

# OPERATION MANUAL AND PARTS LIST

## VBR-300 VERTICAL BAND SAW



**WARNING :** 1.Read this operation manual carefully before operation  
2.Keep this manual for future reference



## GENERAL SAFETY RULES FOR WOODWORKING MACHINERY

1. Know your machine. Read this operation manual carefully. Learn the machine applications and limitations, as well as the specific potential hazard peculiar to it.
2. Keep the guards in place and in working order.
3. The machine must be properly grounded to prevent electrical shocks.
4. Keep the work area clean. Cluttered areas invite accidents.
5. Don't use in a dangerous environment. Don't use the machine in a damp or wet locations, or expose it to rain. Keep the work area well-lit.
6. Keep children and visitors away. All children and visitors should be kept a safe distance from the work area.
7. Wear proper apparel. No loose clothing, gloves, neckties, rings, bracelets or other jewelry to get caught in moving parts. Non-slip wear is recommended. Wear protective hair covering to contain long hair.
8. Use safety glasses. Everyday eyeglasses only have impact-resistant lenses. They are not safety glasses.
9. Hold work securely.
10. Do not overreach.
11. Disconnect the machine from before servicing and when changing accessories such as the blade, etc.
12. Avoid accidental starting. Make sure the switch is at the OFF position before plugging in power wires.
13. Never leave the machine running unattended. Turn off the power.
14. Never have any part of your body in line with the path of blade.



## **ADDITIONAL SAFETY RULES FOR BAND RESAW**

1. Make sure all guards are in place before starting the machine.
2. The band saw is designed for cutting wood material only. Do not apply this machine for cutting metal.
3. Always keep blade teeth sharp.
4. Disconnect the machine from power source before servicing.
5. Check the wood material to be sure that it is free of defect.
6. Never try to remove small pieces of material from the conveyor belt when the machine is operating.
7. Make sure blade has proper tension. Too much tension may cause blade to break.
8. Do not back out of a cut during cutting as this will pull the blade off the wheels.
9. Wear gloves when handling the blade.



## MACHINE SPECIFICATIONS

<b>MODEL</b>	<b>VBR-300</b>
<b>MAXIMUM MATERIAL SIZE (W x H)</b>	<b>500x350mm</b>
<b>FENCE MOVEMENT</b>	<b>200mm</b>
<b>FEED ROLLER OPEN</b>	<b>300mm</b>
<b>MINIMUM CUT PIECE</b>	<b>3mm</b>
<b>SAW WHEEL DIAMETER</b>	<b>31.5" (800mm)</b>
<b>SAW BLADE LENGTH</b>	<b>4980mm</b>
<b>SAW BLADE WIDTH</b>	<b>2 inch</b>
<b>FEED SPEED (VARIABLE)</b>	<b>0-45 m/min</b>
<b>TABLE HEIGHT FROM FLOOR</b>	<b>890mm</b>
<b>SAW WHEEL MOTOR</b>	<b>30HP</b>
<b>FEED MOTOR</b>	<b>1 HP WITH INVERTER</b>
<b>FEED ROLLER MOVEMENT MOTOR</b>	<b>0.25HP</b>
<b>FENCE MOTOR</b>	<b>0.25HP</b>
<b>DUST HOOD OUTLET DIAMETER</b>	<b>Φ4" x 2</b>
<b>PACKING DIMENSIONS (LxWxH)</b>	<b>131 x 227 x 239 cm</b>
<b>NET WEIGHT</b>	<b>1906 KGS</b>
<b>GROSS WEIGHT</b>	<b>2110 KGS</b>



## **STANDARD EQUIPMENT**

- 30HP SAW WHEEL MOTOR
- FREQUENCY INVERTER CONTROLLED FEED SPEED
- PLC CONTROL WITH TOUCH SCREEN
- 2 INCH SAWBLADE
- OIL MIST BLADE COOLING SYSTEM
- OIL MIST SAW WHEELS SYSTEM
- HIGH ACCURACY HYDRALIC BLADE TENSION WITH GREMAN ELECTRIC CONTROL
- TOOL BOX WITH SERVICE TOOLS

## **OPTIONAL EQUIPMENT**

- 30HP SAW WHEEL INVERTER
- T.C.T. SAWBLADE
- STELLITE SAWBLADE

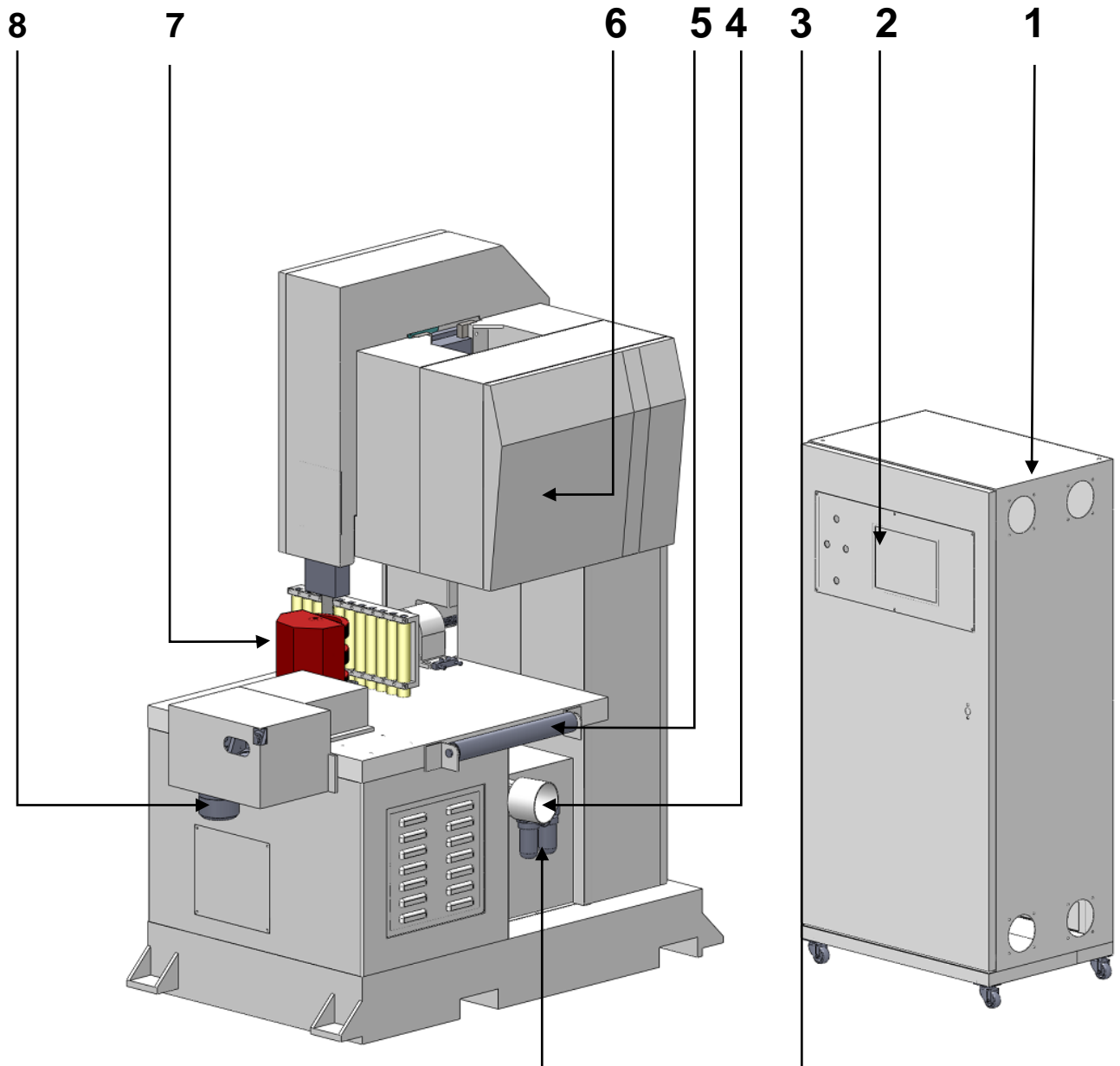


## LEGND OF THE MACHINE

1. ELECTRIC CONTROL BOX
2. ELECTRIC CONTROL PANEL
3. MAIN AIR PRESSURE UNIT
4. DUST HOOD OUTLET DIAMETER
5. IN FEED ROLLER
6. BLADE TENSION HYDRAULIC PUMP
7. FEED ROLLER
8. FEED ROLLER MOVEMENT MOTOR
9. SAW WHEEL MOTOR
10. FEED ROLLER MOTOR
11. DUST HOOD OUTLET DIAMETER
12. FENCE ROLLERS
13. FENCE MOTOR



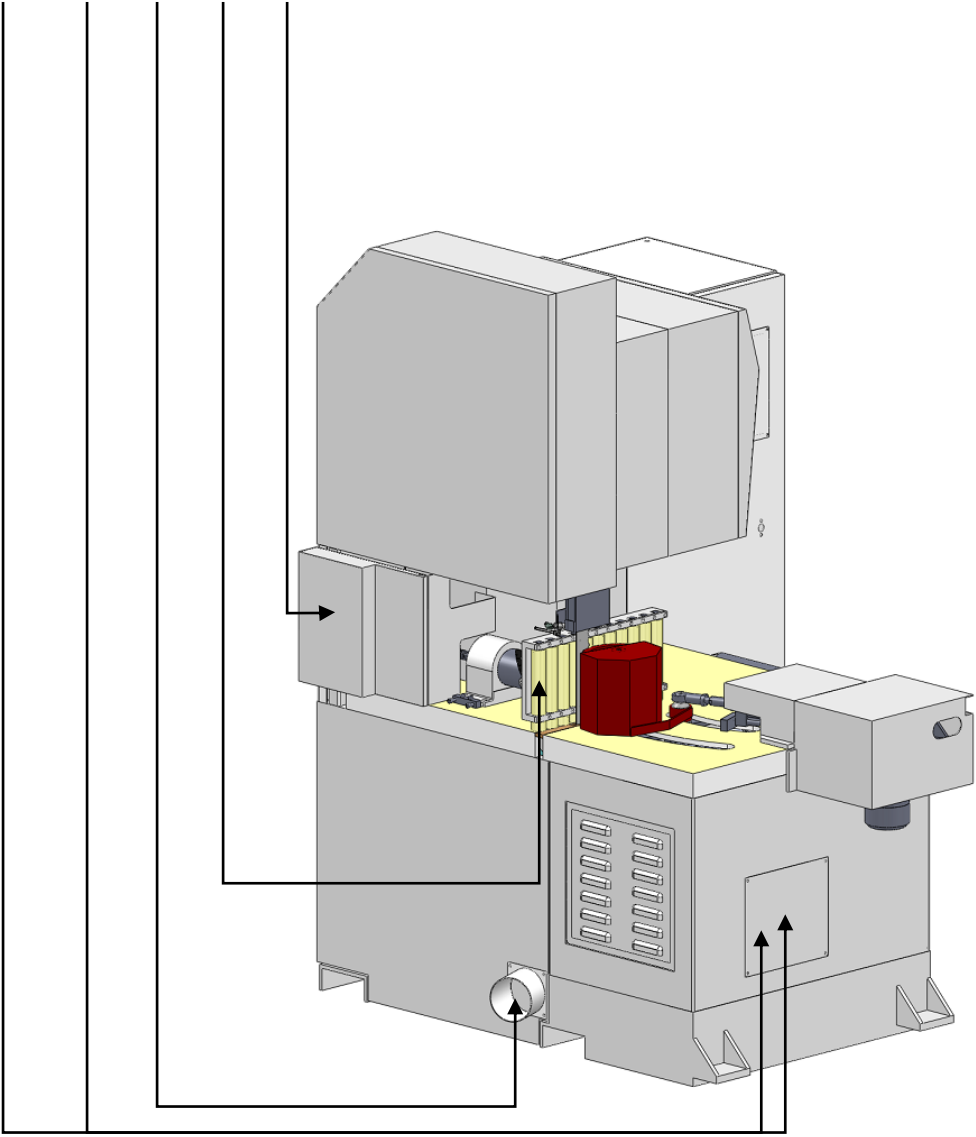
## LEGND OF THE MACHINE





LEGND OF THE MACHINE

9 10 11 12 13





## **UNPACKING THE MACHINE**

Remove the machine from the wooden crate carefully, and ensure that all parts are present and free from damage. If any parts are missing or damaged, contact your local distributor or the machine manufacturer immediately. Do not attempt to assemble or operate the machine without all parts present and in working.

