Operations & Parts Manual





P815HV

32" PLANER

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

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.		

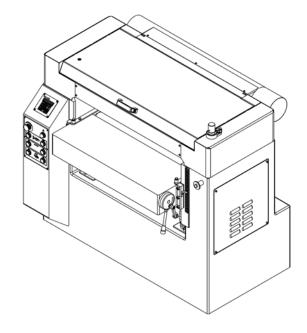


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SPECIFICATIONS

ELECTRICS:

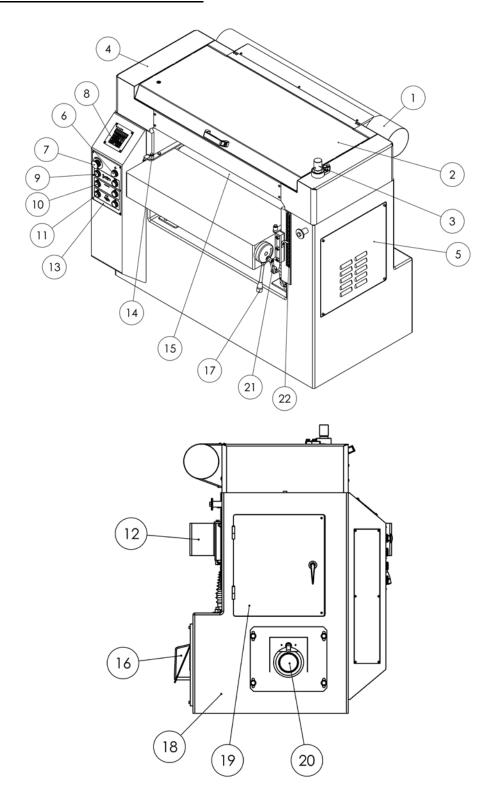
Planer Motor	
Feed Motor	2HP 3PH
Table Lift Motor	1/2HP 3PH
CAPACITY:	
Max. Width Of Stock	
Max. Thickness Of Stock	
Max. Depth Of Cut	8mm (5/16")
Min. Length(uncutted)	
CUTTERHEAD:	
Number Of Knives	4pcs
Diameter	98mm (3-27/32")
Cutting Circle	
Speed	5500R.P.M
TABLE SIZE:	
Width	
Length	
FEED ROLLERS:	
Infeed (One Sectional) Dia	
Outfeed (Two Solid) Dia	
Table Roller (Two Smooth) Dia.	
Feed Rate (Variable Speed)	
MACHINE SIZE (LxWxH)	
PACKING SIZE (LxWxH)	1540mm x 1010mm x 1390mm(60-1/32"x39-1/32"x54-1/32")

STANDARD EQUIPMENT

- 1. Two rollers, table with micro-metric adjustment.
- 2. Variable feed speed system with 2HP 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: 15HP 3PH.

FEATURES OF YOUR 32" PLANER

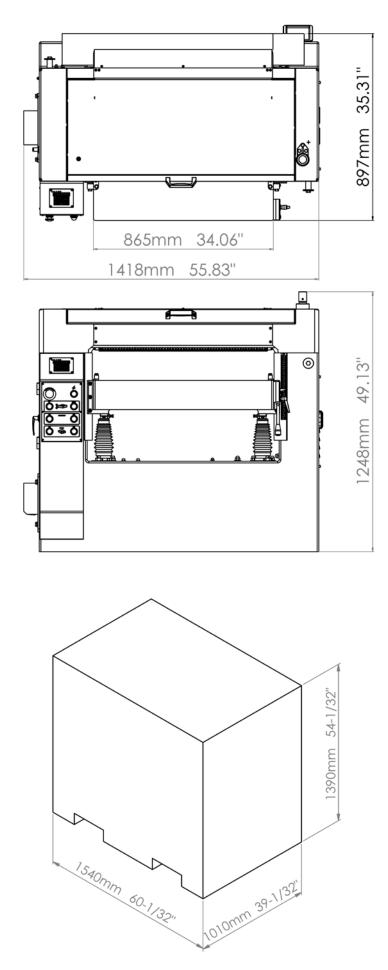


- 1. Dust Hood
- 2. Top Cover
- 3. Thickness Micro Adjustment
- 4. Frame Cover
- 5. Right Side Cover
- 6. Power Indicator Light
- 7. Emergency Stop Button
- 8. Digital Scale And Control
- 9. Table Raising Button
- 10. Start Button, Planer
- 11. Start Feeding Button
- 12. Work Table

- 13. Control Panel
- 14. Limit Block, Width
- 15. Table Roller
- 16. Wiring Terminal Box
- 17. Table Roller Adjustment Handle
- 18. Machine Base

- 19. Access Door
- 20. Variable Speed Dial
- 21. Table Roller Adjustment Lock
- 22. MM/INCH Scale

DIMENSIONS



GENERALSAFETY 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 a toy.
- 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

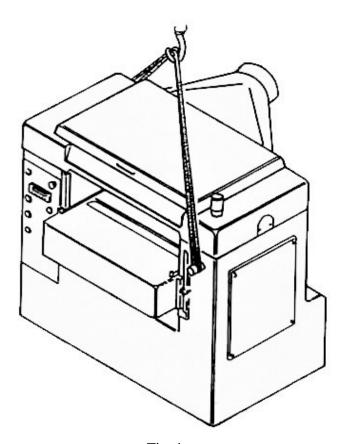


Fig. 1

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

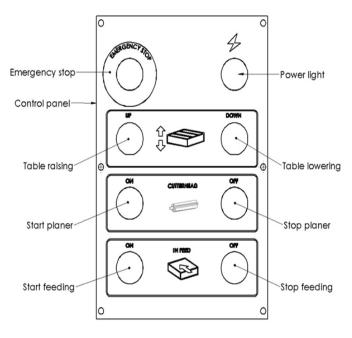
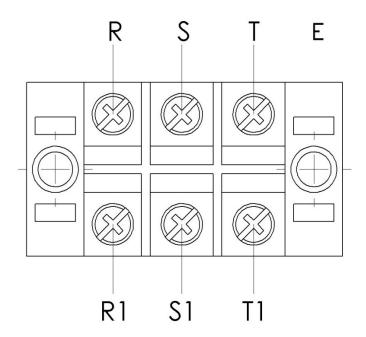


Fig. 2

CONNECTION TO POWER SOURCE



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

Fig.3

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 form 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 cutterheadat 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.

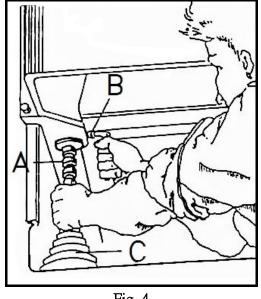


Fig. 4

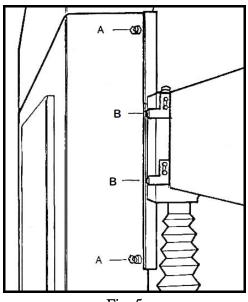


Fig. 5

- Lock Bar A.
- 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 planning rough 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 planning 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

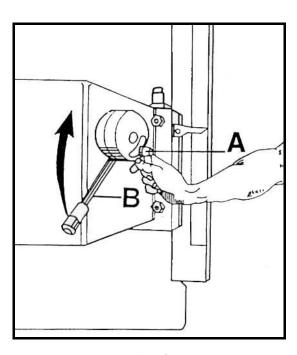
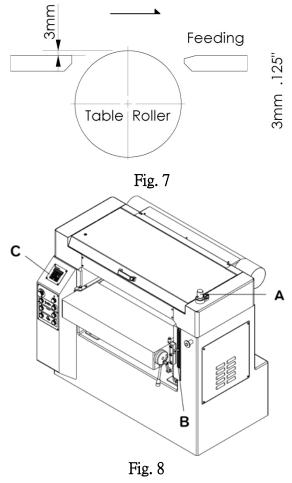


Fig. 6

- A. Lock Handle
- B. Adjusting Handle



- 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

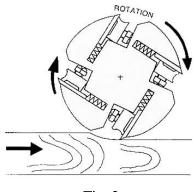


Fig. 9

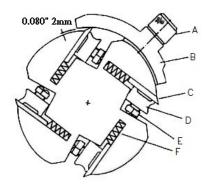


Fig. 10

- Always Feed Againstthe Cutter Rotation As Shown In Fig. 9
- A. Knob

Knife

- D. Knife Gib
- B. Knife setting gage
- E. Square head screw

C.

