	8
16	P054053	Knife	4
17	P056013	Knife, Gib	4
18	P056105	Square Head Screw	48



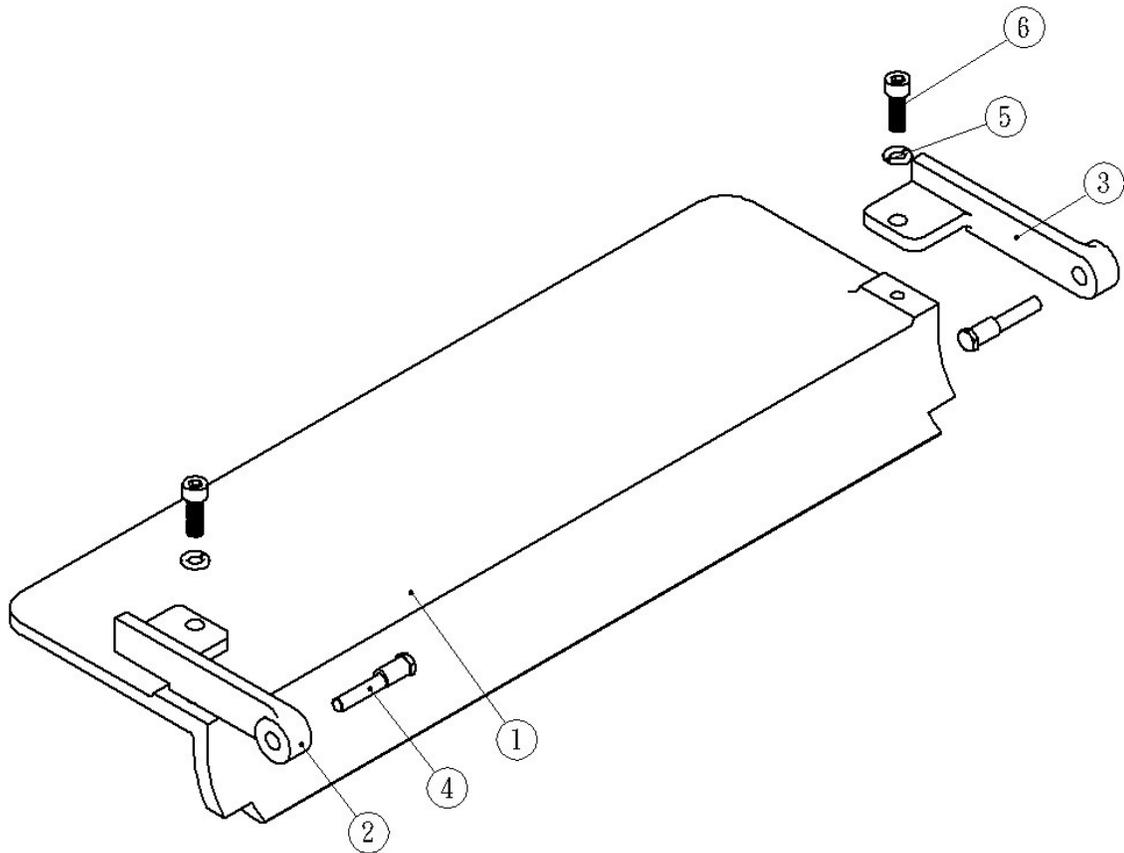
# PARTS LIST:HelicalCutterhead Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	P052105	Helical Cutterhaed	1
2	C009027	Support, Bearing (LH)	1
3	C009068	Support, Bearing (RH)	1
4	S026306ZZ	Bearing	4
5	C010010	Support, Cover (LH)	1
6	C010009	Support, Cover (RH)	1
7	S282009	Washer, $\phi$ 6.4	6
8	S284006	Spring Washer, $\phi$ 6.1	6
9	S135025	Hex. Head Screw, M6-P1.0	6
10	C064030	Pulley	1
11	S003183	Key	1
12	S282112	Washer, $\phi$ 10.5	1
13	S284008	Spring Washer, $\phi$ 10.2	1
14	S137640	Hex. Head Screw, M10-P1.5	1



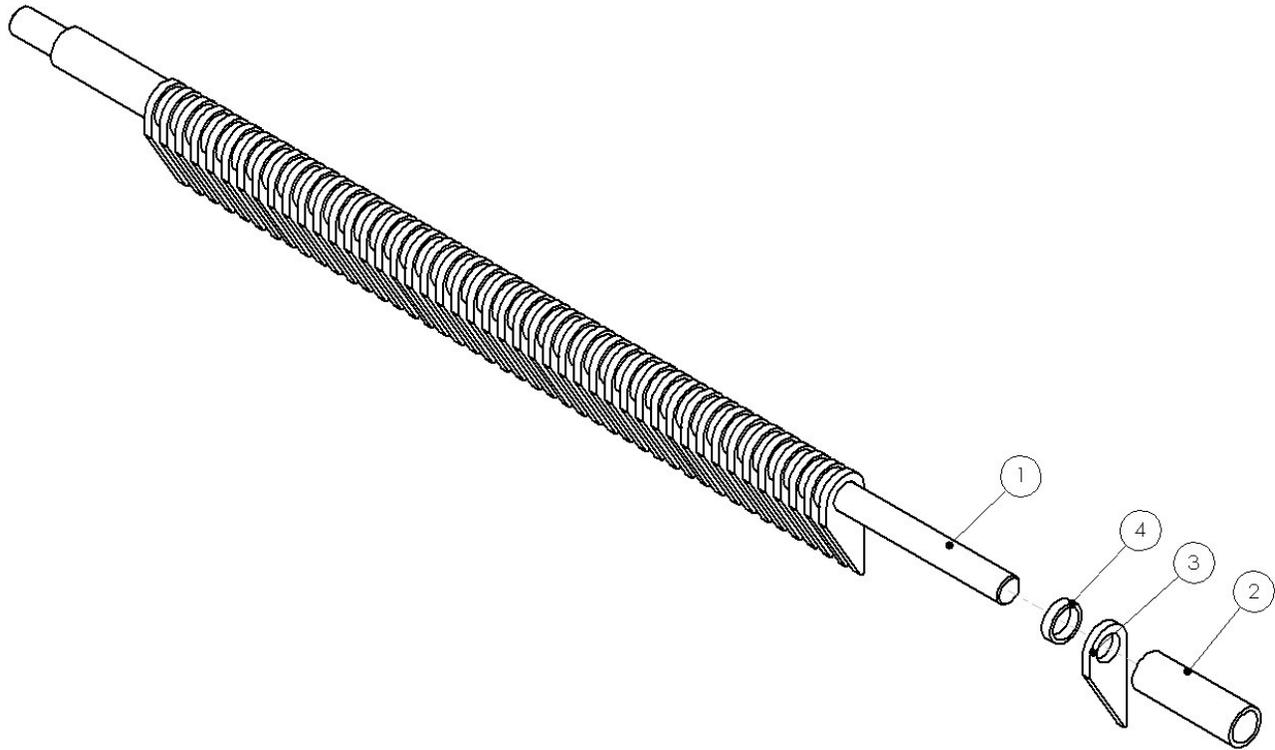
# PARTS LIST: Pressure Bar Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C042016	Pressure Bar	1
2	C015057	Left Arm, Pressure Bar	1
3	C015058	Right Arm, Pressure Bar	1
4	C046029	Shaft	2
5	S284008	Spring Washer, $\phi$ 10.2	2
6	S203030	Hex. Head Screw, M10-P1.5	2