## **CLEANING THE MACHINE**

Once the machine has been unpacked, then remove the rust preventative oil that coats the machine with a cloth soaked in kerosene. Do not use gasoline or lacquer thinner to remove the rust preventative oil, as this can damage the painted parts of the machine.

## **INSTALLING THE MACHINE**

Once the machine has been well placed at a proper work site, it is requested to make the machine leveling adjustment.

The four leveling screws located at the 4 corners are used for adjusting the machine leveling. Turn these 4 leveling screws until the proper machine leveling.



## LUBRICANTION

Please replacement lubricant after first 300 hours operation and do the same for every 2500 hrs.

Proper lubricant can sufficient support worm set contact surface lubrication. Ensure long life running and better efficiency for heavy duty and impact application.

Type of oil:

SPINDLE OIL K5035 (ISO VG5)

Oil for gear reducer:

LOAD	AMBIENT TEMP	CPC-HD	SHELL OIL - Omala oil	MOBLE OIL -Mobil gear	ESSO OIL -Spartan EP
NORMAL LOAD	-20°C~10°C	HD-150	R150	629	150
	-0°C~25°C	HD-220	R220	630	220
	10°C~40°C	HD-320	R320	632	320
	40°C~65°C	HD-460	R460	634	460
HEAVY LOAD	-0°C~25°C	HD-320	R320	632	320
	10°C~40°C	HD-460	R460	634	460
	40°C~65°C	HD-680	R680	636	680



## CONNECT POWER WIRES

Before connecting this machine to your factory power source, be sure that your power source voltage, hertz, and phase are all the same characteristics as that of the machine.

For personal safety, this machine must be properly grounded.

Connect the power wires to the “R.S.T.” terminals, located in the electric control box.

After the power wires are connected, you must check the running direction of the conveyor belt to determine if the wiring is correct or not.

If the conveyor belt runs to the opposite direction, then you need to change any two of the three input power.

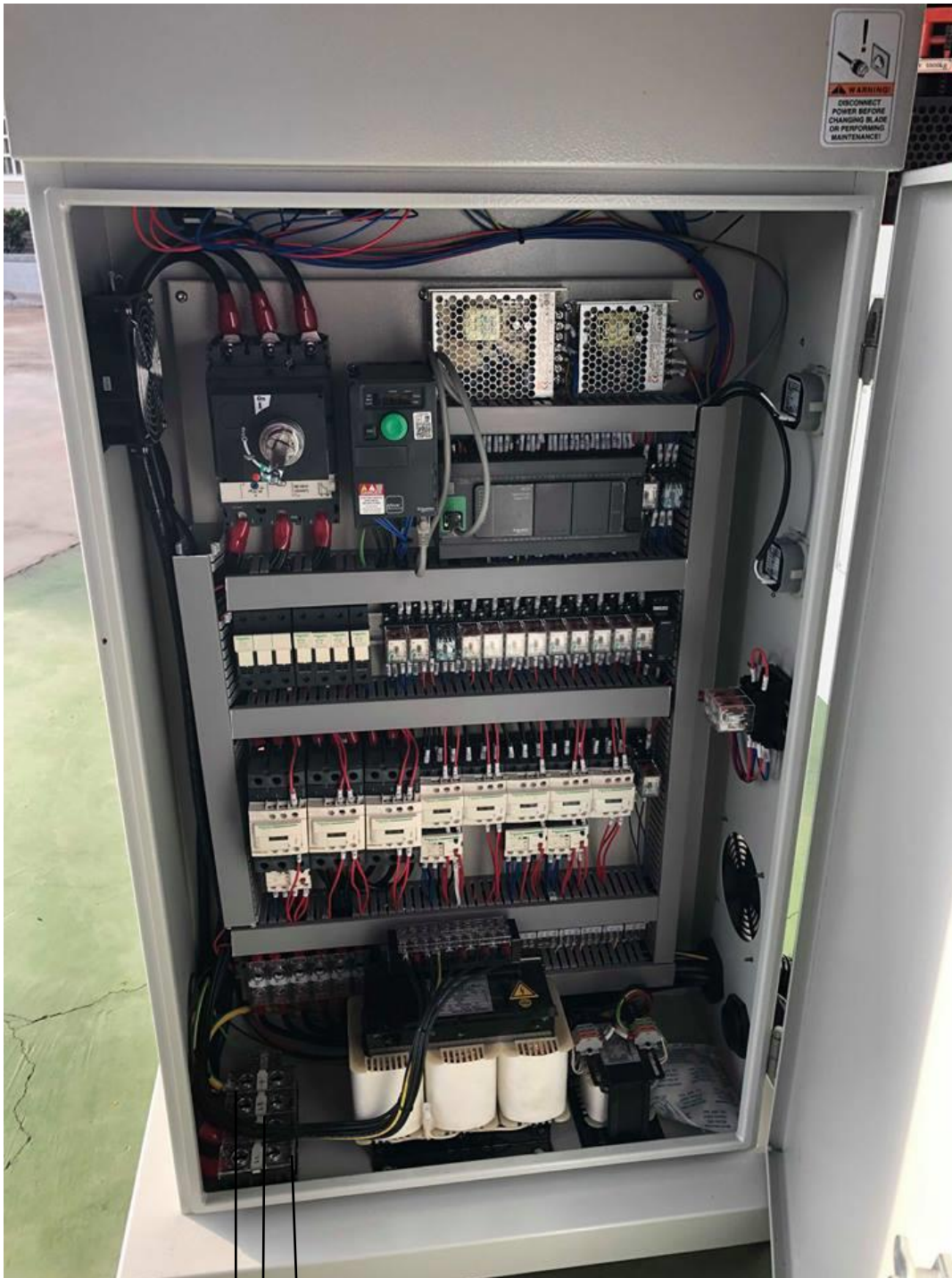


### WARNING

**Disconnect the machine from the power source before making wire connection.**

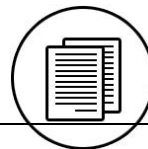


## CONNECT POWER WIRES



R S T

TO POWER SOURCE



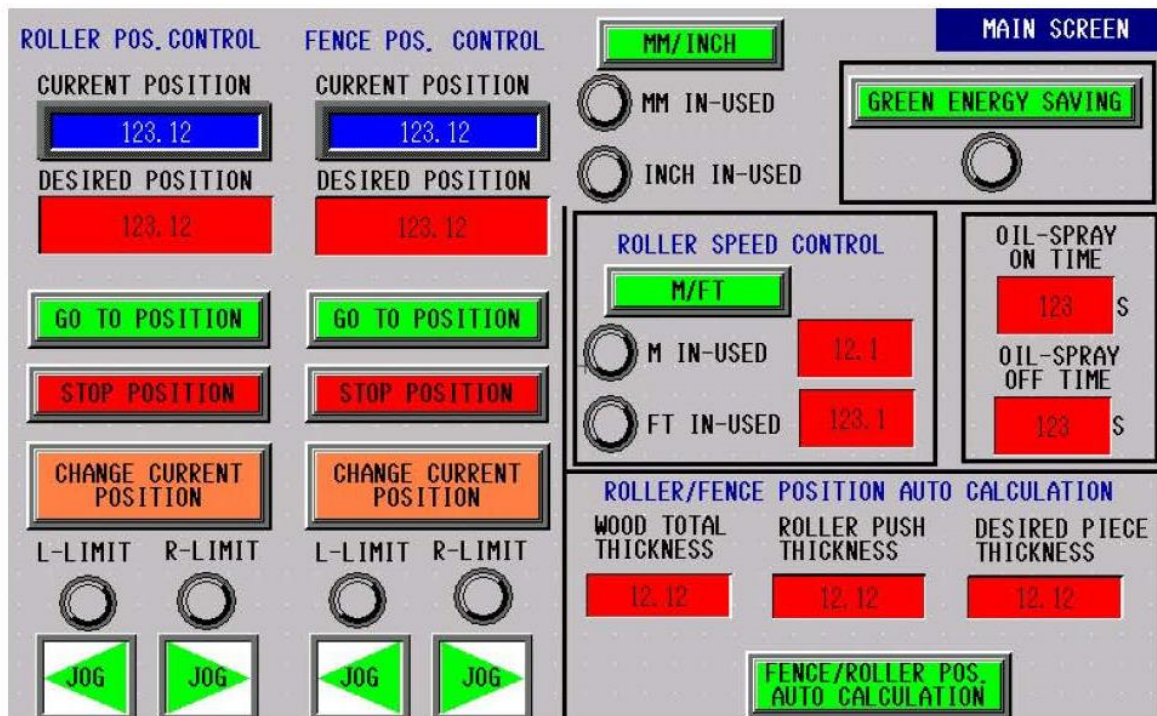
# VBR-300

Operator' s manual/Circuit Diagram

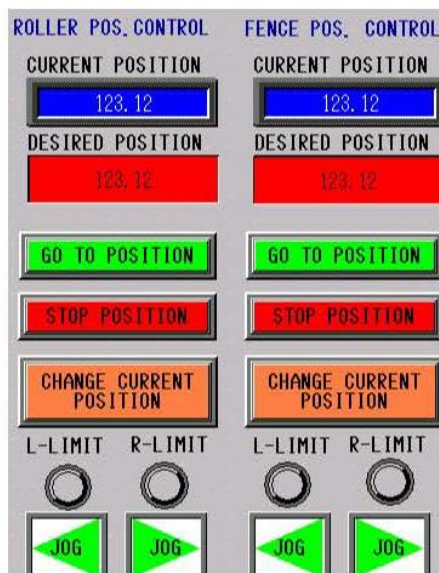
**Schneider Series**



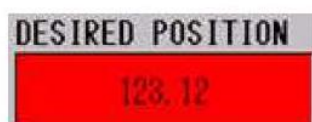
## 1. Main Screen:



## Feeding roller & Fence position control:





This box shows current position of feeding roller or fence.



Users can input position of feeding roller or fence they requires



\* After inputting desired position, press this button . Feeding roller or fence will go to desired position

\* After setting desired position, press this button  for 3 seconds. Current


position  will be changed to desired position. NOTE: When pressing , please be sure don't press the button when feeding roller or fence is in moving state.

\* Pressing this button , feeding roller or fence will stop moving.




When feeding roller or fence goes to too left side or too right side position these lights will flash.



\*When pressing , user can choose mm or inch for feeding roller or fence position.



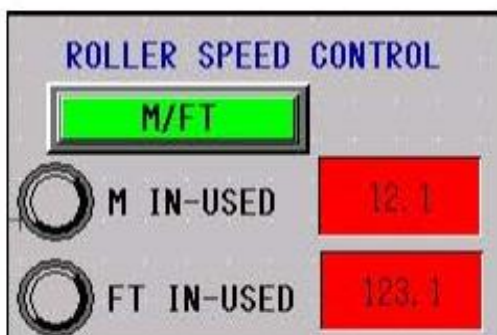
When users press **GREEN ENERGY SAVING**, the light  will on. It means if users forget to loosen blade tension when saw wheel is off. 20 minutes later saw blade tension will lose itself. Please retighten the blade tension if user want to use the machine.

Note: If not to use the band saw, please loosen the tension for blade, so blade's lifetime will be longer.