Infeed Roller, Chipbreaker, Pressure Bar, and Outfeed Roller

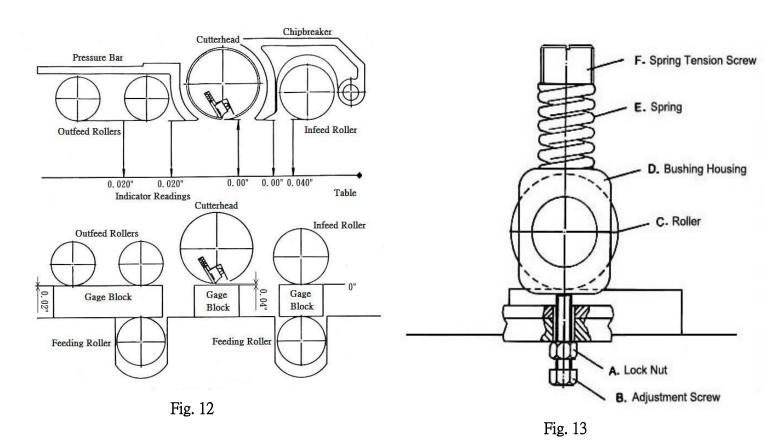
The infeed roller, chipbreaker, pressure bar, and outfeed rollers are adjusted at the factory. The infeed roller and the chipbreaker are to be set .020"below the cutting circle, the pressure bar is to be set .040" below the cutting circle and the outfeed rollers are to be set .020" below the cutting 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



Feed Speed Control

This planer is equipped with a separate 2HP 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. 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.

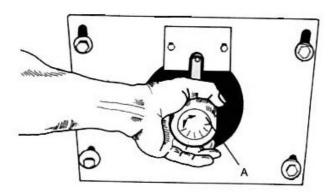


Fig. 14

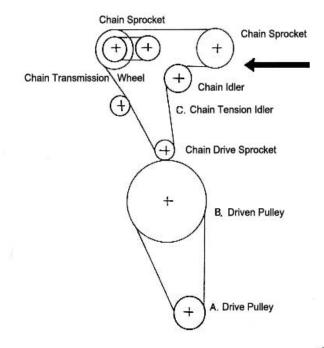


Fig. 15

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
В.	Table Life Screws(4)	Frequently	Grease
C.	Table Side Ways(4)	Frequently	SAR-30

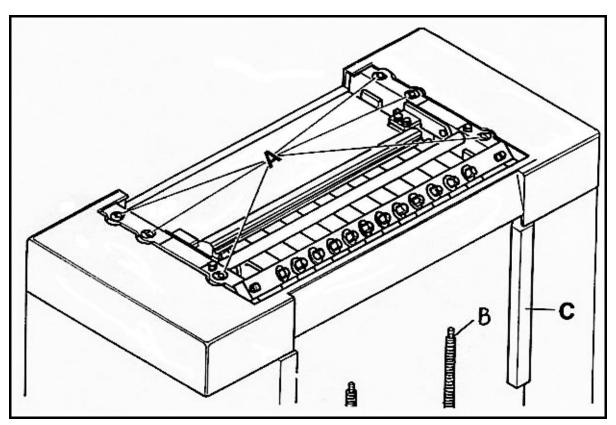


Fig. 16

3. Belt Tension:

Maintain proper belt tension to cutter motor. 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

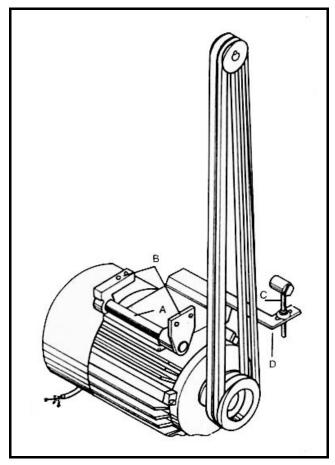


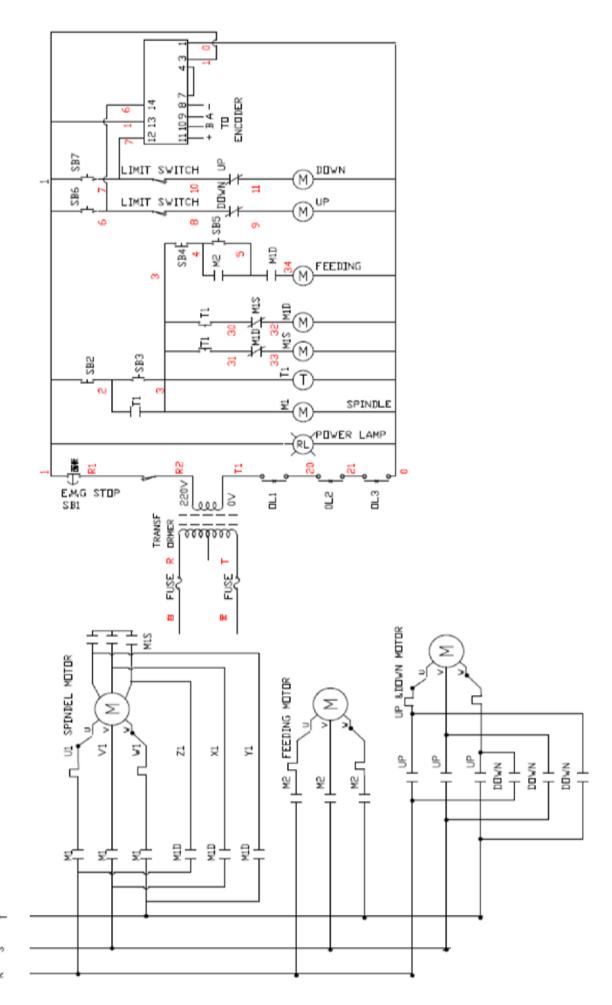
Fig. 17

TROUBLE SHOOTING

Sy	mptom	Possible Causes And Check
1.	If clip or snip appears at beginning of stock.	Pressure bar may be set too low.
		• Chipbreaker may be set too high.
		 Upper infeed sectional roller may be set too high.
		Table infeed roller may be set too high.
		• Spring tension may be too light on pressure bar.
		Table rollers may be too high.
2.	If clip or snip appears on end of stock.	 Pressure bar may be set too high.
		 Table outfeed roller may be set too high.
		 Upper outfeed roller may be set too low.
		 Stock may not be butted.
		 Grain may be running against knives.
		Table rollers may be too high.
3.	If knives tear out stock.	Feed may be too fast.
		 Moisture content may be too high.
		• Cut may be too heavy.
		 Cutting angle may be too large.
		 Grain may be running against knives.
		Knives are dull.
4.	If knives raise the grain.	• Feed may be too fast.
		 Cutting angle may be too large.
		 Moisture content of stock may be too high.
		• Cut may be too heavy.
		 Knives need sharpening.
5.	If chip marks appear on stock.	Blower system may not be strong enough. No suction.
		Feed may be too fast.
		Exhaust pipe may connect with too large on angle to main
		blower pipe.
		Check knife edge.
6.	If panels are taper across the width	 Planer bed out of parallel with cutterhead.
		Knives not set even in cutterhead.
7.	If undesired glossy finish appears.	• Knives may be dull.
		Feed may be too slow.