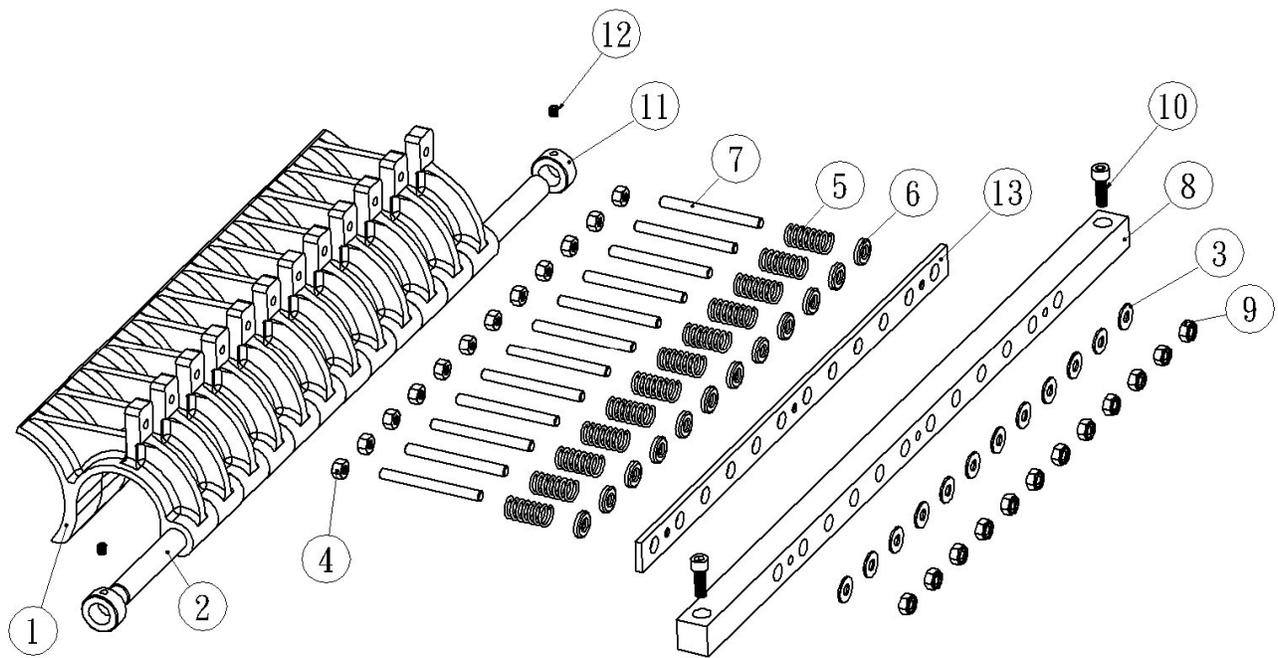
# PARTS LIST: Anti-kickback Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C046028	Rod	1
2	C052026	Bushing	2
3	C045012	Finger	46
4	C052014	Bushing	45



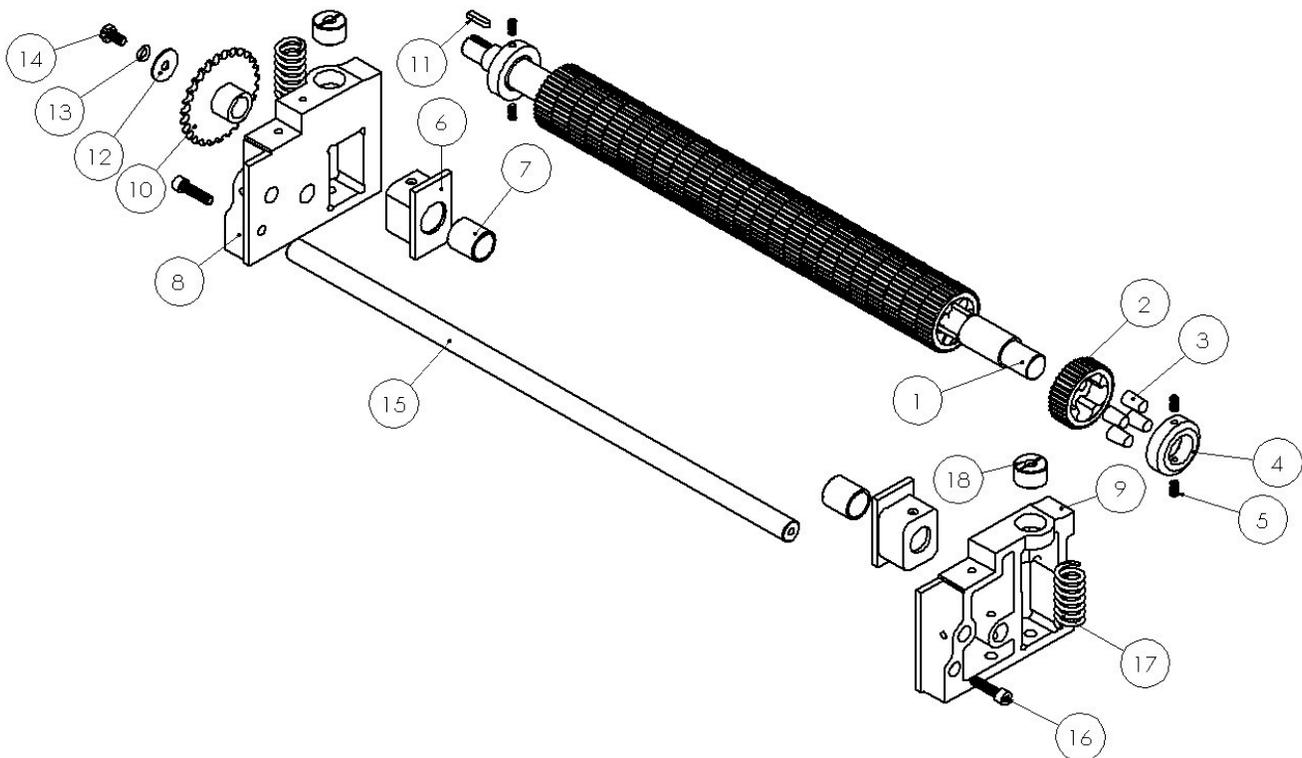
# PARTS LIST:Chipbreaker Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C042013	Chipbreaker	12
2	C048018	Shaft	1
3	S282011	Washer, $\phi$ 10.5	12
4	S273010R	Nut, M10-P1.5	12
5	C060040	Spring	12
6	C053023	Washer, $\phi$ 25	12
7	C034087	Bolt, Outfeed Roller	12
8	C049034	Bar	1
9	S285010	Nut, M10-P1.5	12
10	S203030	Hex. Head Screw, M10-P1.5	2
11	C051032	Collar	2
12	S213008	Fixed Screw, M8-P1.25	2
13	C049031	Plate	1