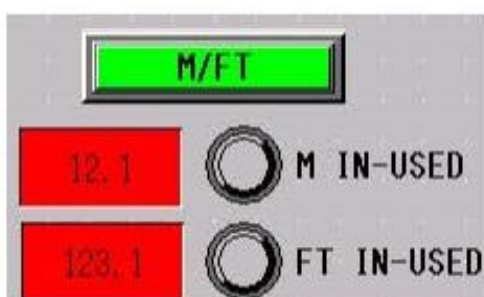


If user sets 5 into "ON TIME" and sets 2 into "OFF TIME", after each saw wheel on, oil spray system will spray oil for 5 seconds and rest for 2 seconds

### Conveyor Speed control:



\*

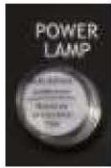


Users can choose Meter/Minute or Ft/Minute by



. The light  will on.

## Operator' s panel:



When power is on, this light on



When press Emergency stop button, machine stop



Touch screen on



Touch screen off



Conveyor CW/STOP/CCW



Feeding Roller on total on time.



Saw blade on/ off

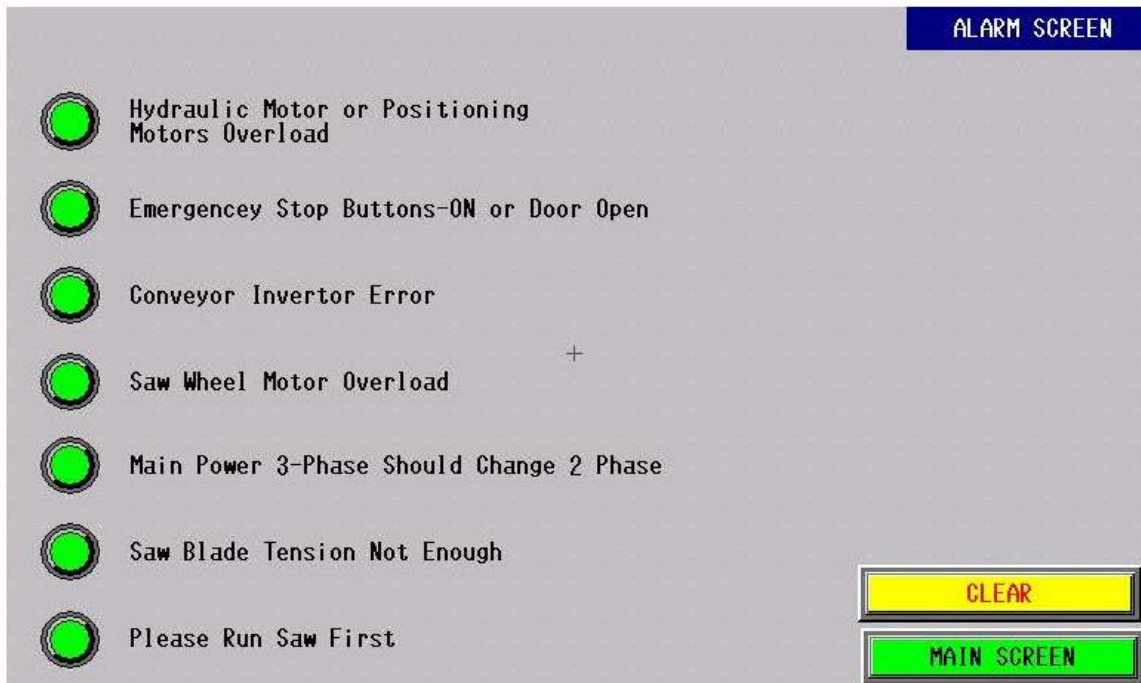



Saw blade total on time.



## 2. Alarm Screen:

These alarms will make machine not work. Please clear all alarms first



Press  to release alarm. If trouble shooting is not finished, alarm can not be released

Description of alarms:

\*Hydraulic Motor or Positioning Motor Overload: Please check Motors. Then, Reset the overload relay inside the electric box.

\*Emergency stop button on or Door open: Please release all emergency stop buttons and close doors.

\*Inverter Error: Please refer to invertor manual for trouble shooting.

\*Saw Wheel Motor Overload: Please check Motors. Then, Reset the overload relay inside the electric box.

\*3 phase power should change 2 phases: Please change 2 phases of main power because motors running direction is incorrect.

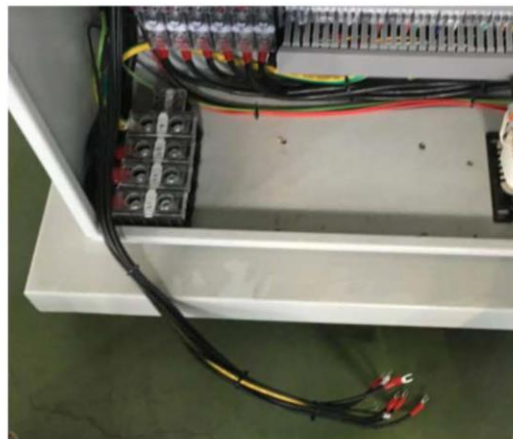
\*Saw Blade Tension not Enough: If saw blade is not tight or saw blade is tighten but oil is leaking. Tension is lower than 48 bars. This alarm occurs.

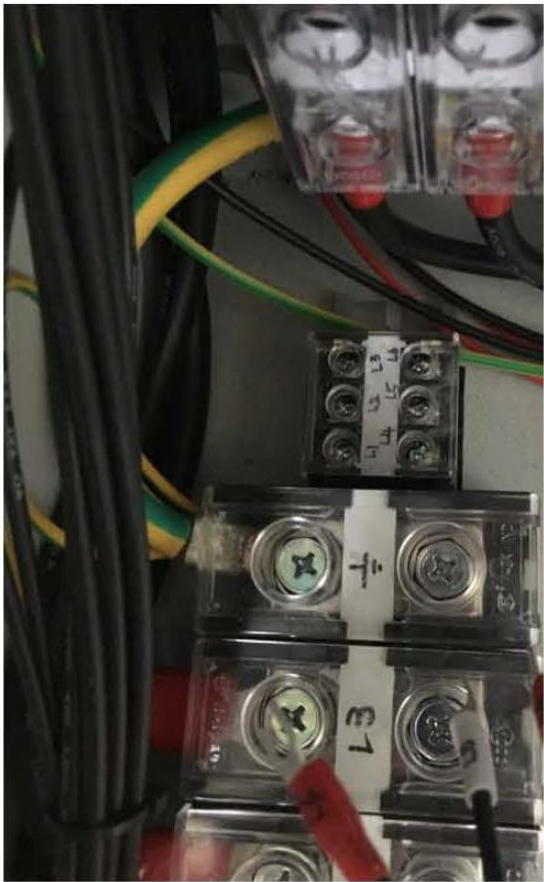
\*Please run saw first: If users run conveyor before running saw wheel, the alarm will appear.



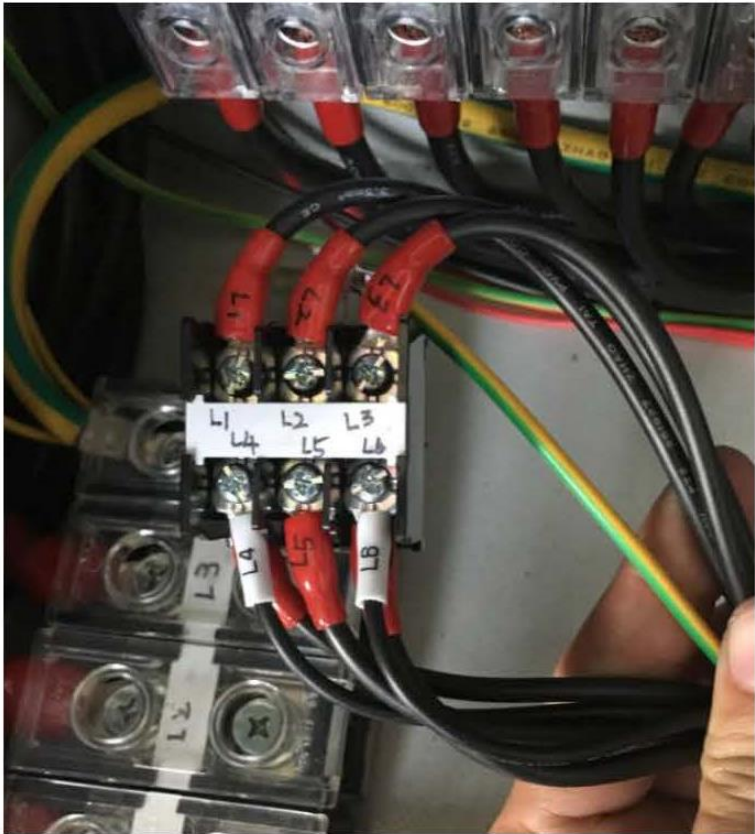
### 3. Change voltage from 480V to 230V:

Take out transformer



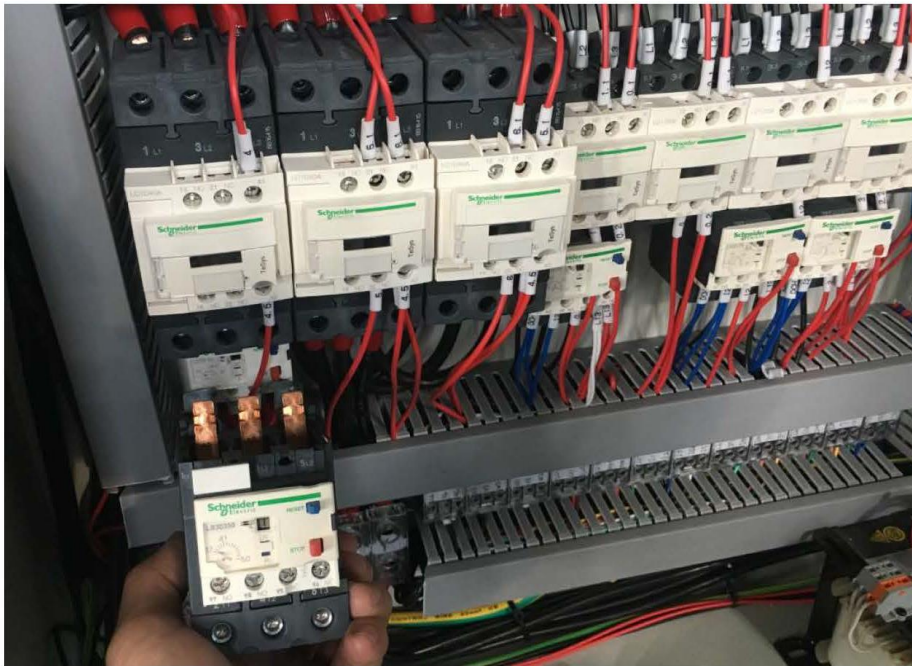


Connect wires to terminal block

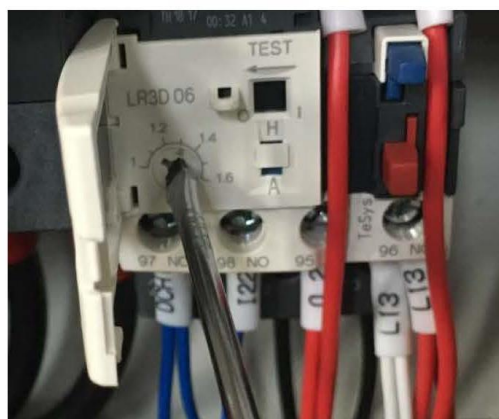
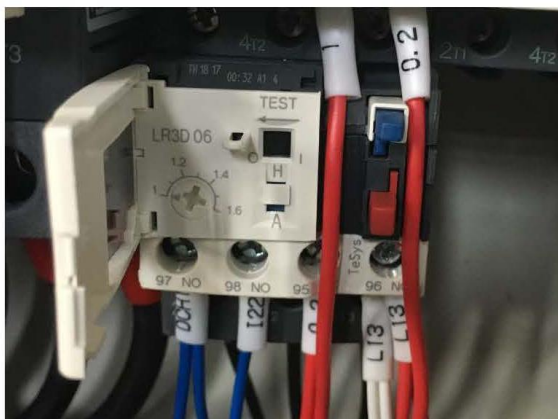