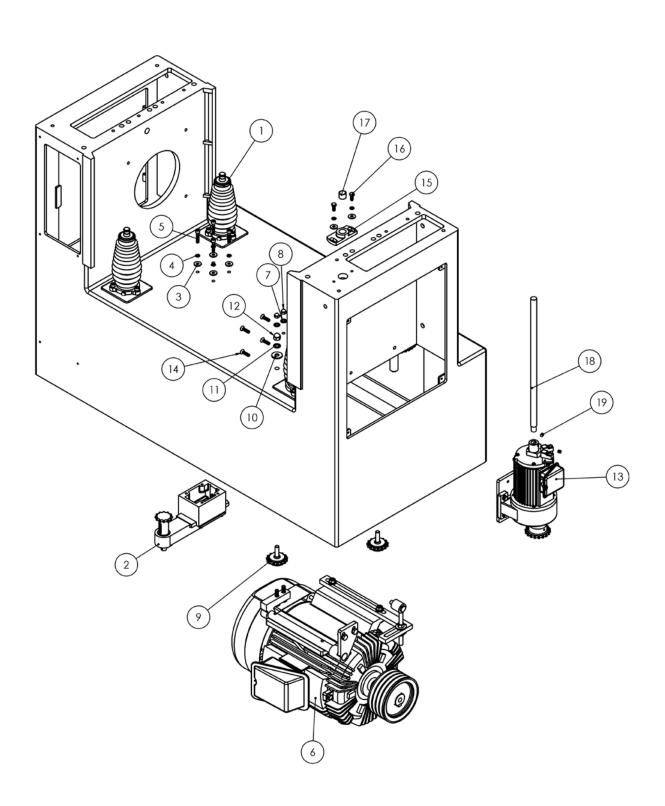
TROUBLE SHOOTING

Sy	mptom	Possible Causes And Check
8.	If washboard finish appears.	• Knives may have been driven back into the head.
		Machine may be completely out of adjustment.
		Planer bed loose and rocking in ways.
9.	If revolution mark shows up.	 Knives may be ground poorly.
		• Knives not set properly or evenly.
10.	If lines appear at right angles to the knife marks.	Knives may have nicked by overgrinding and taking temper
		out of steel.
		 Chips may have wedged between rolls and tables.
		Pressure bar may be dragging
11.	If stock twists in machine.	 Pressure bar may be cocked.
		 Upper outfeed roller may be cocked.
		 Upper outfeed roller may have uneven spring tension.
		Table rollers may be cocked.
12.	If machine is noisy, vibrate and pounds.	• Knives may be too dull.
		 Machine may not be leveled correctly.
		Machine may not be on solid foundation.
		 Pressure bar may be set too low.
13.	If stock sticks or hesitates in machine	 Pressure bar may be set too low.
		• Table rollers may be set too low.
		• Feed rollers may not be set low enough.
		• Cut may be too heavy.
		 A push board may help stock through machine.
_		Check moisture content
14.	If motor kicks out	Knives may be dull, thus overloading motors
		• Pressure bar may be set too low, putting drag on motors.
		Motors may be drawing high current because other machinery
		in the plant in use has pulled down the voltage.
		Machine may be out of adjustment.
		Table rollers may be set too low.
		Too heavy cuts with continued work load.



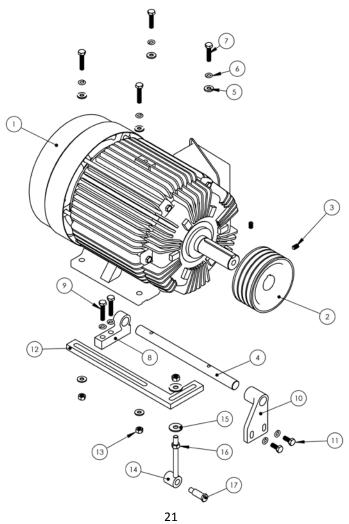
PARTS LIST: A001113 Base Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	T003107		1
2	T013062		1
3	S282109	§ 8.2x § 23x2.2T	6
4	S284007	§ 8.2x § 15.4x 3.2x 2.0T	6
5	S202040	M8-P1.25x40L	4
6	T002080	2P/15HP(11KW)	1
7	S284008	§ 10.2x § 18.4x 3.7x 2.5T	2
8	S277010R	M10-P1.5	2
9	T013070		2
10	S282114	§ 13x § 34x3.0T	2
11	S284009	§ 12.2x § 21.5x4.2x3.0T	2
12	S277012R	M12-P1.75	3
13	T005030	1/2HP x4P (0.4KW) 1:30.L	1
14	S248030	M8-P1.25x30L	4
15	C015045		1
16	S136020	M8-P1.25x20L	2
17	P051001	§ 19.05x § 22.225x18L(§ 3/4)	1
18	C046211		1
19	S213008	M8-P1.25x8L	2
20	S307253	Chain, #425-P257	1



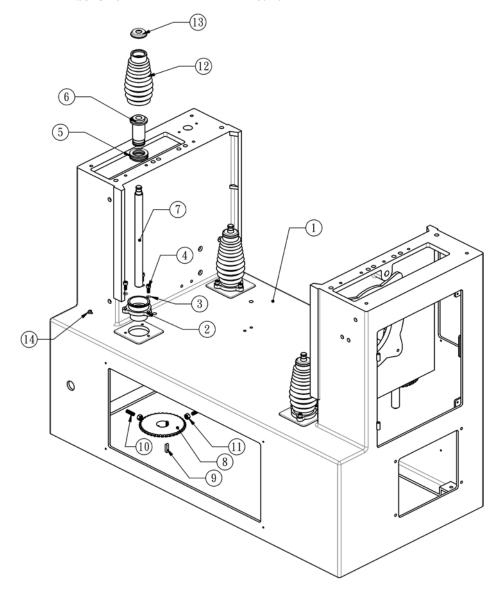
PARTS LIST: T002080 Motor Assembly (15HP-3PH)

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	P041209L	2P/15HP(11KW)	1
2	C064222		1
3	S214014	M10-P1.5x14L	2
4	C046188		1
5	S282111	(§ 3/8) § 10.2x § 24x3.0T	6
6	S284008	§ 10.2x § 18.4x 3.7x 2.5T	8
7	S137045	M10-P1.5x45L	2
8	C063012	T25x25x105L	1
9	S137050	M10-P1.5x50L	4
10	C063044		1
11	S137025	M10-P1.5x25L	2
12	C049230		1
13	S273010R	M10-P1.5	2
14	C034030		1
15	S282114	§ 13x § 34x3.0T	2
16	S273012R	M12-P1.75	2
17	C034031	§ 15.875 x55L(M12-P1.75)	1
18	S300078	Belt, A-78	4



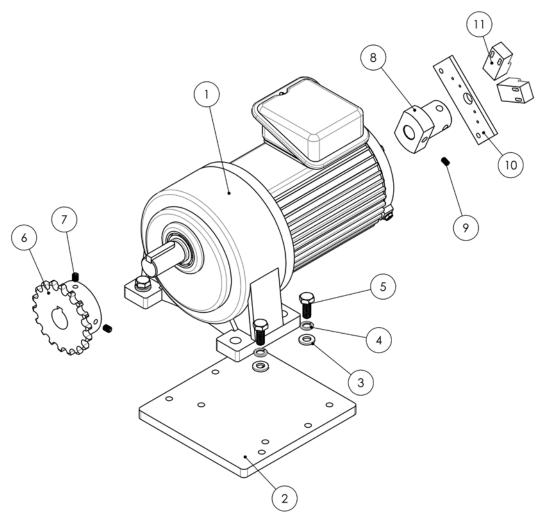
PARTS LIST: T003107 Elevator Bolt Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1.	C001107		1
2	C009026		4
3	S284007	§ 8.2x § 15.4x 3.2x 2.0T	12
4	S202020	M8-P1.25x20L	12
5	S043008	2908, § 40x § 60x16	4
6	C037004		4
7	C035004	∮ 1"x360L	4
8	C067019	36T- ∮ 60x ∮ 40x28L	4
9	S003172	8x8x30L	4
10	S214030	M10-P1.5x30L	8
11	S273010R	M10-P1.5	8
12	C078003		4
13	C053029	§ 20x § 53x10L	4
14	S319201	3/16"	4