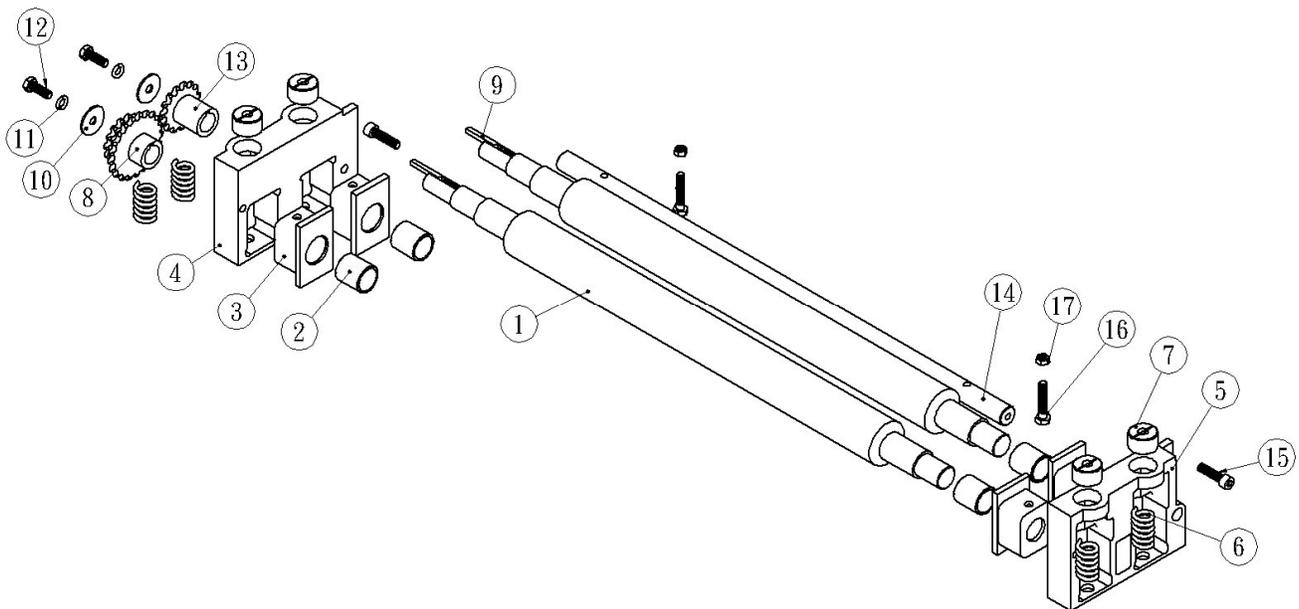
# PARTS LIST:Inffed Roller Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C039016	Shaft, Infeed Roller	1
2	C038006	Indeed Roller	25
3	P063004	Rubber, Infeed Roller	100
4	C051023	Collar	2
5	S213016	Fixed Screw, M8-P1.25	4
6	C009028	Copper Bearing Housing	2
7	P051002	Copper Bearing	2
8	C015047	Left Case, Infeed Roller	1
9	C015132	Right Case, Infeed Roller	1
10	C067014	Chain Sprocket	1
11	S003075	Key	1
12	C053011	Washer, $\phi$ 11	1
13	S284008	Spring Washer, $\phi$ 10.2	1
14	S137620	Hex. Head Screw,, M10-P1.5	1
15	C048016	Shaft	2
16	S203040	Hex. Head Screw, M10-P1.5	2
17	C060058	Spring	2
18	C034033	Nut, Spring	2



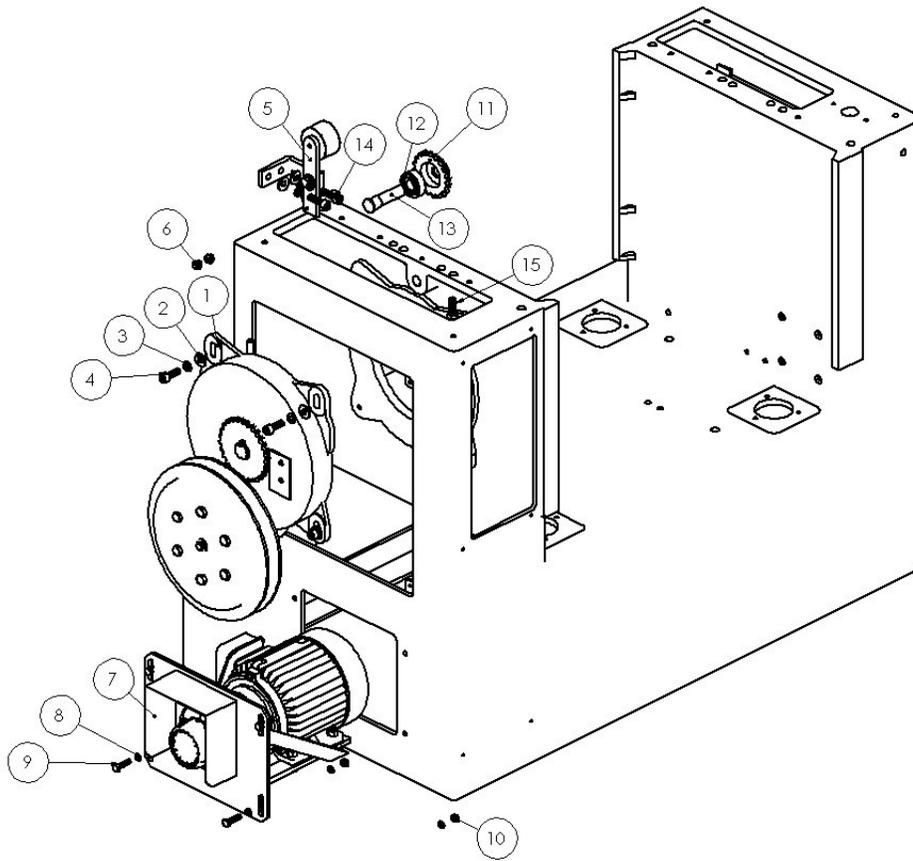
## PARTS LIST: Outfeed Roller Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C039017	Outfeed Roller	2
2	P051002	Copper Bearing	4
3	C009028	Copper Bearing Housing	4
4	C015286	Left Case, Outfeed Roller	1
5	C015285	Right Case, Outfeed Roller	1
6	C060012	Spring	4
7	C034033	Nut, Spring	4
8	C068007	Chain Sprocket	1
9	S003079	Key	2
10	S282049	Washer, $\phi$ 10.5	2
11	S284008	Spring Washer, $\phi$ 10.2	2
12	S137630	Hex. Head Screw, M10-P1.5	2
13	C067024	Chain Sprocket	1
14	C048017	Shaft	1
15	S203040	Hex. Head Screw, M10-P1.5	2
16	S100007	Hex. Head Screw, 3/8"-16NC	2
17	S274012R	Nut, W 3/8"	2



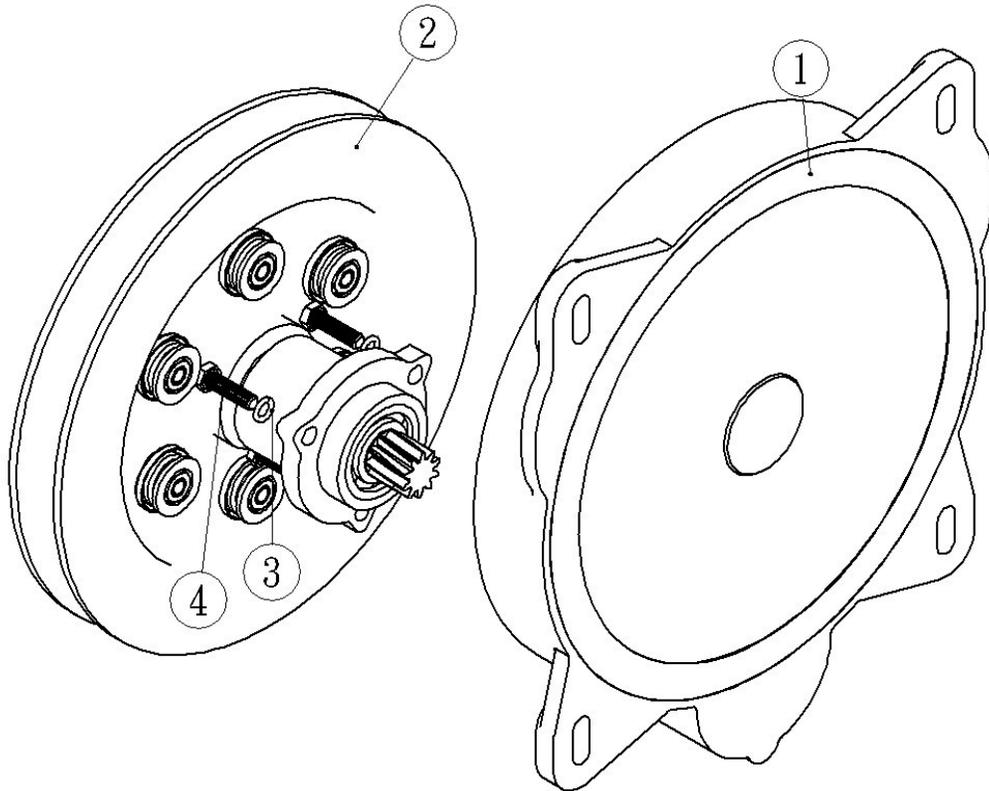
## PARTS LIST:Transmission Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	G006004	Speed Reducer	1
2	S282011	Washer, $\phi$ 10.5	6
3	S284008	Spring Washer, $\phi$ 10.2	6
4	S203030	Hex. Head Screw, M10-P1.5	4
5	T017006	Link Assembly	1
6	S277010R	Nut, M10-P1.5	2
7	T004016	Motor Assembly, Various Speed	1
*	T004122	Motor(1PH) Assembly, Various Speed	1
8	S284007	Spring Washer, $\phi$ 8.2	8
9	S136030	Hex. Head Screw, M8-P1.25	4
10	S273041	Nut, M8-P1.25	4
11	C067023	Chain Sprocket	1
12	S026204ZZ	Bearing	1
13	C047011	Shaft	1
14	S203035	Hex. Head Screw, M10-P1.5	1
15	S137030	Hex. Head Screw, M10-P1.5	1
16	S307118	40 Chain, #40-P118	1
17	S307030	40 Chain, #40-P30	1