Change overload relay for saw wheel motor

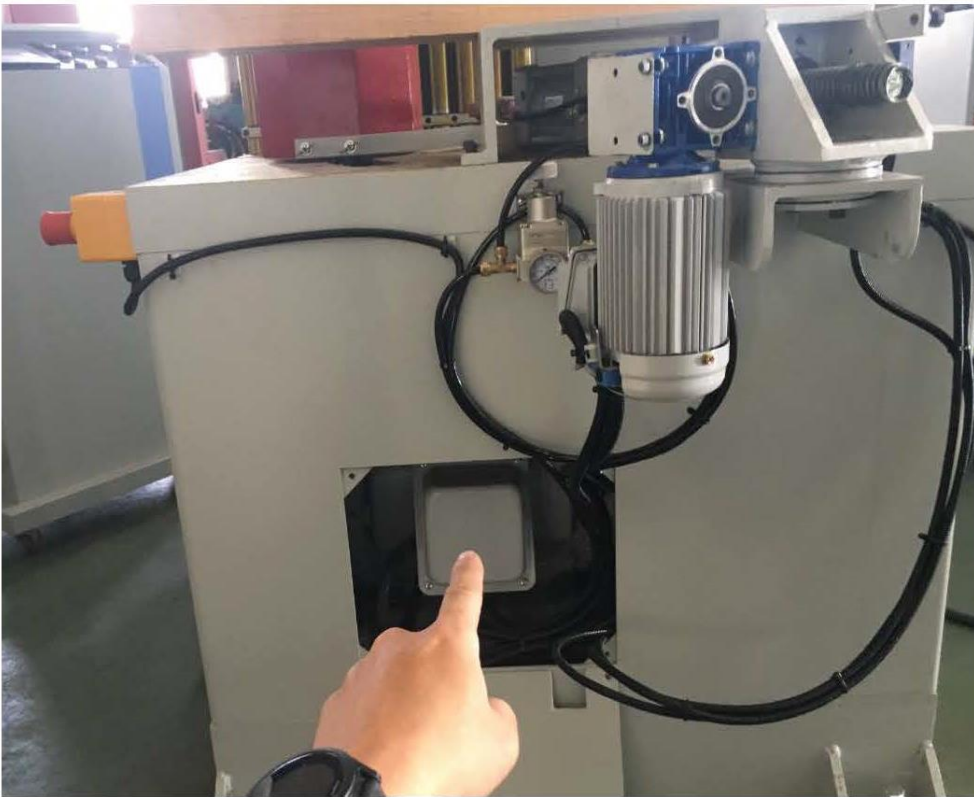


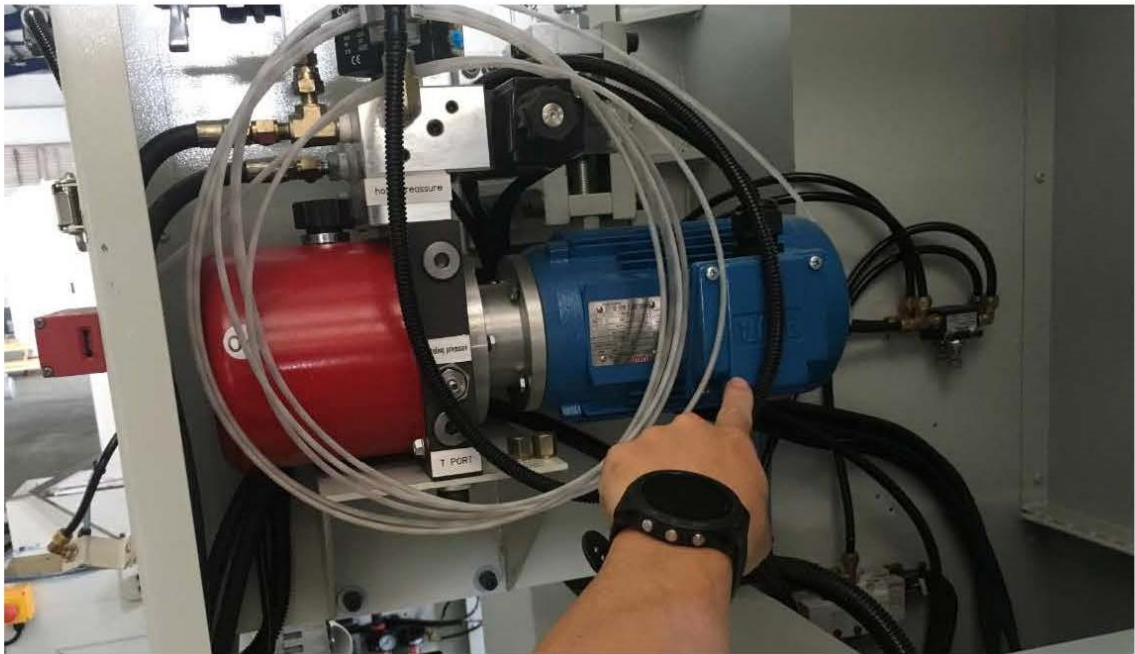
Adjust the value from 1A to 1.3A for 3 pieces of overload relay