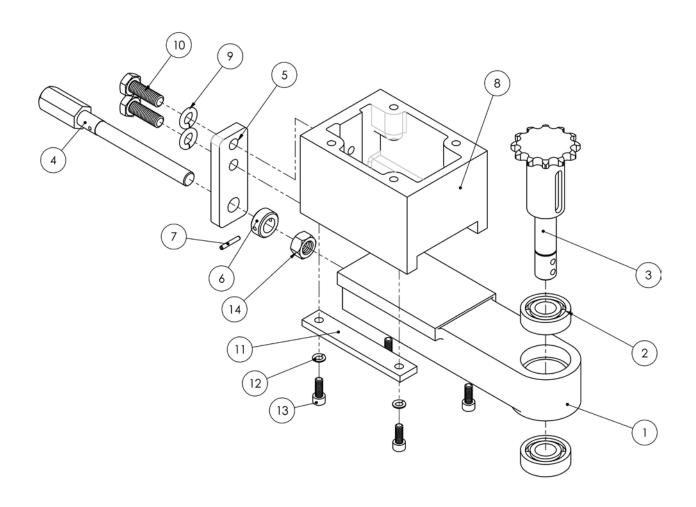
PARTS LIST: T005030 Motor/Table Raising (1/2HP-3PH)

PARTS NO.	SPECIFICATION	Q'TY
P045206TE	"1/2HP x4P (0.4KW) 1:30	1
C063046	1/2HP x4P	1
S282108	(\$ 5/16) \$ 8.4x \$ 15.8x2.2T	4
S284007	§ 8.2x § 15.4x 3.2x 2.0T	4
S136020	M8-P1.25x20L	4
C067087	18- \$ 40x \$ 22x27L	1
S212008	M6-P1.0x8L.	2
C062178		1
S211008	M5-P0.8x8L	1
C062179		1
P085201	PL-05NB-4M	2
	P045206TE C063046 S282108 S284007 S136020 C067087 S212008 C062178 S211008 C062179	P045206TE "1/2HP x4P (0.4KW) 1:30 C063046 1/2HP x4P \$282108 (\$5/16) \$8.4x \$15.8x2.2T \$284007 \$8.2x \$15.4x 3.2x 2.0T \$136020 M8-P1.25x20L \$267087 18- \$40x \$22x27L \$212008 M6-P1.0x8L \$211008 M5-P0.8x8L \$2062179



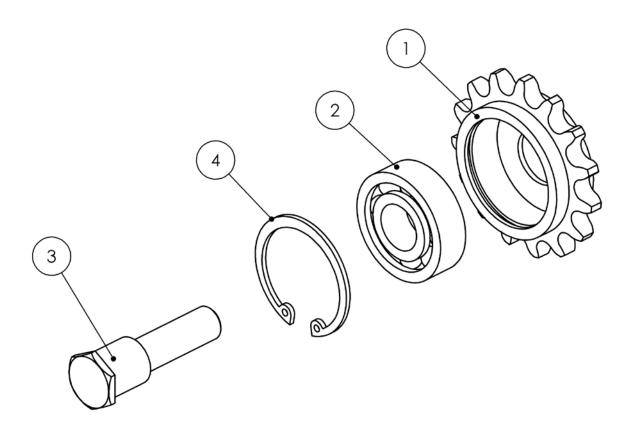
PARTS LIST: T013062 Adjustment Chain Wheel Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1.	C016077		1
2	S026203ZZ	6203ZZ § 17x § 40x12	2
3	C067028	12T-∮30x∮17x128L	1
4	C035046		1
5	C045059	31.75x85	1
6	C051071	∮ 1/2" x ∮ 7/8 吋 x10L	1
7	S267308W	\$ 3.15x20L(W)	1
8	C016076		1
9	S284008	§ 10.2x § 18.4x 3.7x2.5T	2
10	S137030	M10-P1.5x30L	2
11	C007051		2
12	S284006	§ 6.1x § 12.2x2.7x1.5T	4
13	S201016	M6-P1.0x16L	4
14	S273012R	M12-P1.75	1



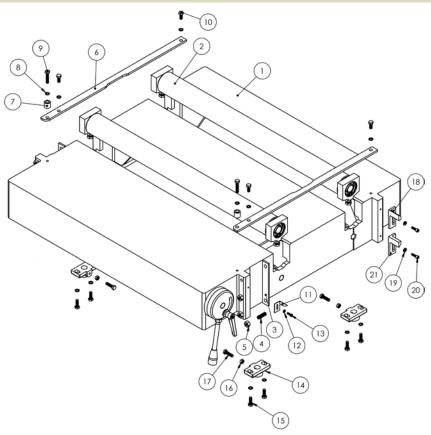
PARTS LIST: T013070 Sprocket Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1.	C067017	15T- ∮ 48x ∮ 40x17.5L	1
2	S026203ZZ	6203ZZ \$ 17x \$ 40x12	1
3	C034029	∮ 19x60L	1
4	S298125	R40 \$ 43.5x1.75t	1



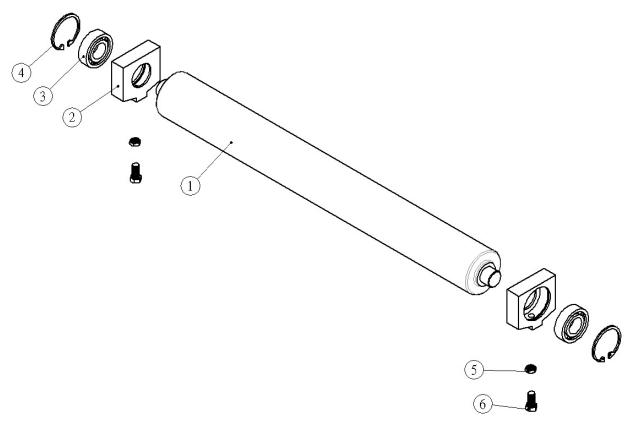
PARTS LIST: A004160 Work Table Assembly

PARTS NO.	SPECIFICATION	Q'TY
T013110		1
T013111		2
C007100		2
S214030	M10-P1.5x30L	6
S273010R	M10-P1.5	6
C020008	1/4"x 618L.	2
C051019	§ 10x § 19.05x20L	2
S284007	§ 8.2x § 15.4x 3.2x 2.0T	14
S136040	M8-P1.25x40L	2
S136020	M8-P1.25x20L	4
C070003		1
S282105	§ 5.3x § 10x1.0T	1
S225020	M5-P0.8x20L	1
C015043		4
S136025	M8-P1.25x25L	8
S273008R	M8-P1.25	4
S136030	M8-P1.25x30L	4
C022030		1
S282107	T2.0x ∮ 6.4x ∮ 12.5	2
S201020	M6-P1.0x20L	2
C022124		1
	T013110 T013111 C007100 S214030 S273010R C020008 C051019 S284007 S136040 S136020 C070003 S282105 S225020 C015043 S136025 S273008R S136030 C022030 S282107 S201020	T013110 T013111 C007100 S214030 M10-P1.5x30L S273010R M10-P1.5 C020008 1/4"x 618L. C051019 \$ 10x \$ 19.05x20L S284007 \$ 8.2x \$ 15.4x 3.2x 2.0T S136040 M8-P1.25x40L S136020 M8-P1.25x20L C070003 S282105 \$ 5.3x \$ 10x1.0T S225020 M5-P0.8x20L C015043 S136025 M8-P1.25x25L S273008R M8-P1.25 S136030 M8-P1.25x30L C022030 S282107 T2.0x \$ 6.4x \$ 12.5 S201020 M6-P1.0x20L