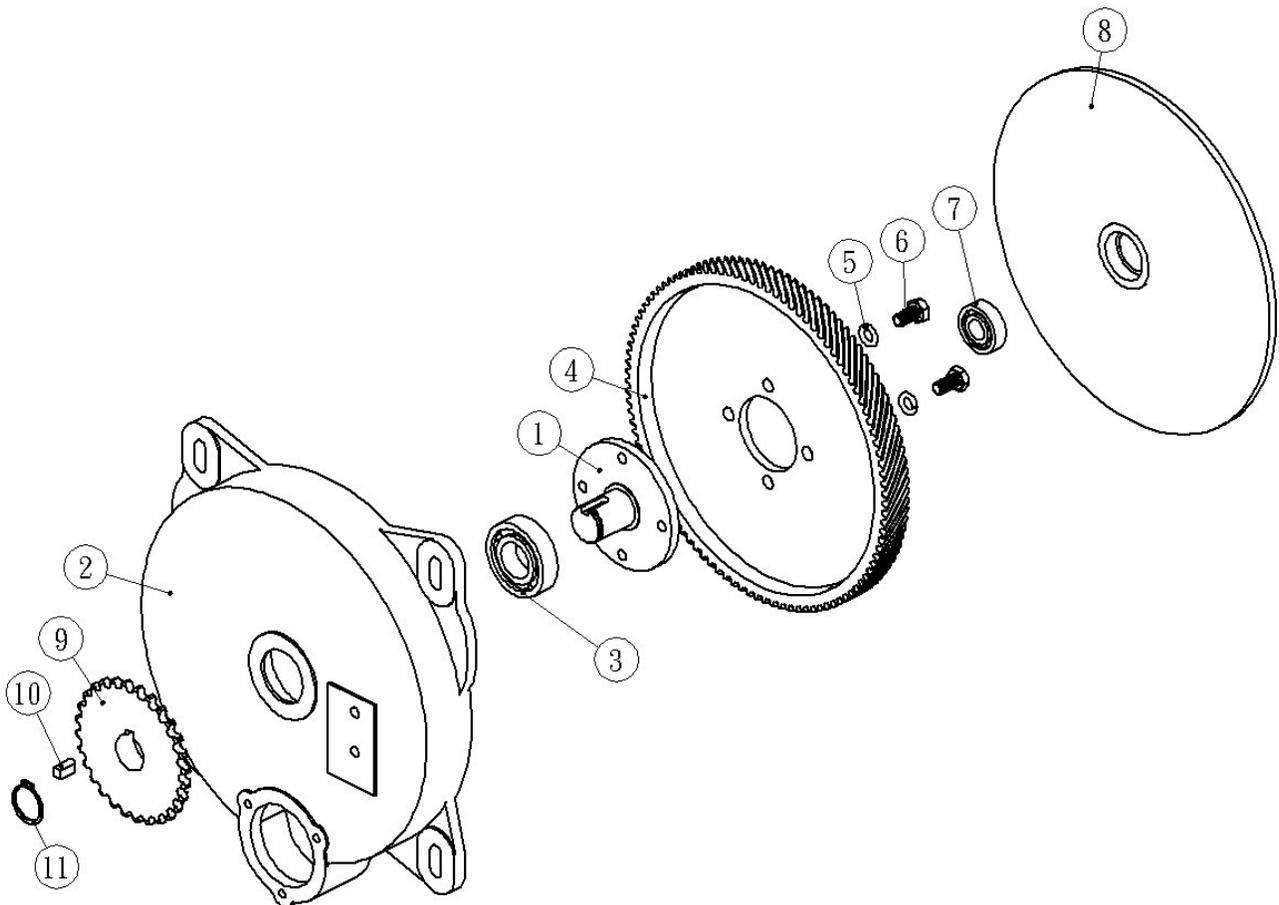
# PARTS LIST:Speed Reducer

NO.	PARTNO.	DESCRIPTION	Q"TY
1	T014004	Reducer Box Assembly	1
2	T015007	Pulley Assembly	1
3	S284007	Spring Washer, $\phi$ 8.2	3
4	S136030	Hex. Head Screw, M8-P1.25	3



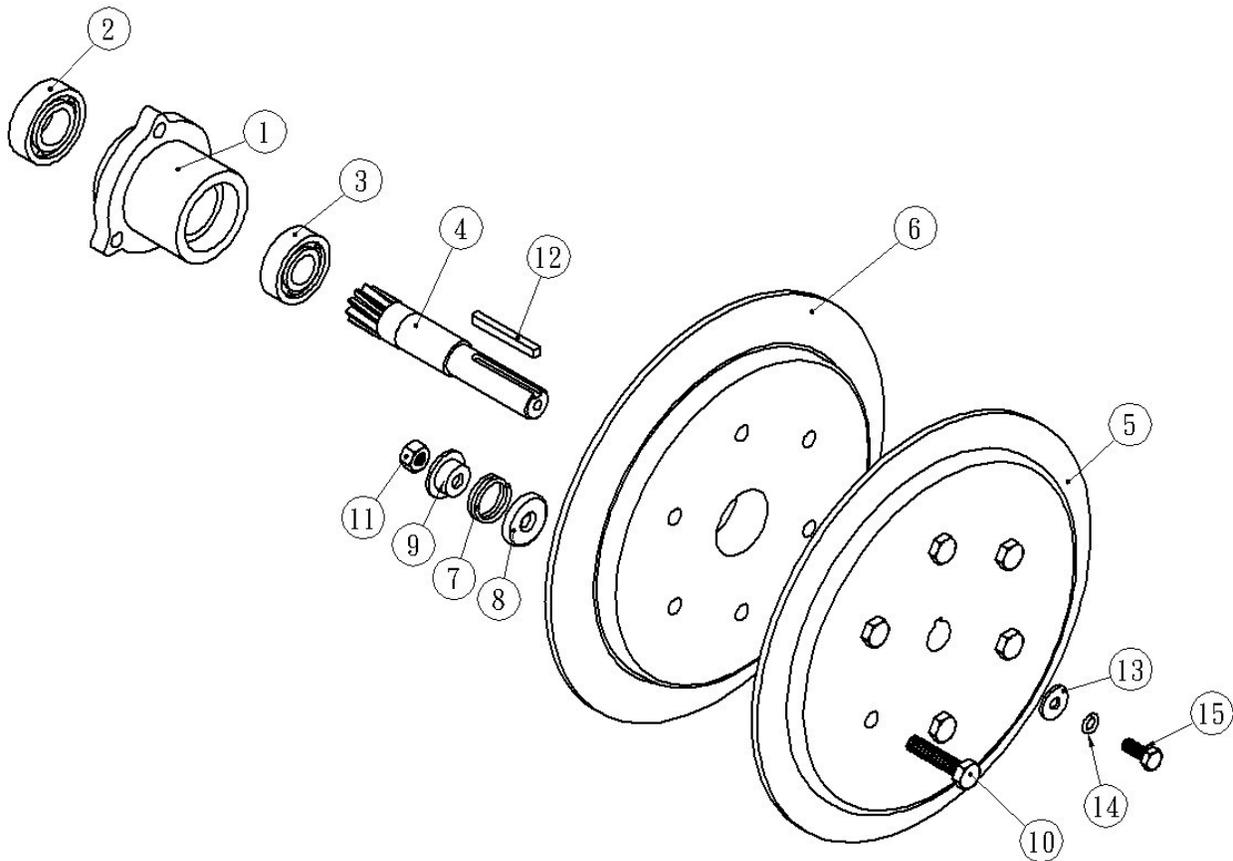
# PARTS LIST:Reducer Box Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C039003	Shaft, Gear	1
2	C031002	Gear Box	1
3	S026206ZZ	Bearing	1
4	C029006	Large Gear	1
5	S284008	Spring Washer, $\phi$ 10.2	4
6	S137020	Hex. Head Screw, M10-P1.5	4
7	S026203ZZ	Bearing	1
8	C009029	Cover, Gear Box	1
9	C067025	Chain Sprocket	1
*	C067026	Chain Sprocket	1
10	S003168	Key	1
11	S298019	C-Ring	1