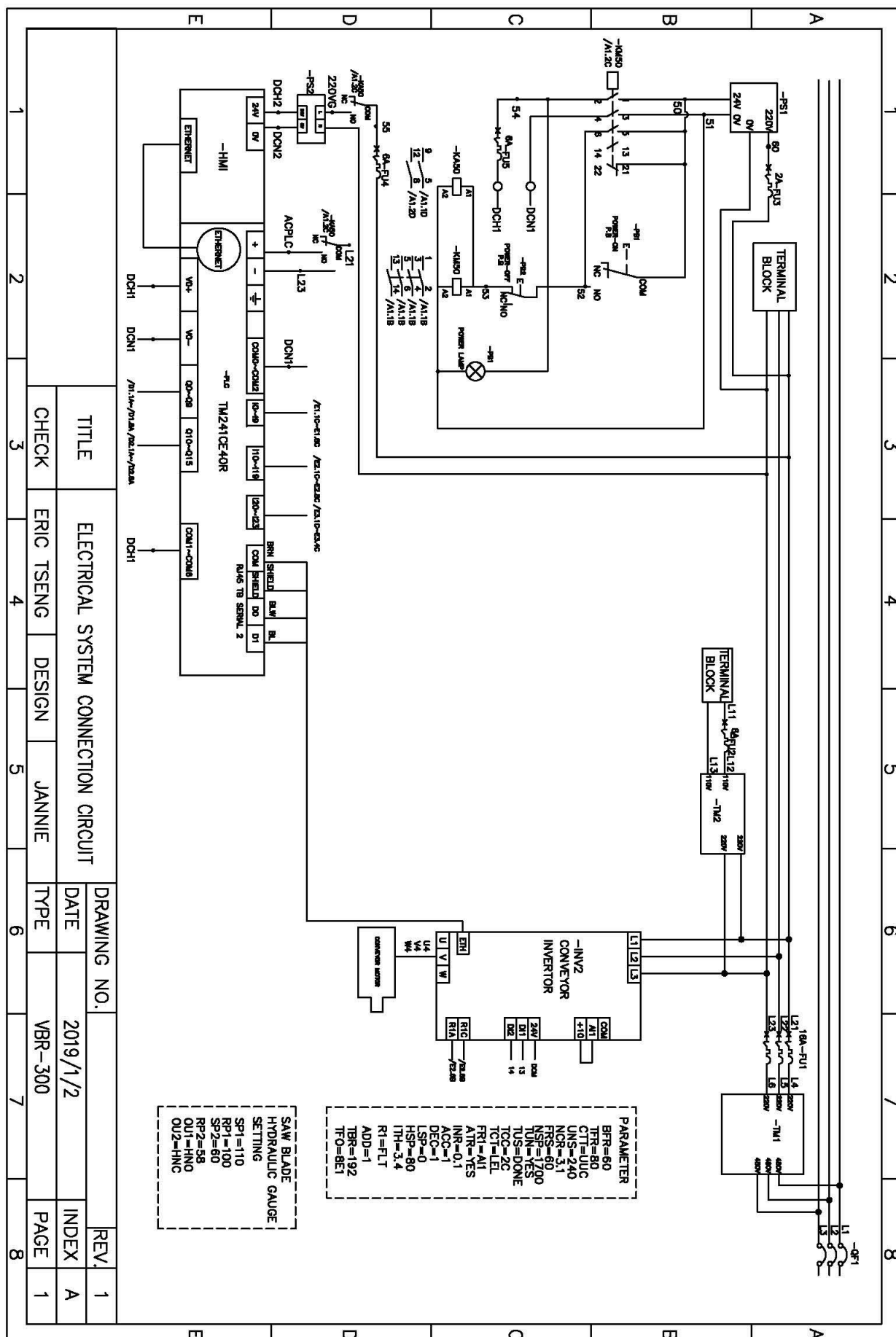


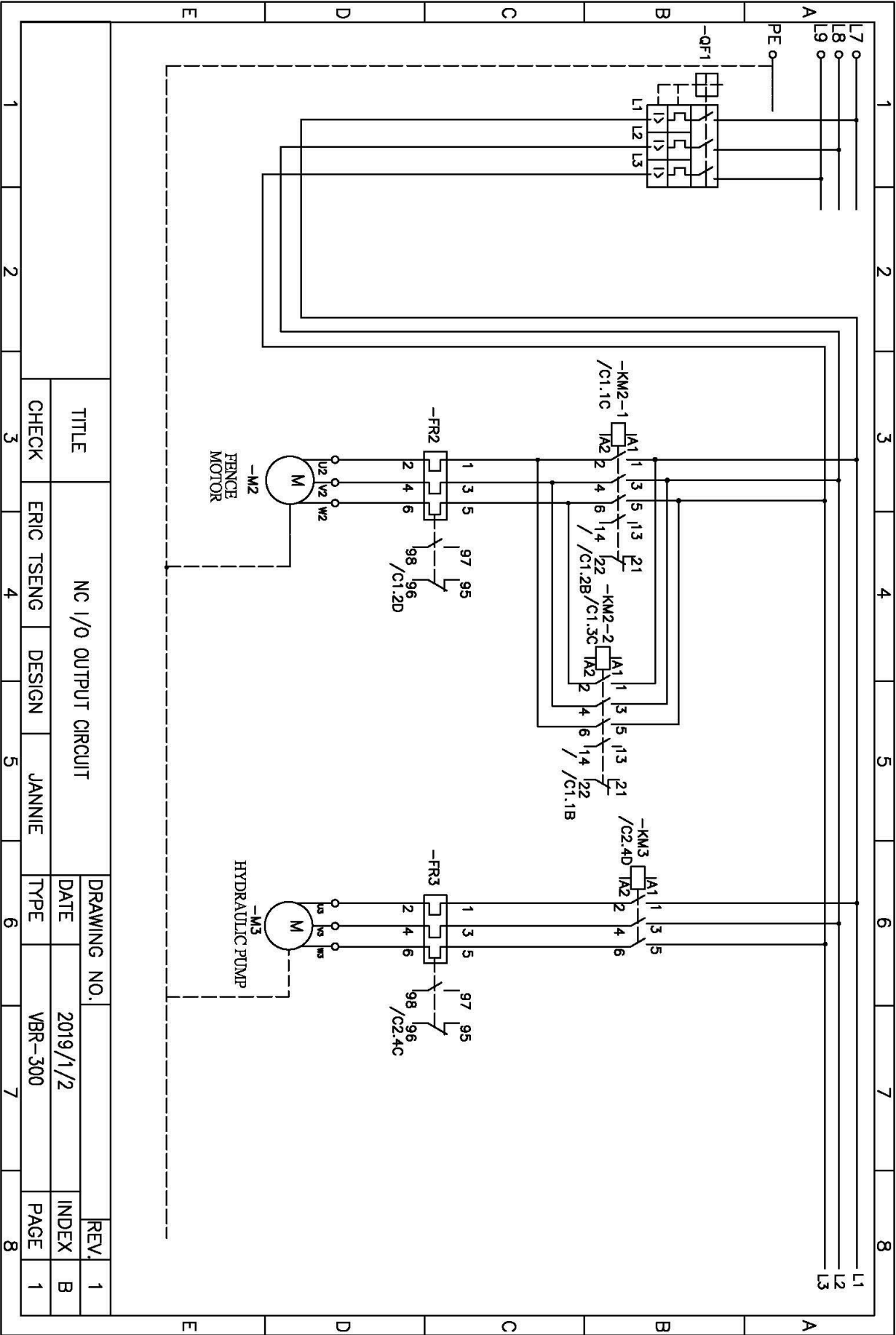


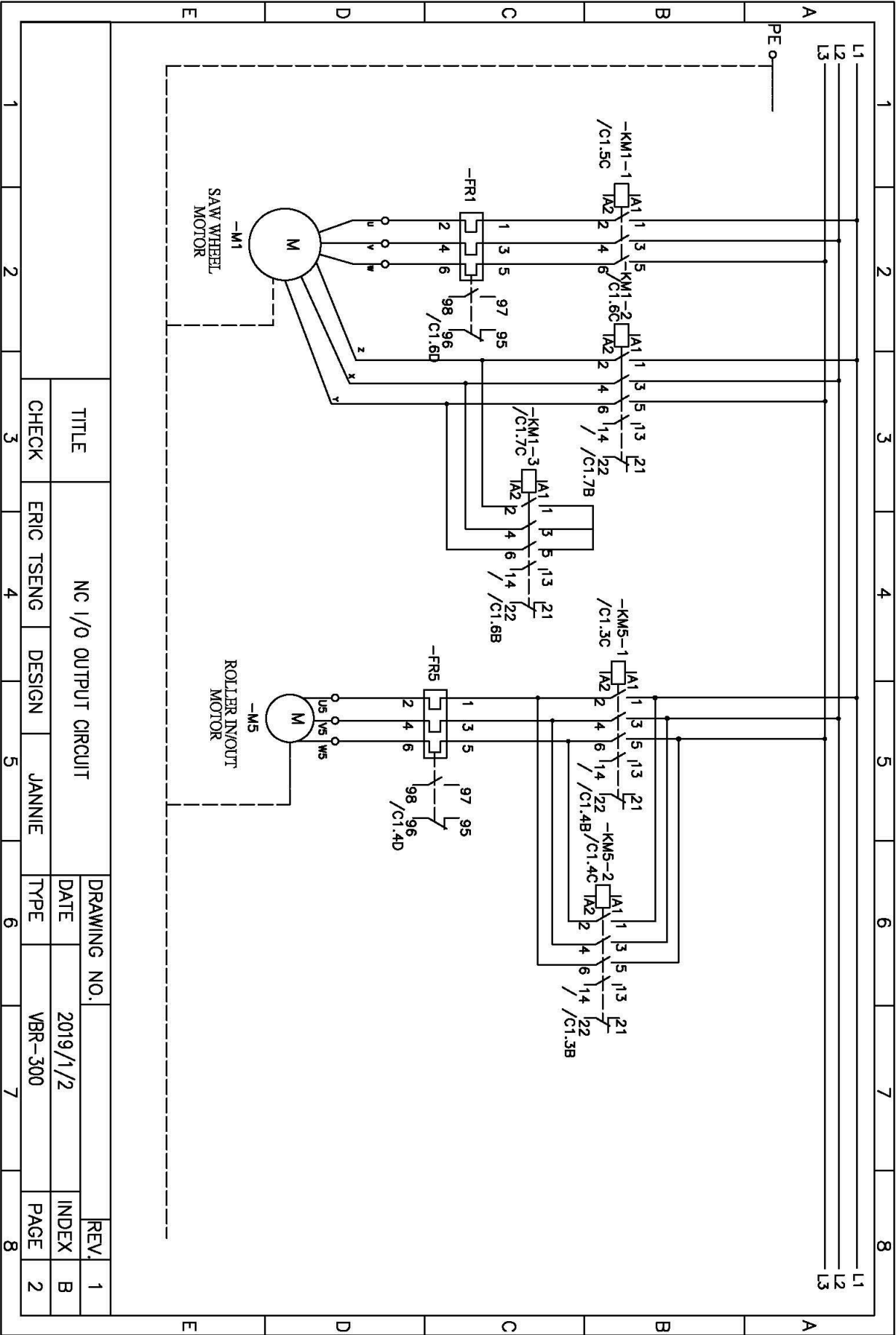
Change wires (saw wheel motor, fence motor, roller positioning motor, hydraulic motor) from high voltage to low voltage