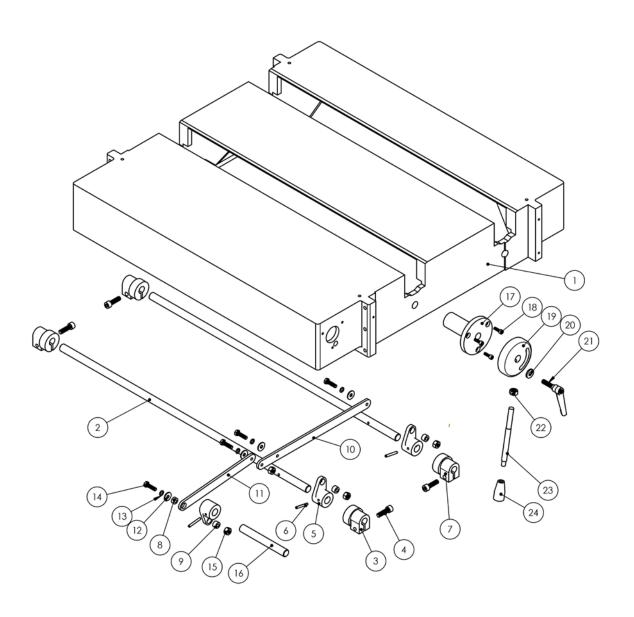
PARTS LIST: T013111 Table Roller Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C040134		1
2	C009008		2
3	S026205ZZ	6205ZZ \$ 25x \$ 52x15	2
4	S298130	R50 § 54.2x2.0t (2.2)	2
5	S273010R	M10-P1.5	2
6	S137020	M10-P1.5x20L	2



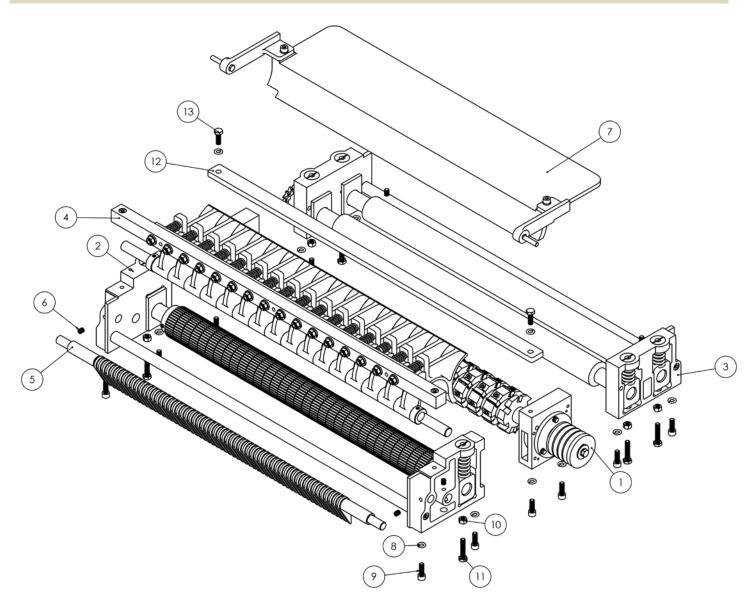
PARTS LIST: T013011 Work Table/Table Roller Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C006178		1
2	C048120	∮ 19.05x867L	2
3	C017023		2
4	S203035	M10-P1.5x35L	4
5	C017030		3
6	S267512W	§ 5.2x40L	3
7	C017029		2
8	C051022	§ 8x § 15.8x7L	1
9	C052027	§ 5/8"x10L.	3
10	C049032		1
11	C049027		1
12	S282109	§ 8.2x § 23x2.2T	4
13	S284007	§ 8.2x § 15.4x 3.2x 2.0T	4
14	S136030	M8-P1.25x30L	4
15	S273010R	M10-P1.5	4
16	C046030	Φ3/4"x156L	1
17	C015055		1
18	S201020	M6-P1.0x20L.	3
19	C017014	20tx § 100x § 19.05	1
20	S282111	(§ 3/8) § 10.2x § 24x3.0T	1
21	P026291PB	(76R) M10-P1.5x25.5L	1
22	S273012R	M12-P1.75	1
23	C057006	M12x167L	1
24	P029214Y	W 3/8 -16	1



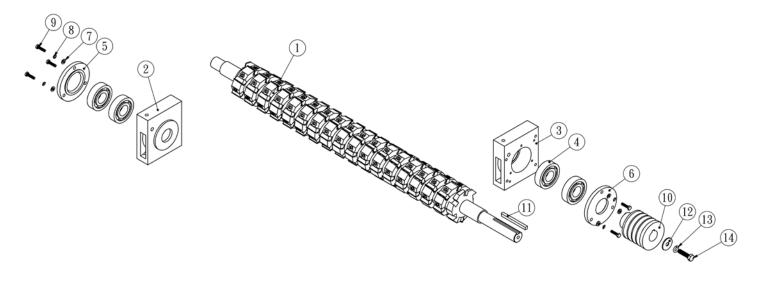
PARTS LIST: A002042 In/Outdfeed/Cutterhead/Chipbreaker/Pressure bar Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	T001138	Helical Cutterhead	1
2	T010050		1
3	T011016		1
4	T009168		1
5	T009219		1
6	S214010	M10-P1.5x10L	4
7	T009218		1
8	S284008	§ 10.2x § 18.4x 3.7x 2.5T	14
9	S203030	M10-P1.5x30L	12
10	S273010R	M10-P1.5	6
11	S137050	M10-P1.5x50L.	6
12	C045058		1
13	S137030	M10-P1.5x30L	2



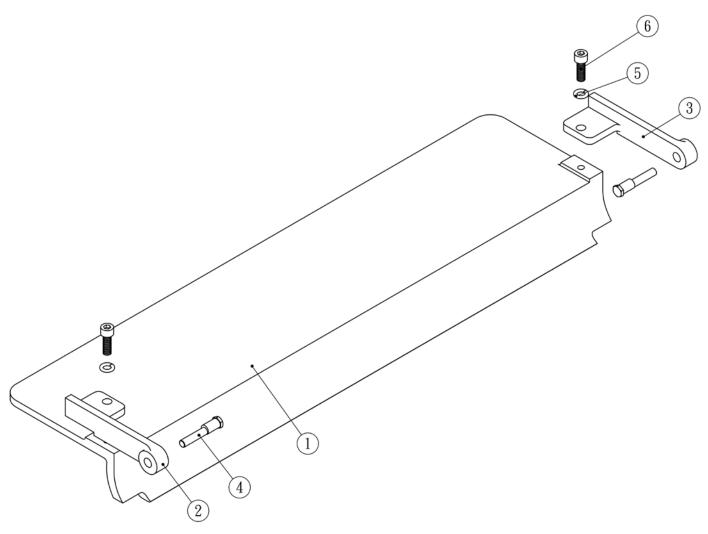
PARTS LIST: T001138 Helical Cutterhead Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	P052207		1
2	C009027		1
3	C009068		1
4	S026306ZZ	6306ZZ § 30x § 72x19	4
5	C010010		1
6	C010009		1
7	S282107	T2.0x § 6.4x § 12.5	6
8	S284006	§ 6.1x § 12.2x2.7x1.5T	6
9	S135025	M6-P1.0x25L	6
10	C064224	\$ 80 7-1/2,15HP	1
11	S003184	8x8x90L	1
12	S282112	§ 10.5x § 35x2.0T	1
13	S284008	§ 10.2x § 18.4x 3.7x 2.5T	1
14	S137040L	M10-P1.5x40L	1



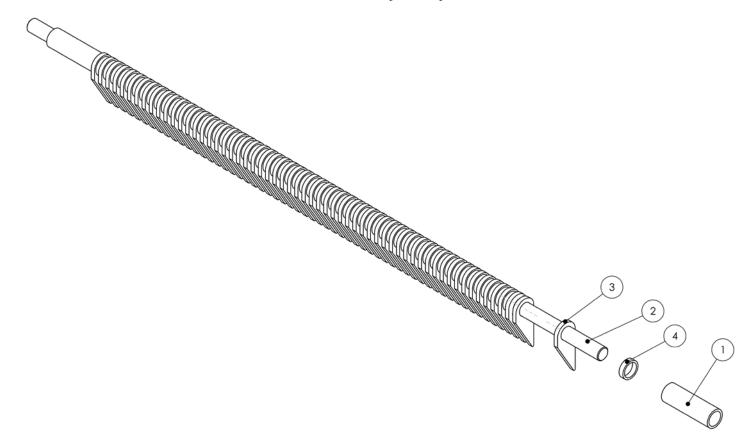
PARTS LIST: T009218 Pressure Bar Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C042151		1
2	C015057		1
3	C015058		1
4	C046029	§ 14x64.5L	2
5	S284008	§ 10.2x § 18.4x 3.7x 2.5T	2
6	S203030	M10-P1.5x30L	2