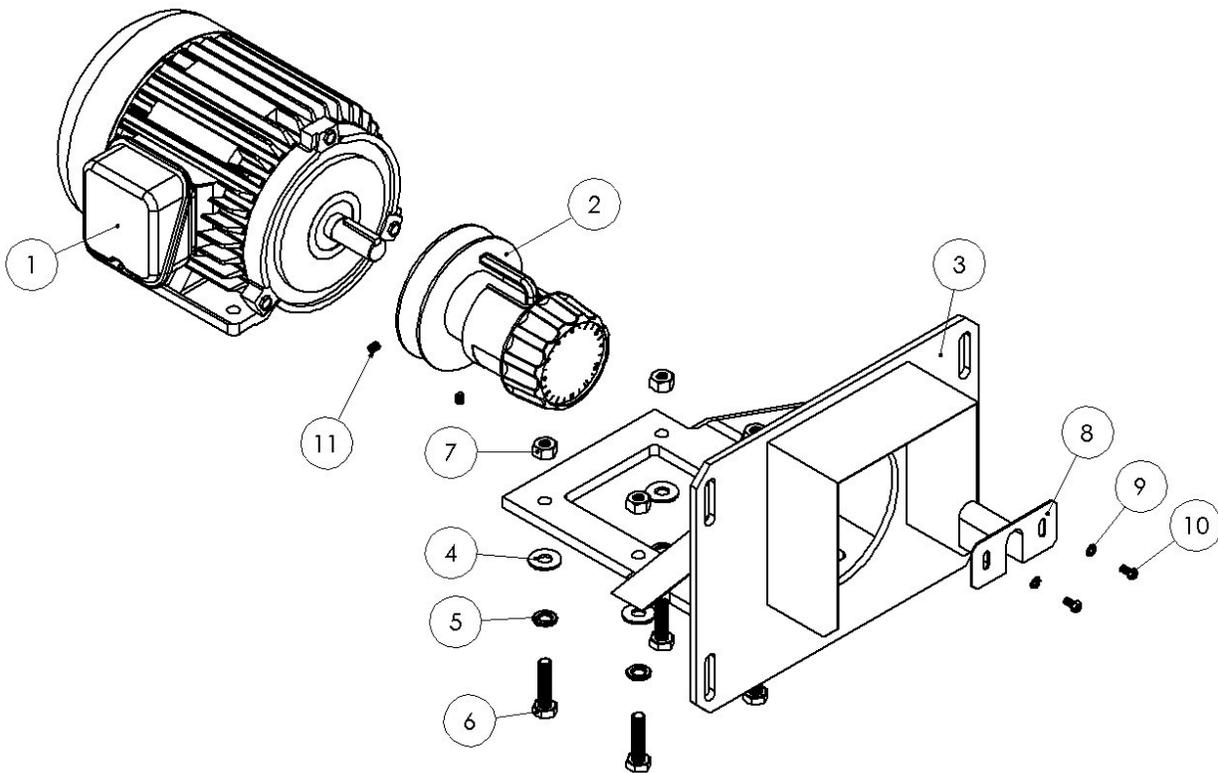
# PARTS LIST:Pulley Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C009005	Bearing Stand	1
2	S026205ZZ	Bearing	1
3	S026204ZZ	Bearing	1
4	C029007	Small Gear	1
5	C064017	Pulley	1
6	C064016	Pulley	1
7	C060020	Spring	6
8	C053022	Washer, $\phi$ 35	6
9	C051013	Collar	6
10	S137045	Hex. Head Screw, M10-P1.5	6
11	S273010R	Nut, M10-P1.5	6
12	S003080	Key	1
13	S282109	Washer, $\phi$ 8.2	1
14	S284007	Spring Washer, $\phi$ 8.2	1
15	S136620	Hex. Head Screw, M8-P1.25	1



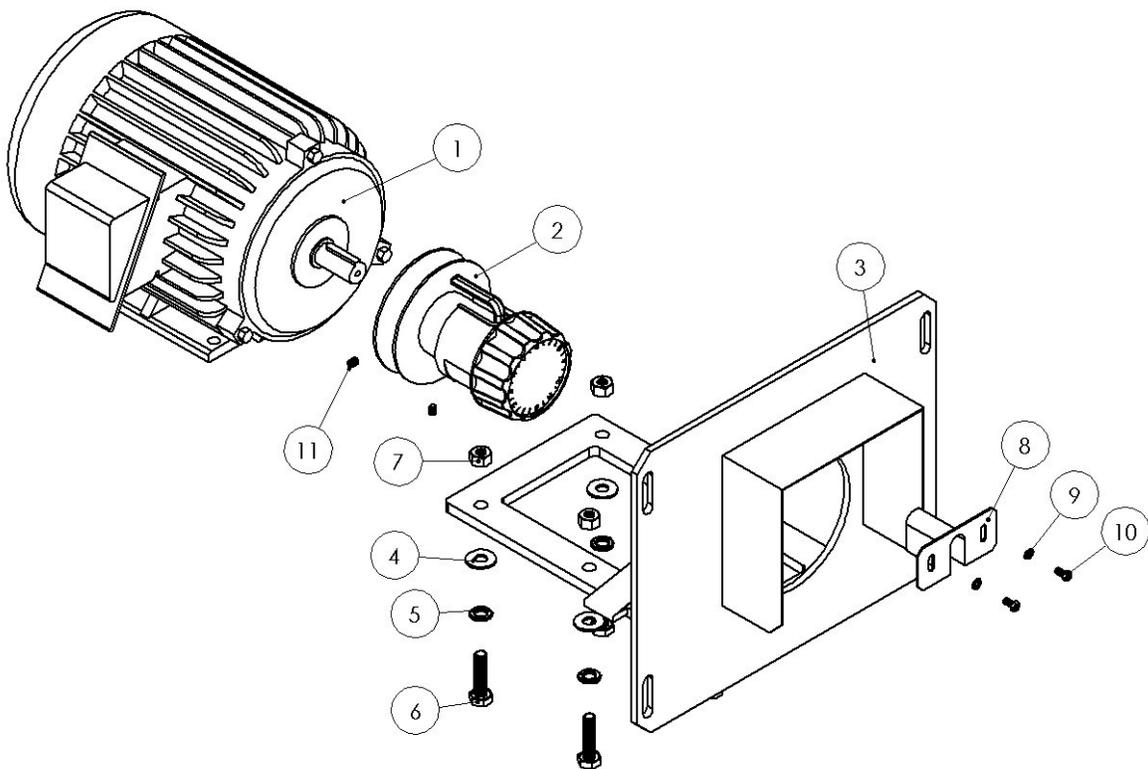
# PARTS LIST:Motor Assembly, Various Speed

NO.	PARTNO.	DESCRIPTION	Q"TY
1	P041403R	Motor	1
2	P050014	Control Dial, Various Speed	1
3	C015059	Stand, Motor	1
4	S282011	Washer, $\phi$ 10.5	4
5	S284008	Spring Washer, $\phi$ 10.2	4
6	S137040	Hex. Head Screw, M10-P1.5	4
7	S273010R	Nut, M10-P1.5	4
8	C023018	Fix Plate, Control Dial	1
9	S284005	Spring Washer, $\phi$ 5.1	2
10	S225010	Round Head Screw, M5-P0.8	2
11	S212013	Fixed Screw, M6-P1.0	2
12	S301048	B Belt	1