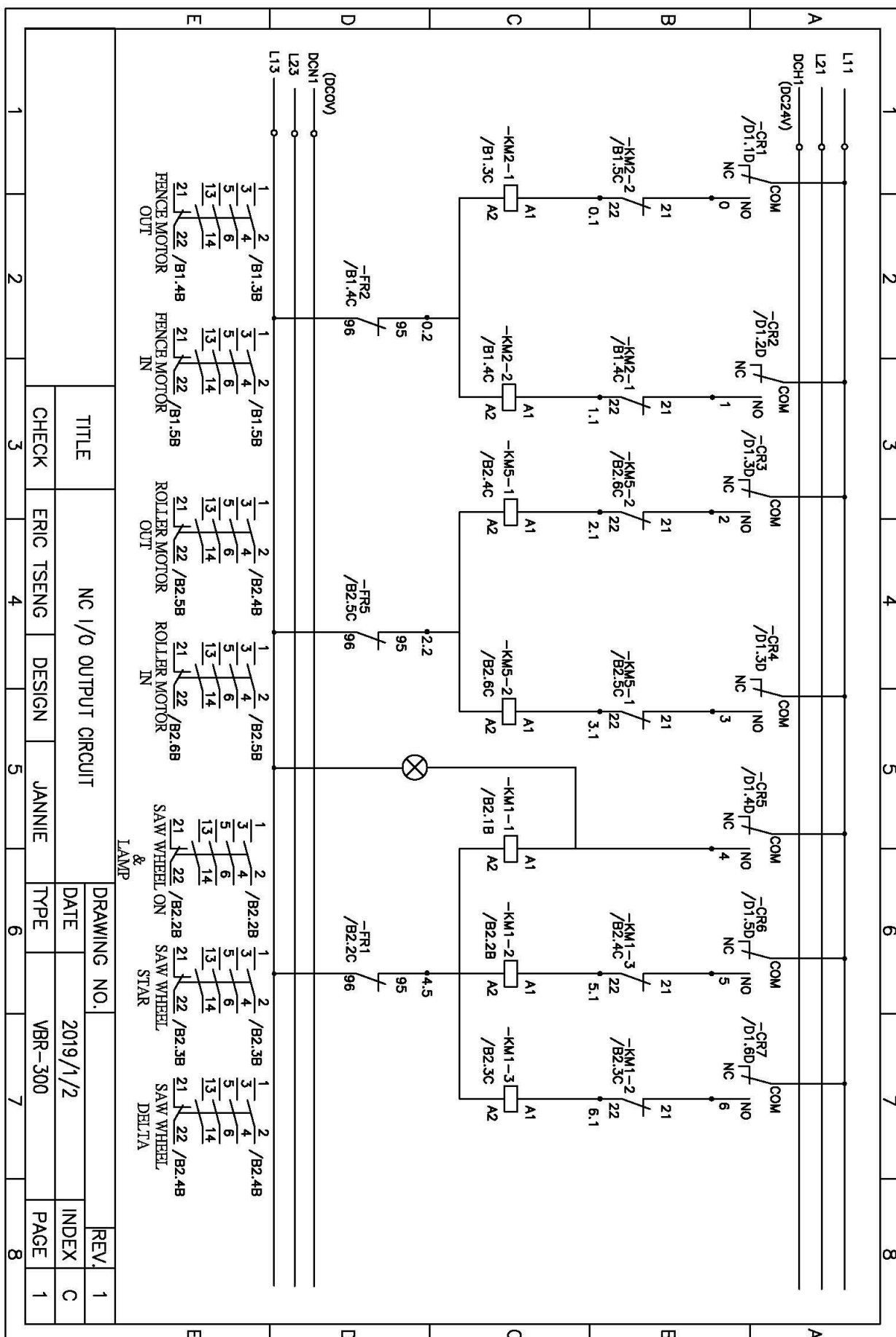


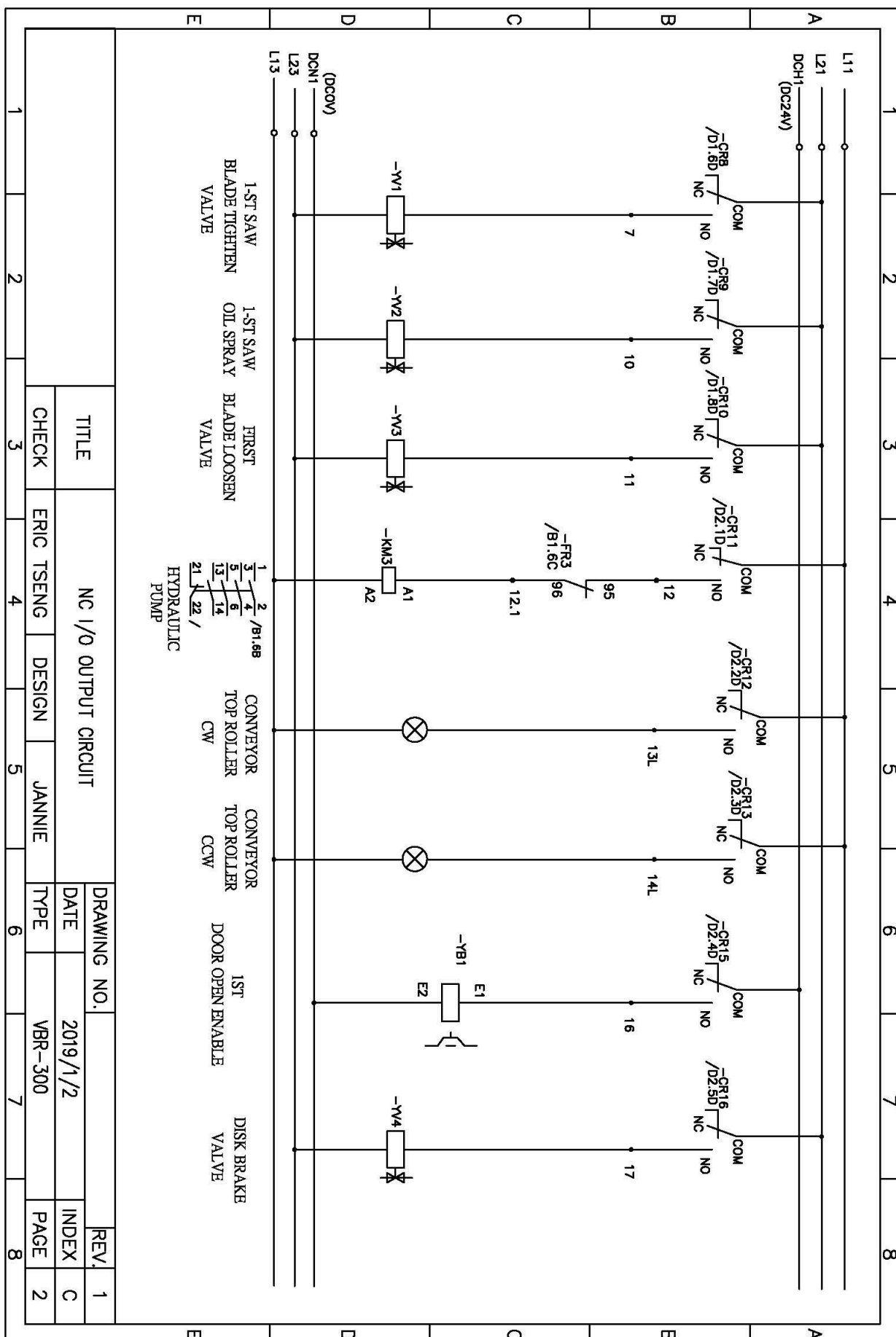


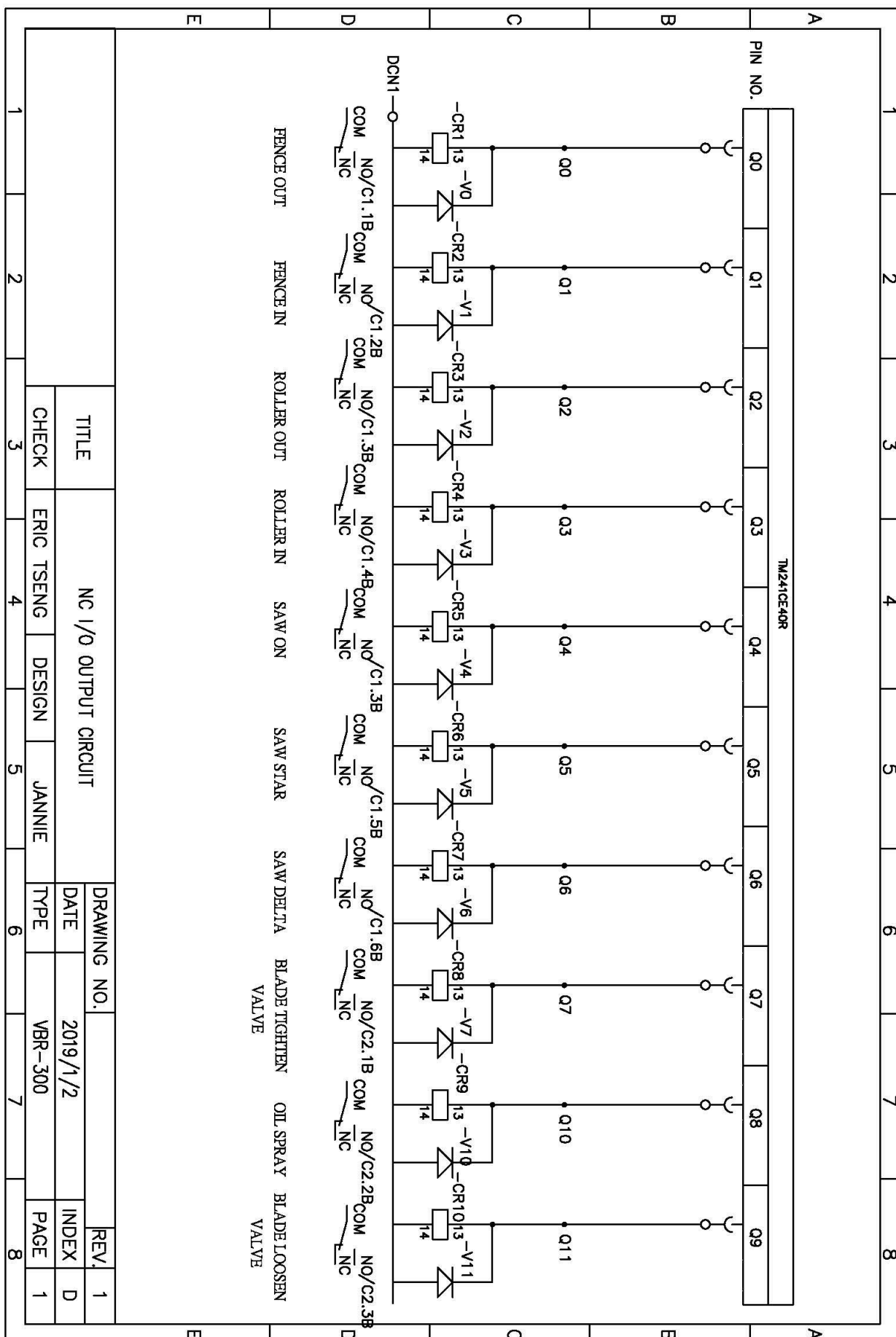


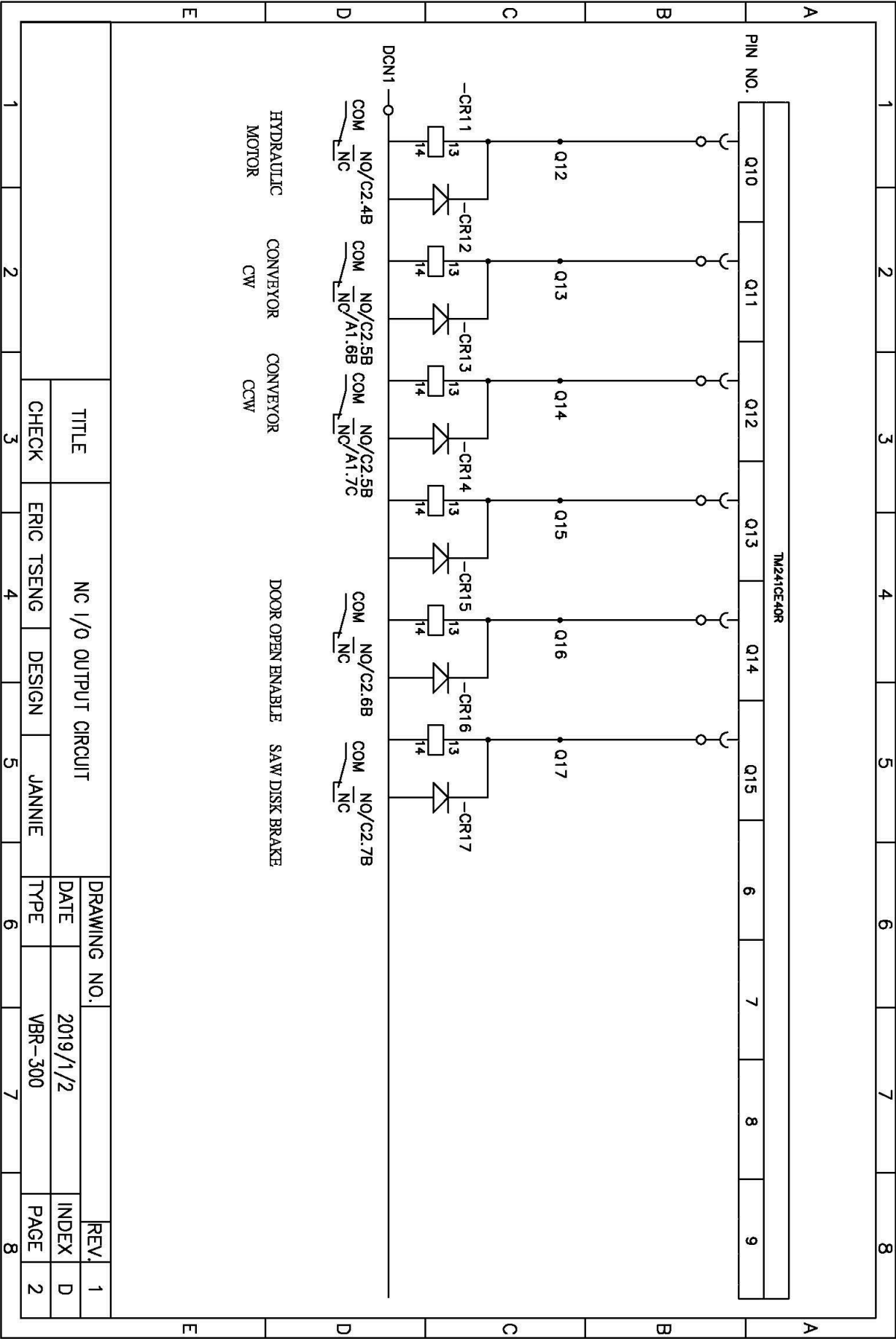


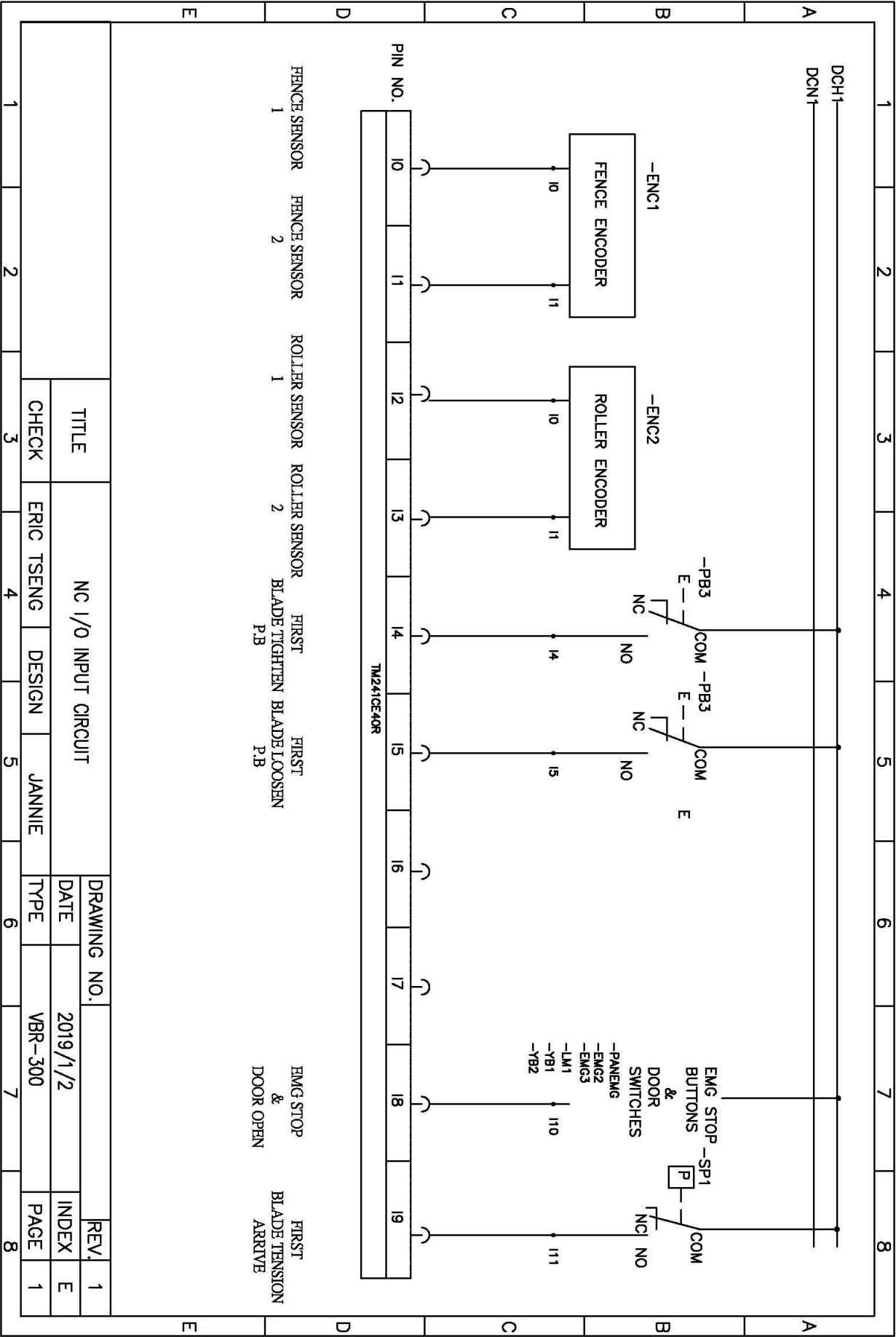


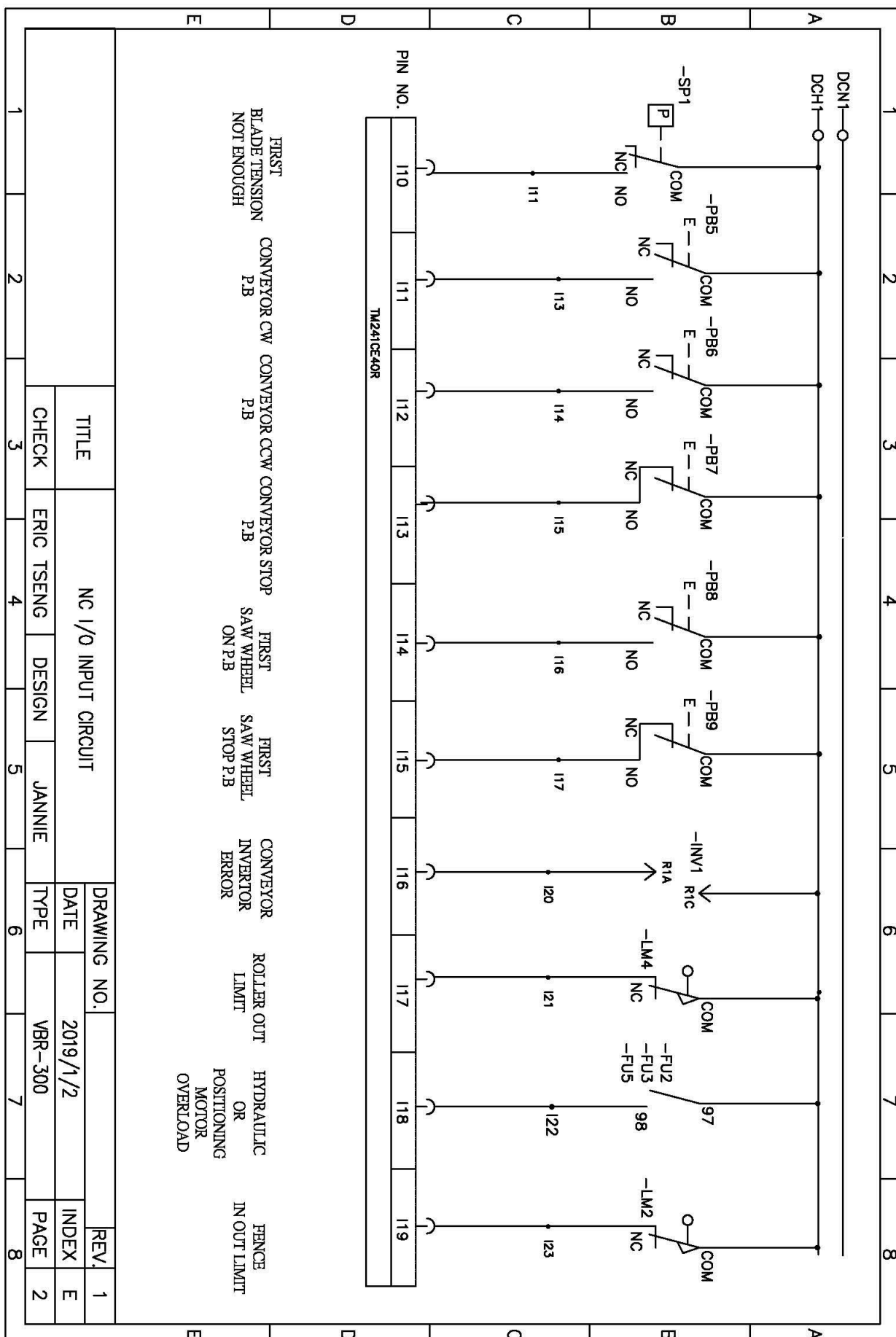


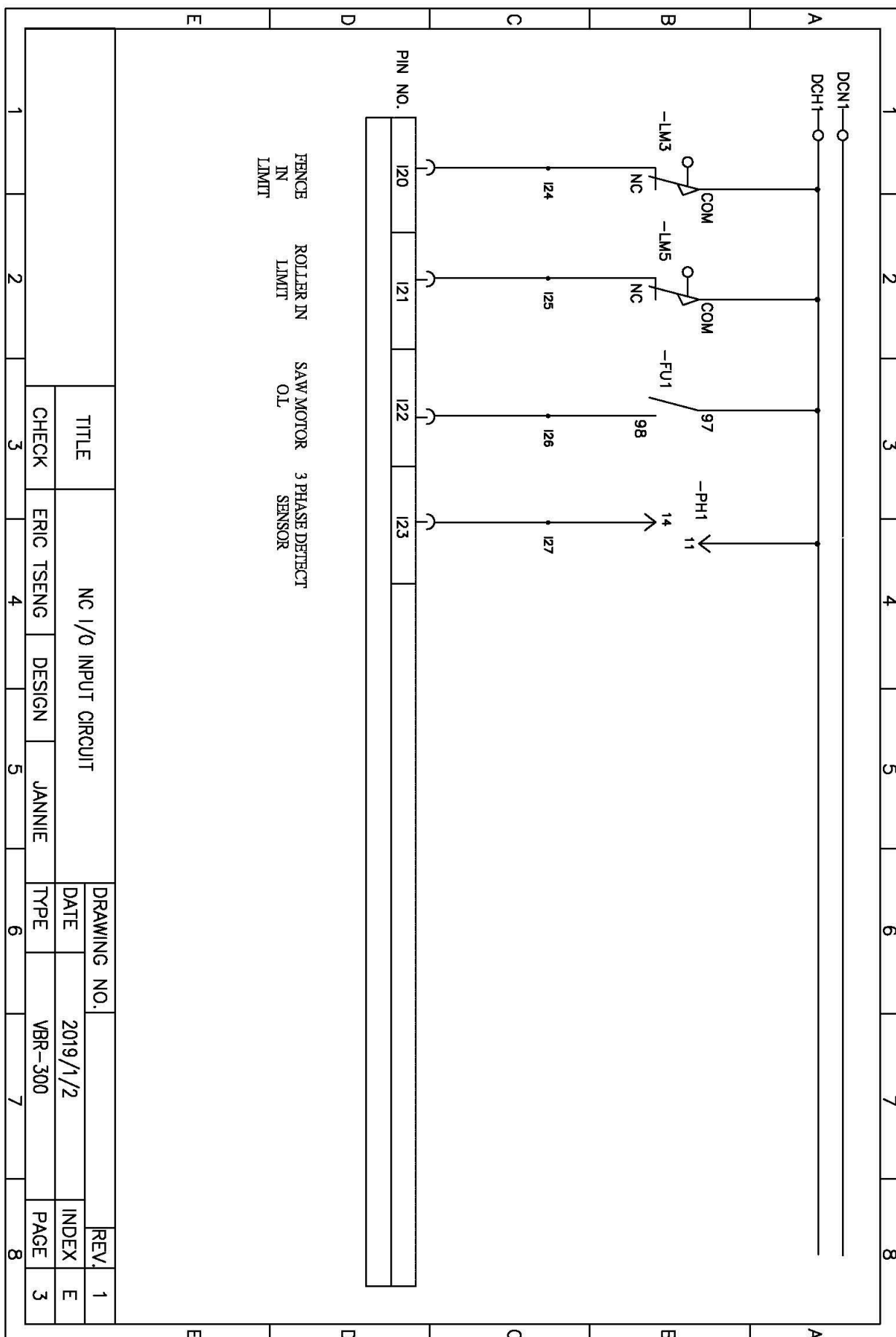














designation

type number

part number

quantity

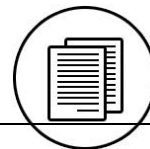
reference

**Main Control Panel**

FUJ-push button-1a/lamp(dec24)	AR22FOL-10E4G	40412122201	1	PB1
ETN-push button-1b	M22-D-R/K01	40412101001	3	PB2/PB7/PB9
TE-HM1-7 inch	HMGXU3512	40490107003	1	HM1
ETN-push button-1a/lamp(ac220)	M22-DL-G/K10/LLED230-G	40412101002	3	PB5/PB6/PB8
ETN-lamp-ac220	M22-L-W/LLED230-W	40500500009	1	
IDEC-EMG stop-2b	XN4E-BL402MFRH	40411600003	1	PANEMG
HOURS-timmer	H57/GRAY 100-130VAC	40210712007	2	

**Electric Cabinet**

LCE-transformal	2KVA-P-0/460/480 S1-0/220		1	TM1
LCE-transformal	220V-A-P-0/220 S1-0/110		1	TM2
TE-main power-switch(125a)	NSX160N 3P125A	41410102001	1	QF1
TE-main power-switch handle	lv429338	40501725002	1	QF1
TE-top feeding roller inverter	ATV320U07M3C-1HP/2200V	40370700102	1	INV1
TE-PLC	TE PLC TM241 CE4OR	40480105004	1	PLC
MW-dc power supply	LRS-50-24	40501305001	1	PS2
MW-dc power supply	LRS-100-24	40501310001	1	PS1
TE-FUSE base	DF103 3P	40502100002	1	FU1
ETN-fuse	FWC-16A10F	40502000003	3	FU1
TE-FUSE base	DF101	40502100001	4	FU2~FU5
ETN-fuse	FWC-6A10F	40502000001	4	FU2~FU5