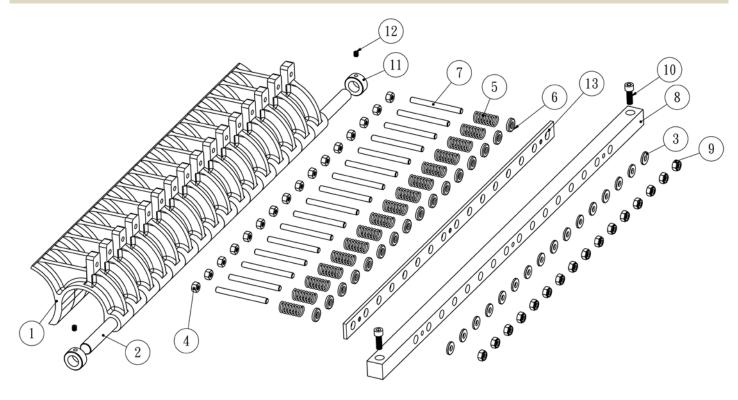
PARTS LIST: T009219 Anti-kickback Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C052026	§ 27x82L.	1
2	C046187	∮ 19.05x1022L	2
3	C045012	6tx ∮ 19.5	60
4	C052014	§ 21.5x § 27x7L	59



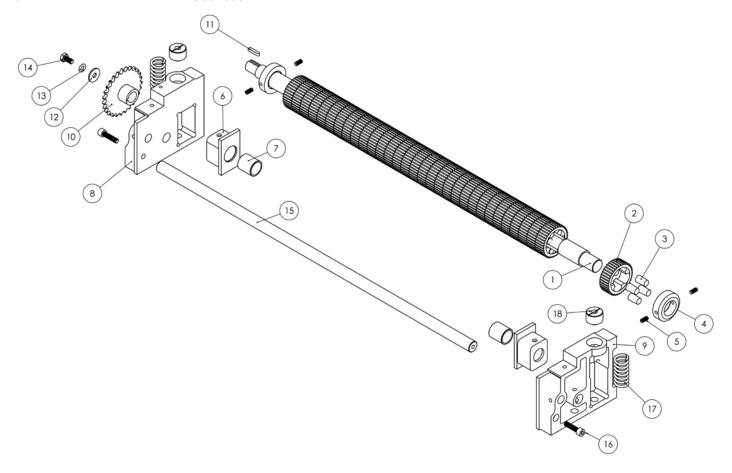
PARTS LIST: T009168 Chipbreaker Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C042013		16
2	C048119	\$ 22.225x1022L	1
3	S282111	(§ 3/8) § 10.2x § 24x3.0T	16
4	S273010R	M10-P1.5	16
5	C060040	§ 2.5x § 21x43.5L	16
6	C053023	§ 25x § 11x5T	16
7	C034087	M10-P1.5x105L	16
8	C049229	31.75tx31.75x1023L	1
9	S285010R	M10-P1.5	16
10	S203030	M10-P1.5x30L	2
11	C051032	§ 22.2x § 38.1x18L	2
12	S213008	M8-P1.25x8L	2
13	C049231	6.35tx31.75x813.2L	1



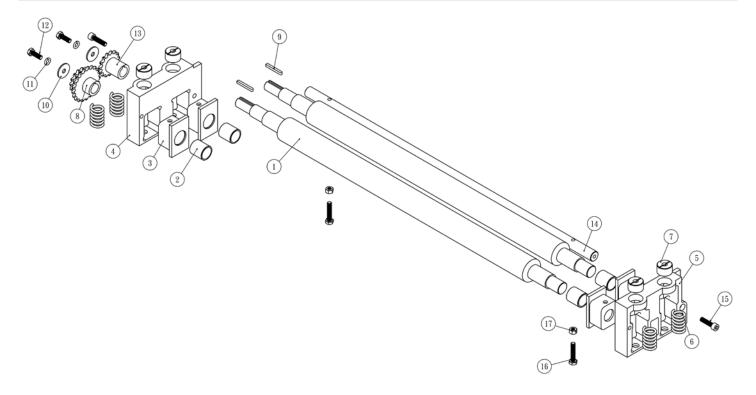
PARTS LIST: T010050 Inffed Roller Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C039056		1
2	C038006	25.3 x § 75.95	32
3	P063004	#22 (Φ16.3x25LxΦ14.12)	128
4	C051023	§ 36x § 65x20L	2
5	S213016	M8-P1.25x16L	4
6	C009028		2
7	P051002	§ 30x § 36x38L	2
8	C015047		1
9	C015132		1
10	C067014	27T- \$ 37x \$ 25x34L	1
11	S003075	6x6x30L	1
12	C053011	3tx § 31.75x § 11	1
13	S284008	§ 10.2x § 18.4x3.7x2.5T	1
14	S137020L	M10-P1.5x20L	1
15	C048118	§ 25.4x943L	1
16	S203040	M10-P1.5x40L	2
17	C060058	§ 5x § 33x72L	2
18	C034033		2



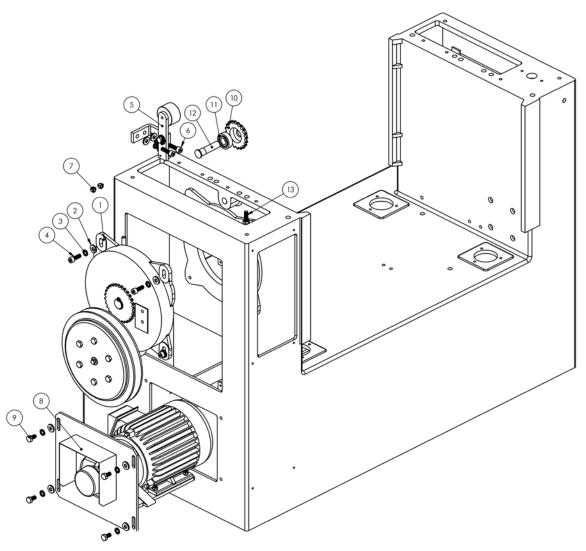
PARTS LIST: T011016 Outfeed Roller Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C039055		2
2	P051002	§ 30x § 36x38L	4
3	C009028		4
4	C015286		1
5	C015285		1
6	C060012	§ 5x § 33x58L	4
7	C034033		4
8	C068007	(15Tx 21T)- § 37x § 25x51L	1
9	S003079	6x6x50L	2
10	S282113	§ 10.5x § 37x3.0T	2
11	S284008	§ 10.2x § 18.4x 3.7x 2.5T	2
12	S137030L	M10-P1.5x30L	2
13	C067024	15T-Φ37xΦ25x51L	1
14	C048117	§ 25.4x943L	1
15	S203040	M10-P1.5x40L	2
16	S137050	M10-P1.5x50L	2
17	S273010L	M10-P1.5	2



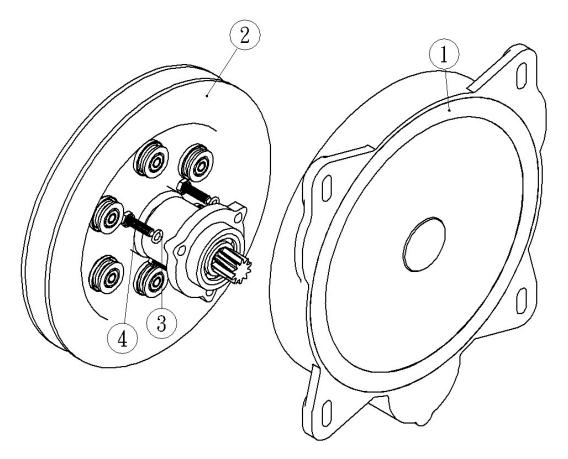
PARTS LIST: A007104 Transmission Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	G006004		1
2	S282111	(§ 3/8) § 10.2x § 24x3.0T	10
3	S284008	§ 10.2x § 18.4x 3.7x 2.5T	12
4	S203030	M10-P1.5x30L	4
5	T017006		1
6	S203035	M10-P1.5x35L	2
7	S277010R	M10-P1.5	2
8	T004042	4P/2HP	1
9	S137020	M10-P1.5x20L	4
10	C067023	20T- § 57x § 21x19L	1
11	S026204ZZ	6204ZZ § 20x § 47x14	1
12	C047011	§ 19.05x71L	1
13	S137030	M10-P1.5x30L	1
14	S307060	Chain, #425-P128	1
15	S307018	Chain, #425-P31	1
16	S301039	Belt, C-49	1