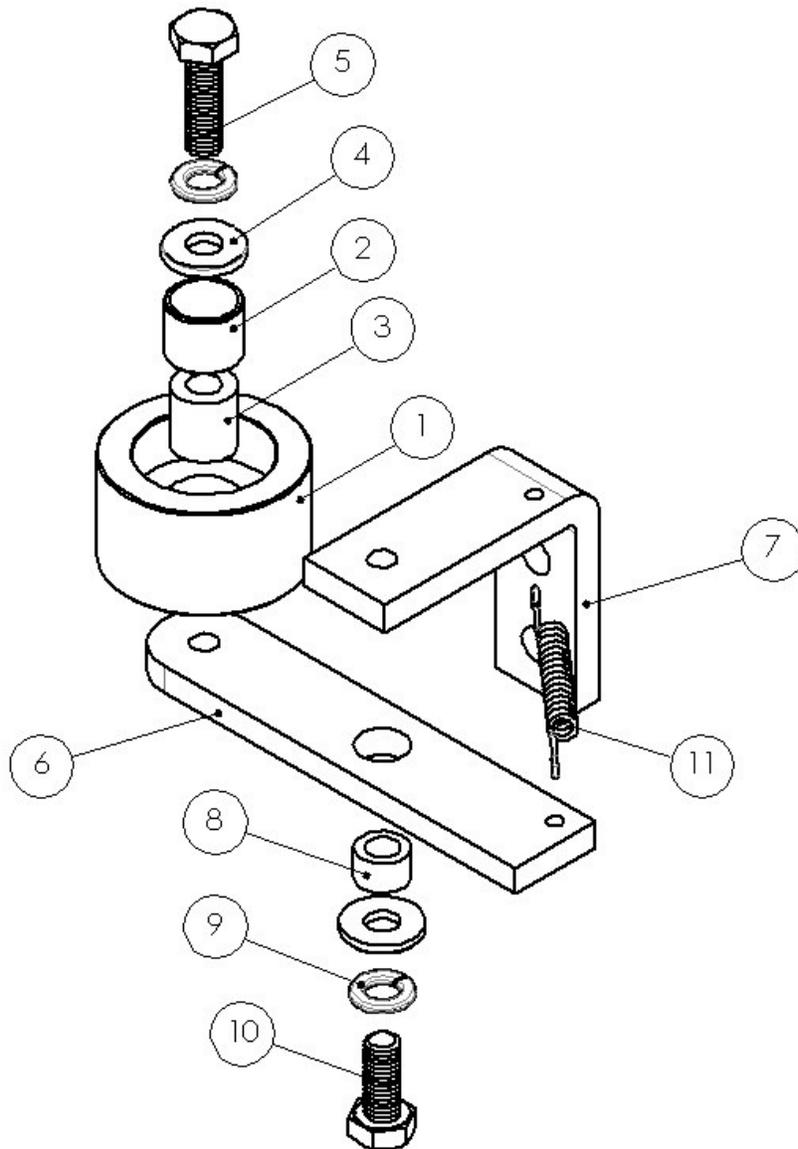
# PARTS LIST:Motor(1PH) Assembly, Various Speed

NO.	PARTNO.	DESCRIPTION	Q"TY
1	P040403R	Motor	1
2	P050014	Control Dial, Various Speed	1
3	C015303	Stand, Motor	1
4	S282011	Washer, $\phi$ 10.5	4
5	S284008	Spring Washer, $\phi$ 10.2	4
6	S137040	Hex. Head Screw, M10-P1.5	4
7	S273010R	Nut, M10-P1.5	4
8	C023018	Fix Plate, Control Dial	1
9	S284005	Spring Washer, $\phi$ 5.1	2
10	S225010	Round Head Screw, M5-P0.8	2
11	S212013	Fixed Screw, M6-P1.0	2



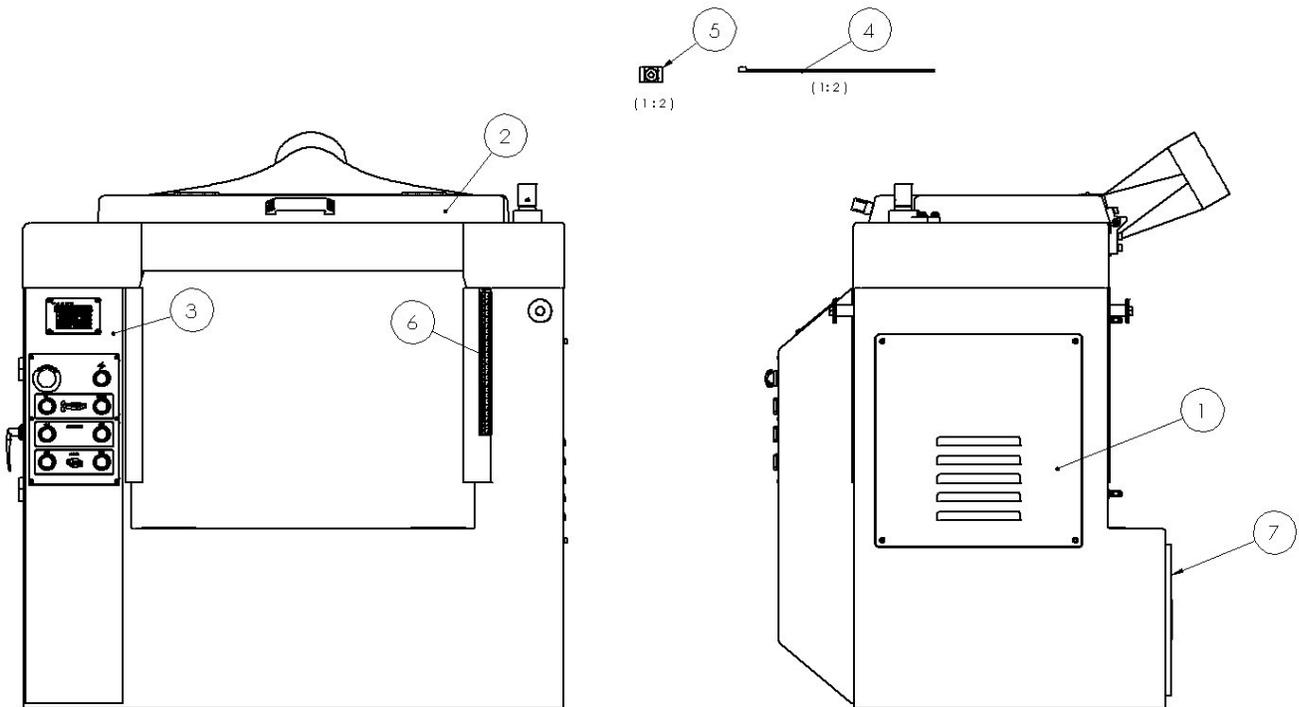
# PARTS LIST:Link Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C066004	Wheel	1
2	P051001	Brass Bearing,	1
3	C052016	Bushing	1
4	S282111	Washer, $\phi$ 10.5	2
5	S137035	Hex.Head Screw, M10-P1.5	1
6	C049018	Linked Plate	1
7	C015030	Linked Support	1
8	C051024	10L Bushing	1
9	S284008	Spring Washer, $\phi$ 10.2	2
10	S137025	Hex.Head Screw, M10-P1.5	1
11	C060011	Spring	1