OMRON-3 phase detector	K8DS-PH1	40413200001	1	PH1
OMRON-relay base	PYF14A-E	40500200102	2	
OMRON-relay	MY4N-1-DC24	40500200002	2	KM50/CR13
OMRON-relay base	PYF08A-E	40500200101	15	
OMRON-relay	MY2N-GS-DC24	40500200008	15	KA50/CR1~CR12/CR15/CR16
TE-magnetic contactor-ac110-9a	LC1D40F7	40501100014	3	KM1-1/KM1-2/KM1-3
TE-magnetic contactor-ac110-9a	LC1D09F7	40501100012	5	KM2-1/KM2-2/KM3/KM5-1/KM5-2
TE-motor protector-1-1.6a	LR3D06	40412700011	3	FR2/FR3/FR5
TE-motor protector-37~50a	LR3D350	40412700010	1	FR1/240V
TE-motor protector-23-32a	LR3D32	40412700009	1	FR1/480V



TE-contactor interlock-1	LAD9V2	40413100002	2	KM2/KM5
TE-contactor interlock-2	LAD9V6	40413100001	2	KM2/KM5

**External**

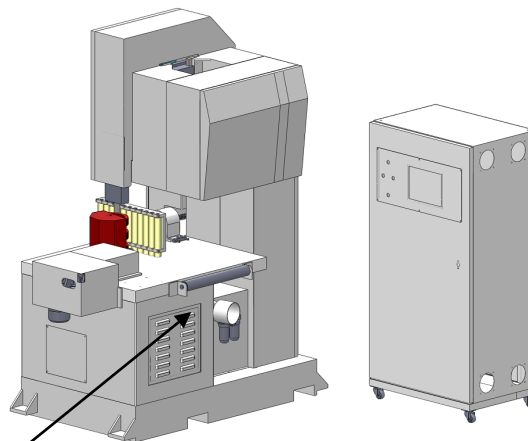
Encoder-lifter motor			4	ENC1/ENC2
ETN-EMG stop-1b	M22-PVT/K01	40411600101	2	EMG2
TE-blade tighten/loosen switch head	ZB5 AD3	40410900101	1	PB3
TE-blade tighten/loosen switch body	ZB5 AZ103	40410900192	1	PB3
TE-limit switch	XCMN2115L1	40410402115	4	LM1
TE-door switch			1	LM1
Omron-door interlock switch	D4SL-N4QDA-D	40412900002	2	YB1
Omron-door interlock switch ping	D4SL-NK1	40412900003	2	YB1



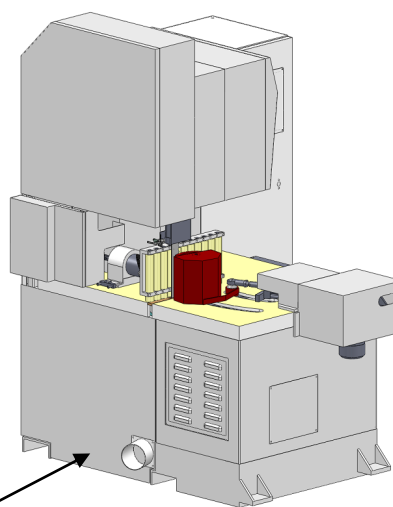
## CONNECT DUST COLLECTION SYSTEM

This machine is equipped with a dust hood outlet. Located at right side of the machine. Apply an appropriate size of flexible hose to connect the dust hood outlet to a dust collection system. This outlet is 5" in diameter.