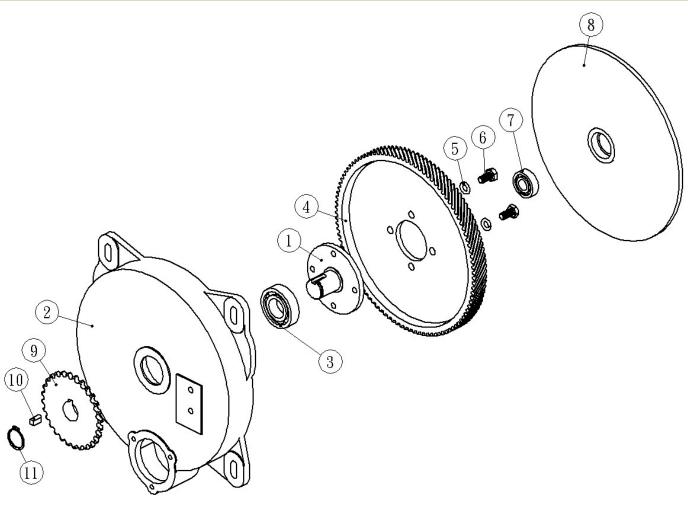
PARTS LIST: G006004 Speed Reducer

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	T014004		1
2	T015007		1
3	S284007	§ 8.2x § 15.4x 3.2x 2.0T	3
4	S136030	M8-P1.25x30L	3



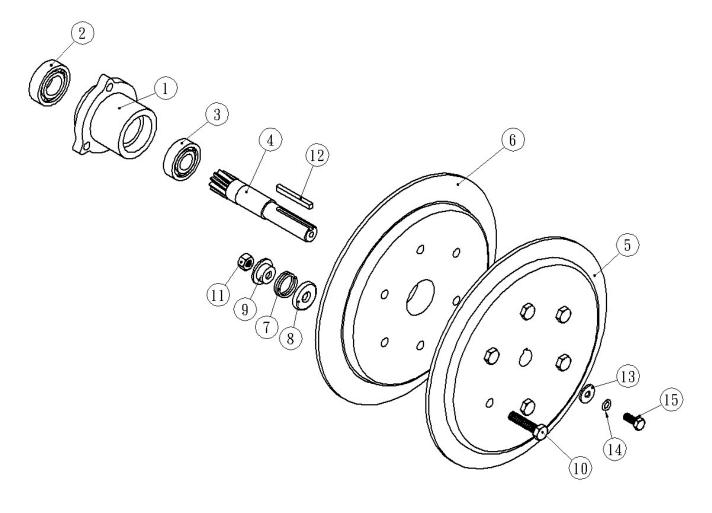
PARTS LIST: T014004 Reducer Box Assembly

PARTS NO.	SPECIFICATION	Q'TY
C039003		1
C031002		1
S026206ZZ	6206ZZ § 30x § 62x16	1
C029006		1
S284008	\$ 10.2x \$ 18.4x 3.7x 2.5T	4
S137016	M10-P1.5x16L	4
S026203ZZ	6203ZZ \$ 17x \$ 40x12	1
C009029		1
C067025		1
S003168	8x8x18L	1
S298019	S30 § 27.9x1.5t (1.65)	1
	C039003 C031002 S026206ZZ C029006 S284008 S137016 S026203ZZ C009029 C067025 S003168	C039003 C031002 S026206ZZ 6206ZZ \$ 30x \$ 62x16 C029006 S284008 \$ 10.2x \$ 18.4x 3.7x 2.5T S137016 M10-P1.5x16L S026203ZZ 6203ZZ \$ 17x \$ 40x12 C009029 C067025 S003168 8x8x18L



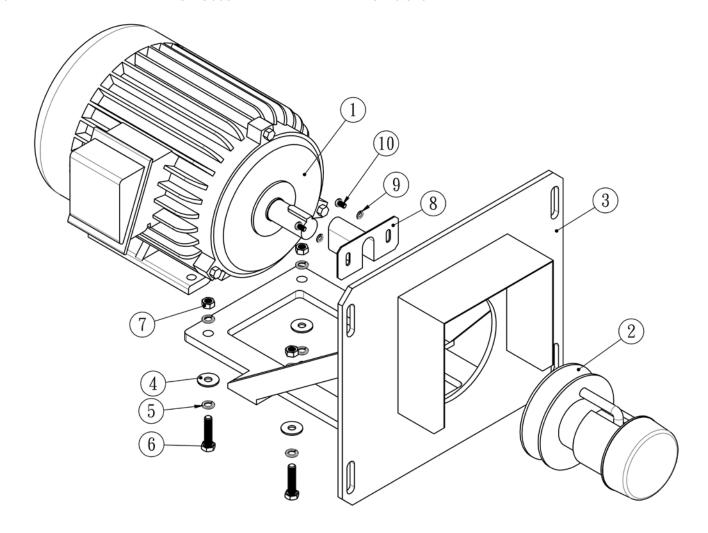
PARTS LIST: T015007 Pulley Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C009005		1
2	S026205ZZ	6205ZZ \$ 25x \$ 52x15	1
3	S026204ZZ	6204ZZ \$ 20x \$ 47x14	1
4	C029007	\$ 25.7x145L	1
5	C064017		1
6	C064016		1
7	C060020	\$ 2.5x \$ 29.5x50L	6
8	C053022	§ 10x § 35x5L	6
9	C051013	∮ 1 1/4"x12L	6
10	S137045	M10-P1.5x45L	6
11	S273010R	M10-P1.5	6
12	S003080	6x6x55L	1
13	S282109	§ 8.2x § 23x2.2T	1
14	S284007	§ 8.2x § 15.4x3.2x2.0T	1
15	S136620	M8-P1.25x20L	1



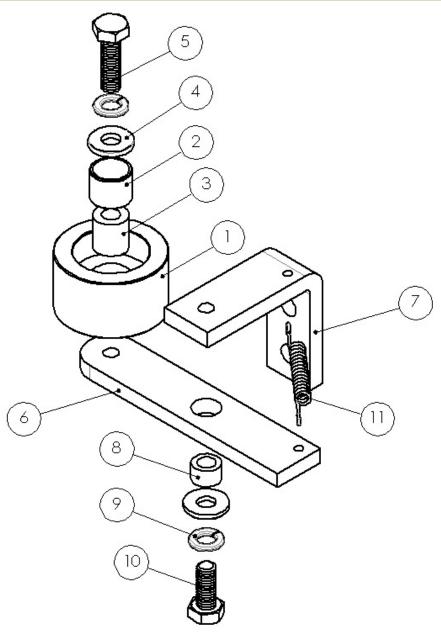
PARTS LIST: T004042 Motor Assembly, Various Speed (2HP-3PH)

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	P041404R	4P 2HP(1.5KW)	1
2	P050001	2HP	1
3	C015158		1
4	S282109	§ 8.2x § 23x2.2T	4
5	S284007	§ 8.2x § 15.4x 3.2x 2.0T	8
6	S136035	M8-P1.25x35L	4
7	S273008R	M8-P1.25	4
8	C023018		1
9	S284005	§ 5.1x § 9.2x1.7x1.3T	2
10	S225008	M5-P0.8x8L	2