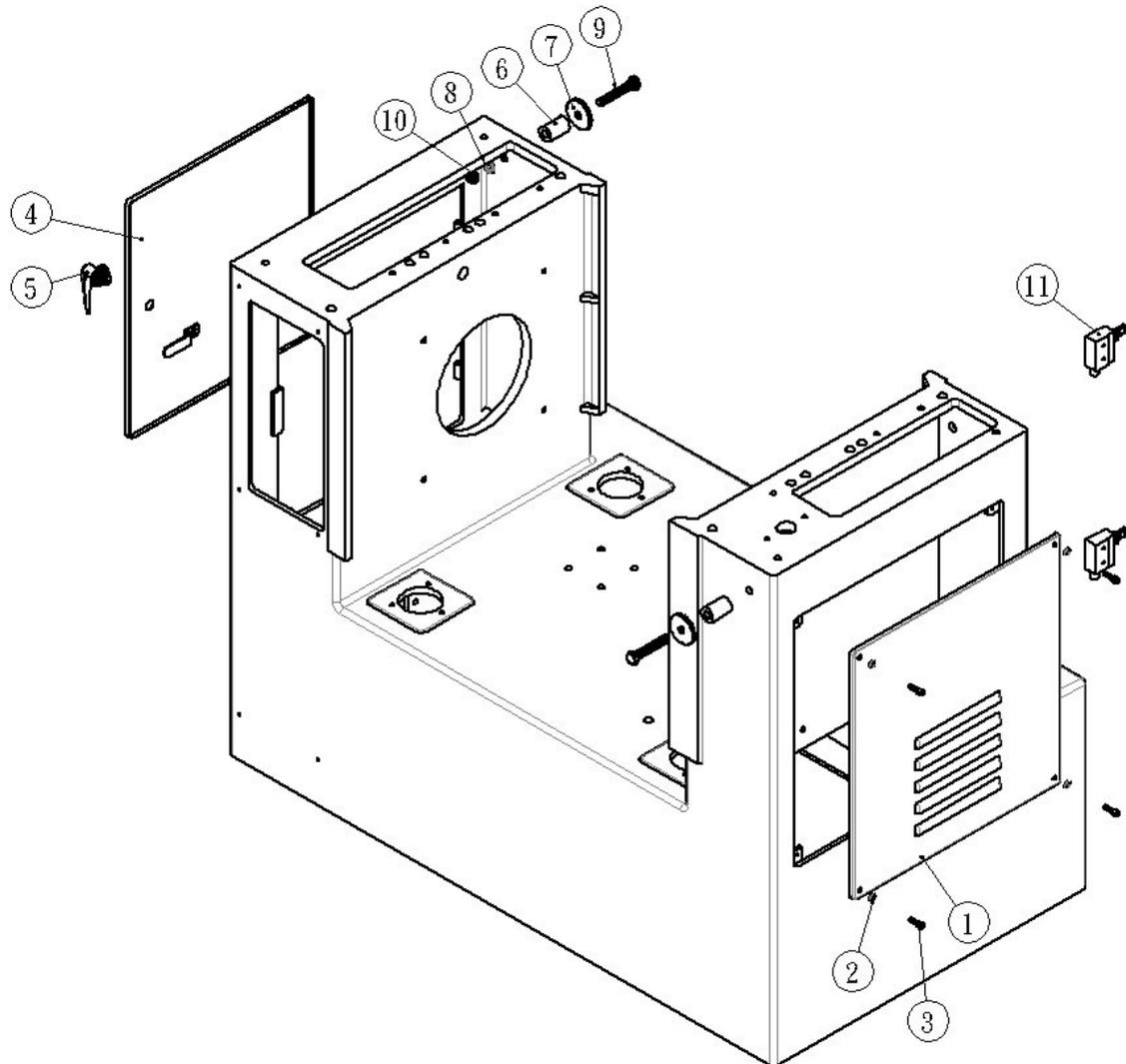
# PARTS LIST: Cover Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	T025006	Cover Assembly, Body	1
2	T025007	Cover Assembly, Top	1
3	T075004	Control Panel Assembly	1
4	P090005M	Tight	1
5	P091003	Mount, Tie	1
6	P108105	Measure	1
7	T020007	Distribution Box	1



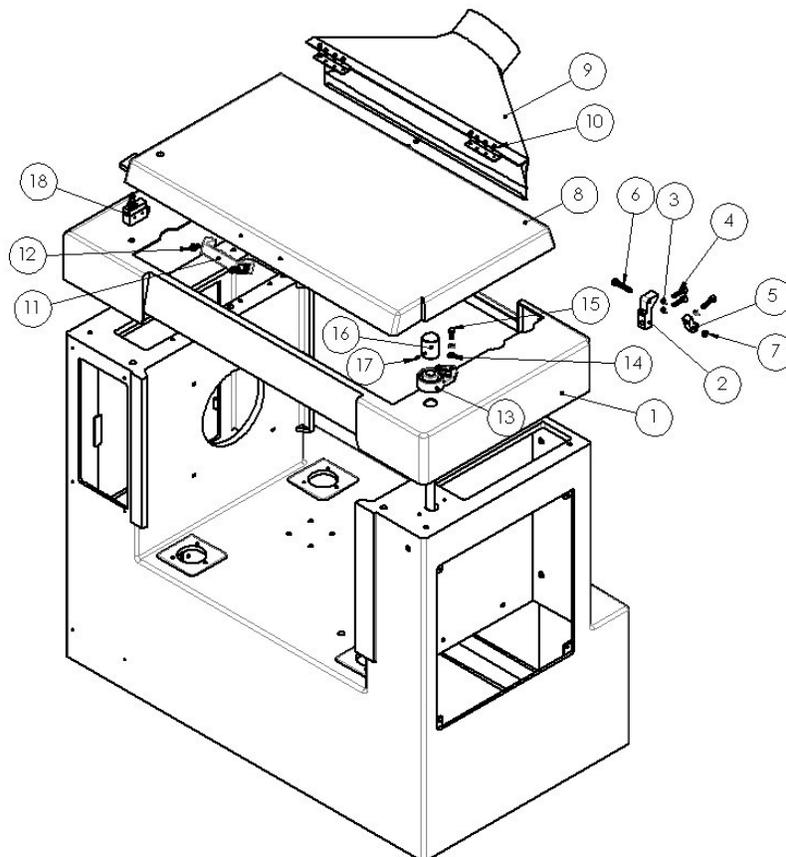
# PARTS LIST:Cover Assembly, Body

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C074391	Right Cover, Body	1
*	C074784	Right Cover (1PH), Body	1
2	S284006	Spring Washer, $\phi$ 6.1	4
3	S201020	Hex. Head Screw, M6-P1.0	4
4	C074028	Left Cover, Body	1
5	P027001	Lock Handle	1
6	C039005	Bushing	2
7	C053021	Washer, $\phi$ 12	2
8	S284009	Spring Washer, $\phi$ 12.2	2
9	S204070	Hex. Head Screw, M12-P1.75	2
10	S273043	Nut, M12-P1.75	2
11	P087301	TZ TypeLimit Switch	2



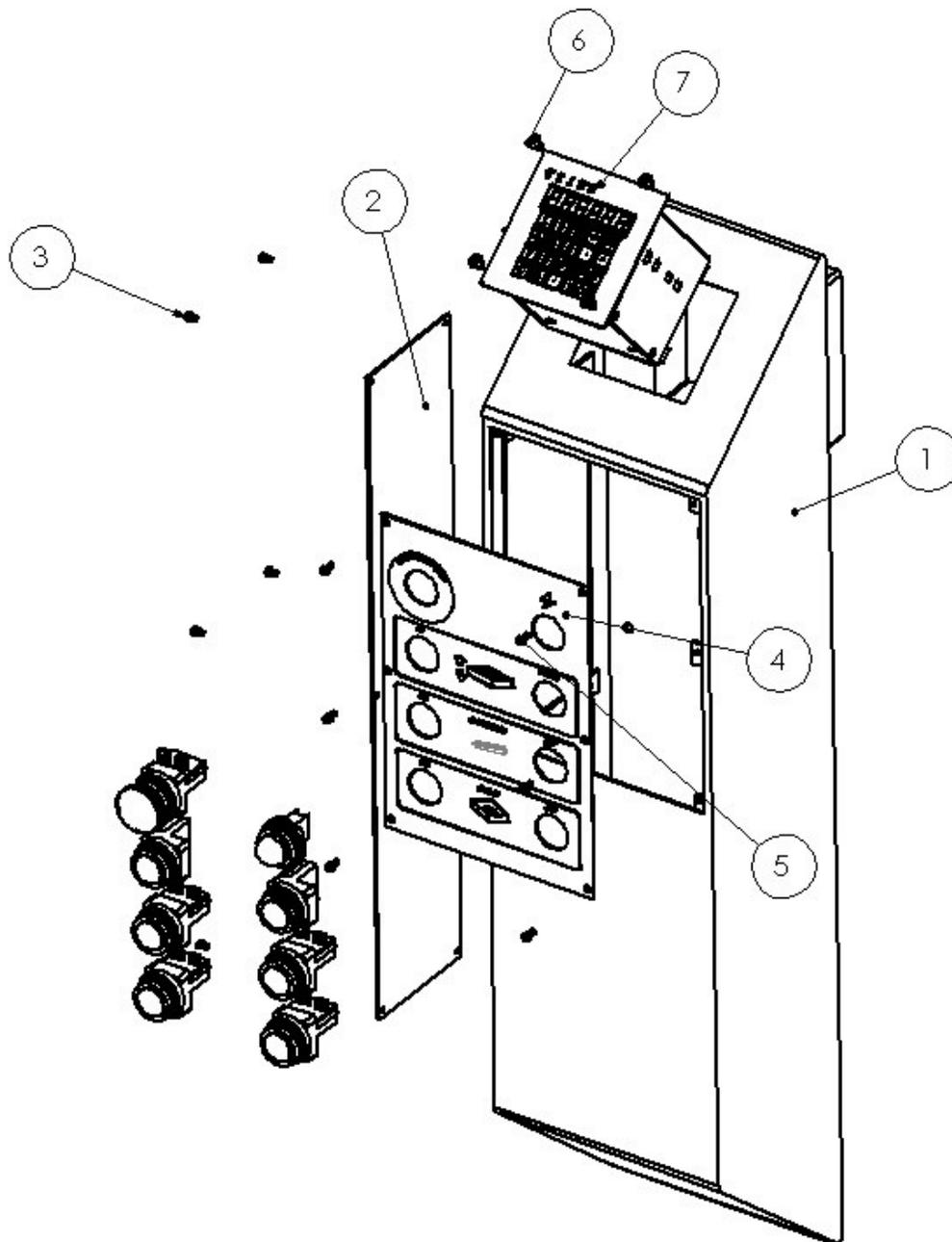
## PARTS LIST:Cover Assembly, Top

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C073093	Cover, Cutterhead Assembly	1
2	C061001	Button, Down	2
3	S284007	Spring Washer, $\phi$ 8.2	9
4	S202030	Hex. Head Screw, M8-P1.25	6
5	C061002	Button, Up	2
6	S136050	Hex. Head Screw, M8-P1.25	2
7	S273008R	Nut, M8-P1.25	2
8	C073094	Cover, Top	1
9	C077014	Dust Hood	1
10	S225010	Round Head Screw, M5-P0.8	8
11	P030106	Handle	1
12	S202016	Hex. Head Screw, M8-P1.25	2
13	S057004	Bearing Unit, UCFK 204 $\phi$ 20	1
14	S282022	Washer, $\phi$ 8.4	3
15	S136020	Hex. Head Screw, M8-P1.25x20L	3
16	C057058	Adjustment Handle	1
17	S211008	Fixed Screw, M5-P0.8	1
18	P087301	TZType Switch	1



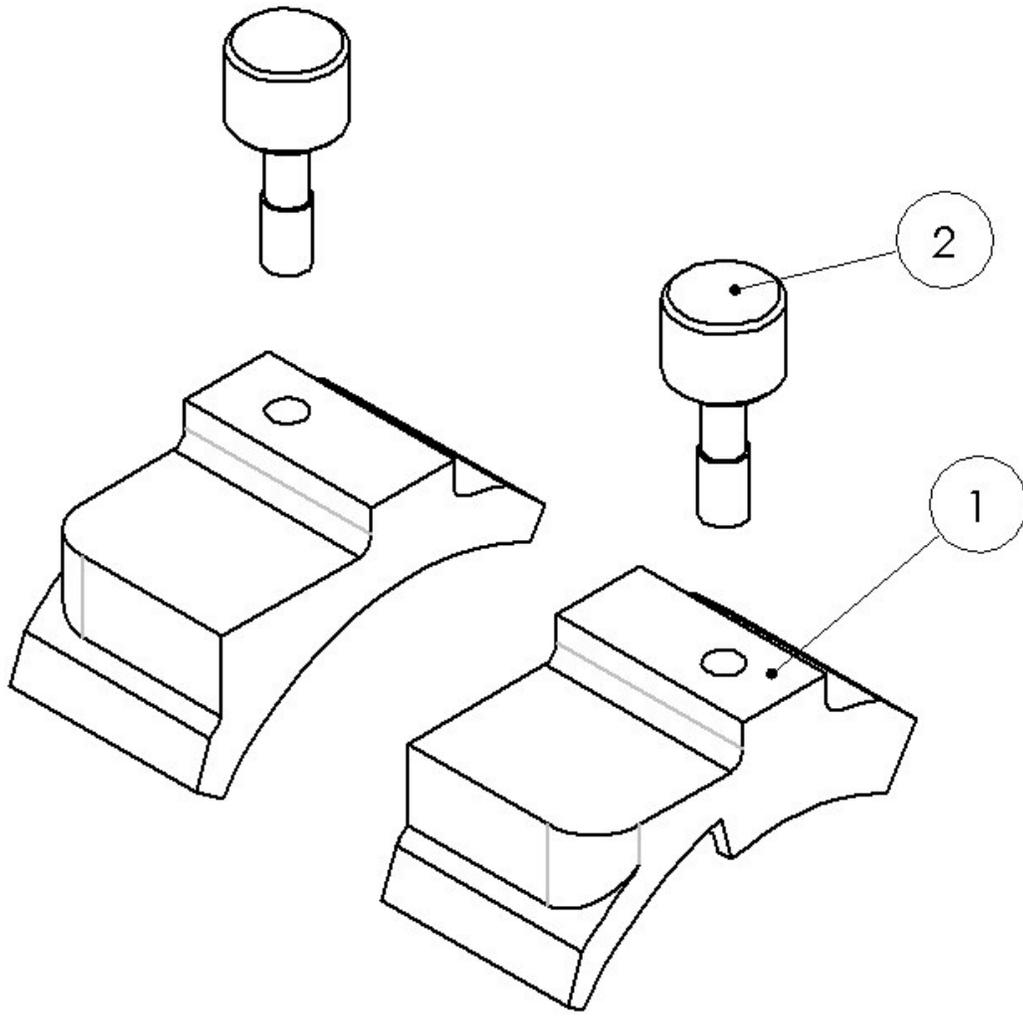
# PARTS LIST:Control Panel Assembly

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C085038	Control Panel Box	1
2	C085039	Side Cover, Control Panel Box	1
3	S224006	Round Head Screw, M4-P0.7	6
4	P107013	Control Panel	1
5	S238003	Round Head Screw, 5/32"-32NC	6
6	S233010	Round Head Screw, M6-P1.0	4
7	CH-525	Digital Control System	1



# PARTS LIST: Gage Set

NO.	PARTNO.	DESCRIPTION	Q"TY
1	C080003	Gage, Knife Setting	2
2	C034032	Gage Screw	2



# PARTS LIST: Tool Set

NO.	PARTNO.	DESCRIPTION	Q"TY
1	S296005	Allen Wrench, M4	1
2	S296006	Allen Wrench, M5	1
3	S296007	Allen Wrench, M6	1
4	S296008	Allen Wrench, M8	1
5	S290071	Open End Wrench, 10x12	1
6	S290073	Open End Wrench, 12x14	1
7	S290074	Open End Wrench, 17x19	1