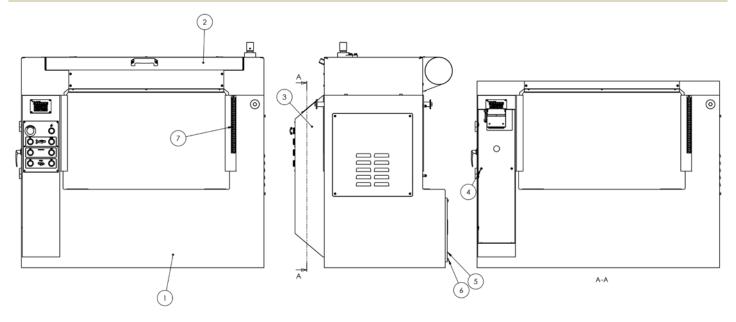
PARTS LIST: T017006 Link Assembly

PARTS NO.	SPECIFICATION	Q'TY
C066004	35tx ∮ 60	1
P051001	§ 19.05x § 22.225x18L(§ 3/4)	1
C052016	§ 10x § 19.05x20L	1
S282111	(§ 3/8) § 10.2x § 24x3.0T	2
S137035	M10-P1.5x35L	1
C049018	9.525tx31.75x138L	1
C015030		1
C051024	§ 15.875x § 10x10.5L	1
S284008	§ 10.2x § 18.4x3.7x2.5T	2
S137025	M10-P1.5x25L	1
C060011	§ 1.5x § 10x59.5L	1
	C066004 P051001 C052016 S282111 S137035 C049018 C015030 C051024 S284008 S137025	C066004 35tx § 60 P051001 § 19.05x § 22.225x18L(§ 3/4) C052016 § 10x § 19.05x20L S282111 (§ 3/8) § 10.2x § 24x3.0T S137035 M10-P1.5x35L C049018 9.525tx31.75x138L C015030 (S15.875x § 10x10.5L) S284008 § 15.875x § 18.4x3.7x2.5T S137025 M10-P1.5x25L



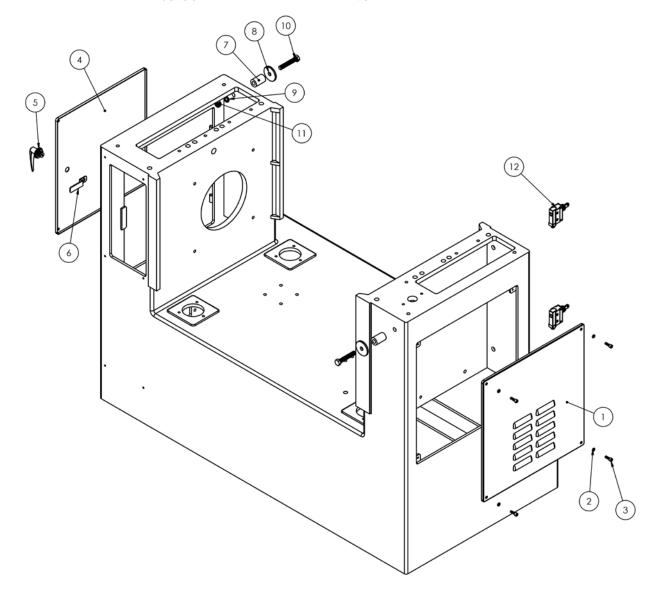
PARTS LIST: A009223 Cover Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	T025060		1
2	T025059		1
3	T075004		1
4	S233010	M6-P1.0x10L.	6
5	P100111C10		1
6	S201020	M6-P1.0x20L	4
7	P108105	28x325 (12")	1



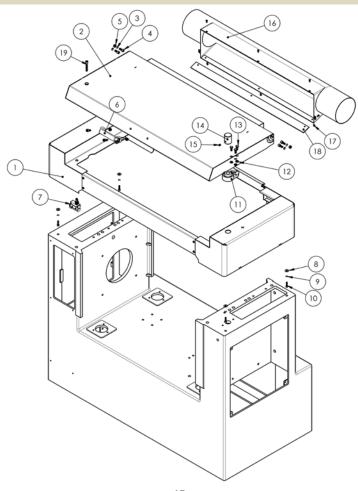
PARTS LIST: T025060 Cover Assembly, Body

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C074391		1
2	S284006	§ 6.1x § 12.2x2.7x1.5T	4
3	S201020	M6-P1.0x20L	4
4	C074028		1
5	P027001		1
6	P027051	2.2Tx19.05x78L	1
7	C039005		2
8	C053021	§ 50x § 12x5T	2
9	S284009	§ 12.2x § 21.5x4.2x3.0T	2
10	S138070	M12-P1.75x70L	2
11	S273012R	M12-P1.75	2
12	P087301	TZ-7311	2



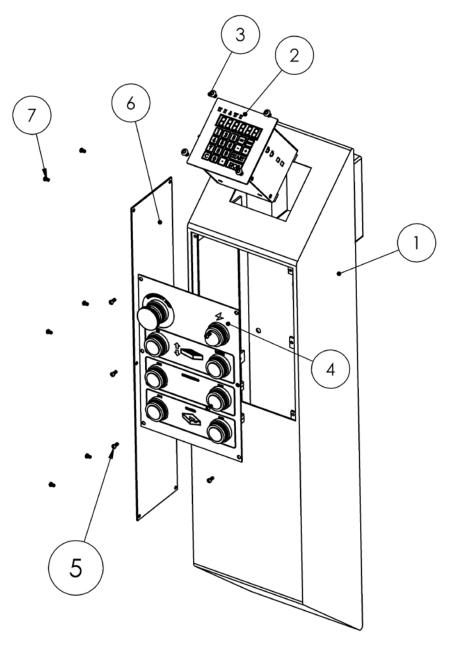
PARTS LIST: T025059 Cover Assembly, Top

NO.	PARTS NO.	SPECIFICATION	Q' TY
1	T028015		1
2	C073157		1
3	S284007	§ 8.2x § 15.4x 3.2x 2.0T	9
4	S202020	M8-P1.25x20L	6
5	S285008R	M8-P1.25	4
6	P030106	42Hx146L	1
7	P087301	TZ-7311	1
8	S282106	§ 6.6x § 19x2.0T	4
9	S284006	∮ 6.1x ∮ 12.2x2.7x1.5T	4
10	S201025	M6-P1.0x25L	4
11	S057004	UCFB 204 § 20	1
12	S282108	(§ 5/16) § 8.4x § 15.8x2.2T	3
13	S136020	M8-P1.25x20L	3
14	C057058	\$ 38.1x50L	1
15	S213008	M8-P1.25x8L	1
16	C077114		1
17	S225010	M5-P0.8x10L	8
18	C096006		1
19	S202055	M8-P1.25x55L	1



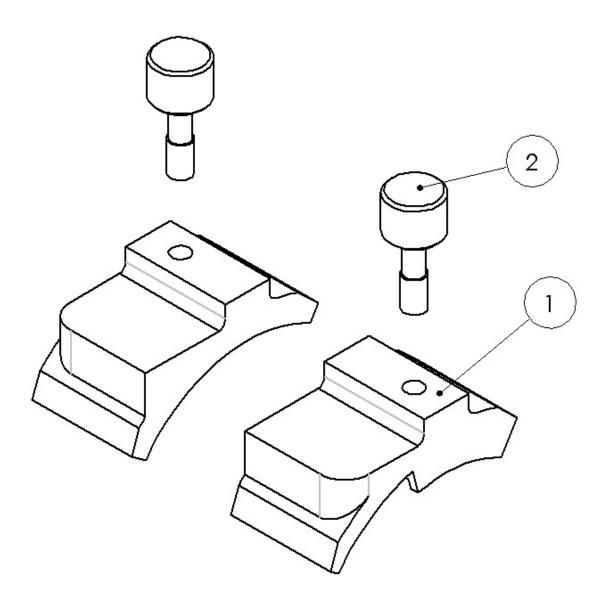
PARTS LIST: T075004 Control Panel Assembly

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C085038		1
2	P073201P	CH-525(P)	1
3	S233010	M6-P1.0x10L	4
4	P107013		1
5	S238003	W 5/32 -32x3/8"	6
6	C085039		1
7	S224006	M4-P0.7x6L	6



PARTS LIST: T029004 Gage Set

NO.	PARTS NO.	SPECIFICATION	Q'TY
1	C080003		2
2	C034032		2



PARTS LIST: T027019 Tool Set

NO.	PARTS NO.	SPECIFICATION	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