Be sure to start running the dust collection system before operating the band resaw.



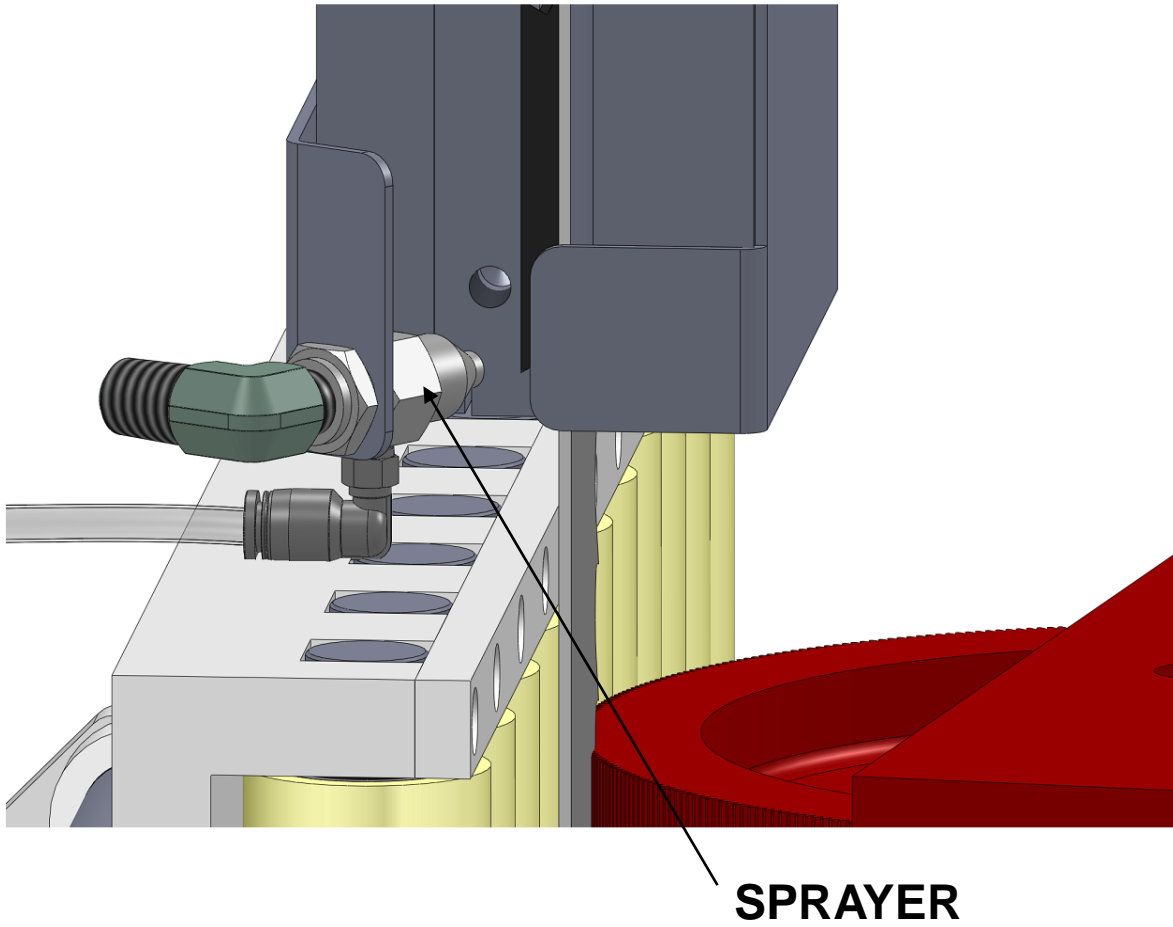
**DUST HOOD DUTLET**



**DUST HOOD DUTLET**



## BLADE COOLING SYSTEM

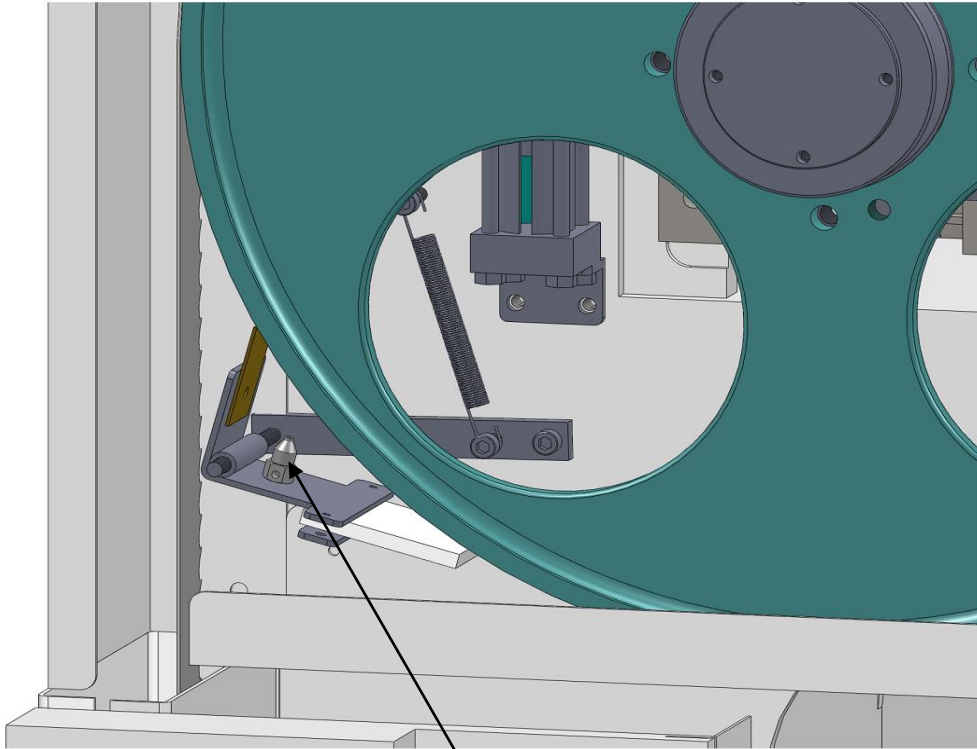


## OIL TANK FOR BLADE COOLING SYSTEM





## SAW WHEEL COOLING SYSTEM



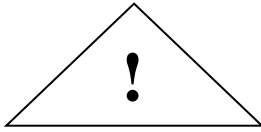
SPRAYER

## OIL TANK FOR SAW WHEEL COOLING SYSTEM





## OPENING WHEEL FRONT GUARD



### **WARNING!!**

Don't open the wheel guard immediately after the blade stop switch or the emergency stop switch is pressed. Wait about 2-3 minutes until the sawblade has come to a complete stop before opening the guard.

1. Unlock the lock on both side of front guard.
2. Please open the guard with two hands.





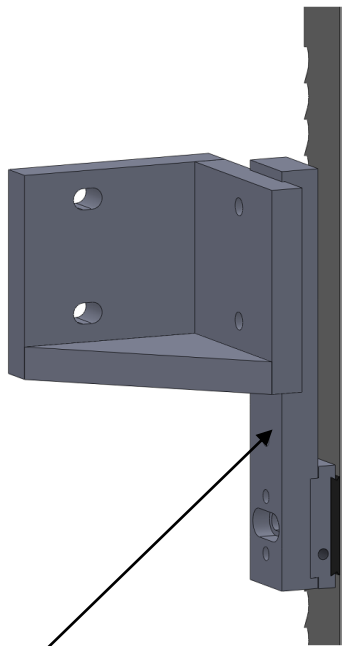
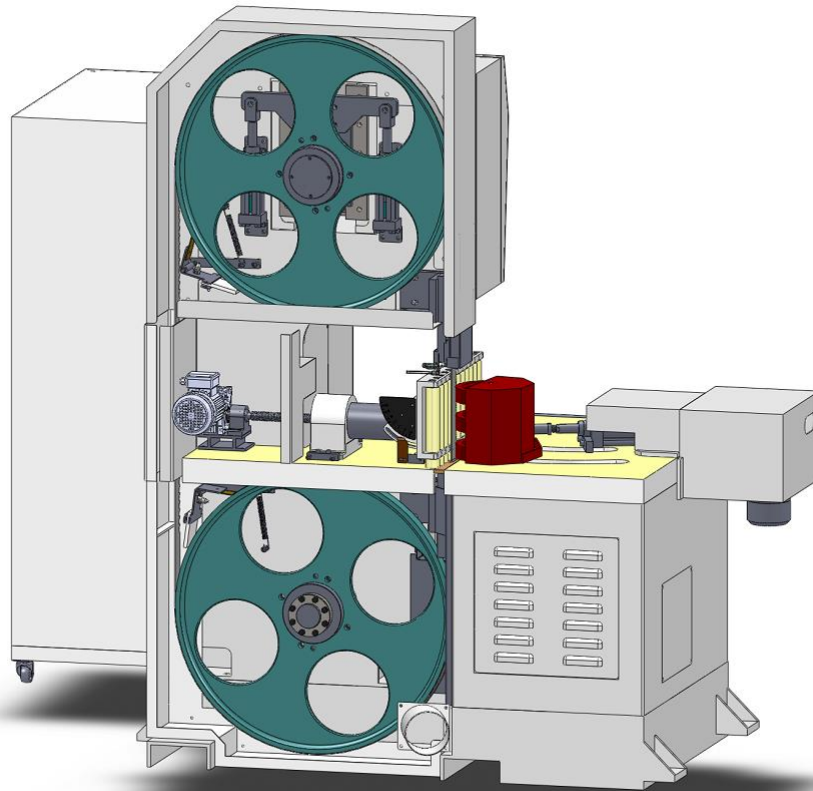
## INSTALLING THE BLADE

1. Open the wheel front guard.
2. Uncoil the blade.
3. Place the blade over the wheel and insert it into the gap of the blade guides.
4. When installing the blade, be sure the teeth pointing toward the running direction of the wheels.
5. Make sure the blade is between the blade guides and is in the center of wheel rim.
6. It is necessary to make blade tension adjustment before installing the blade





## BLADE GUIDES

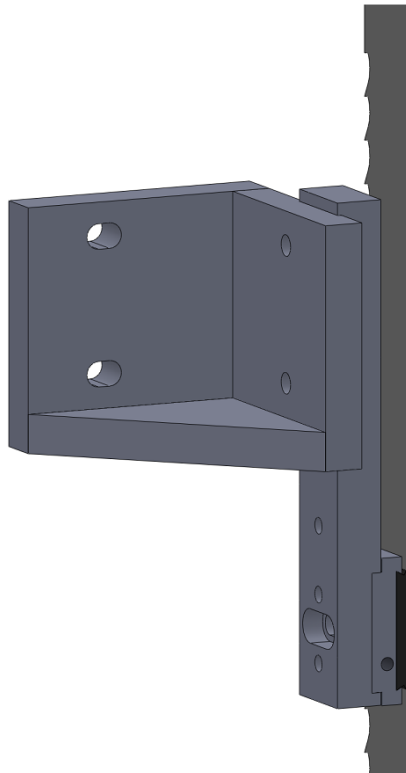


PRESSURE GUIDE BRACKET

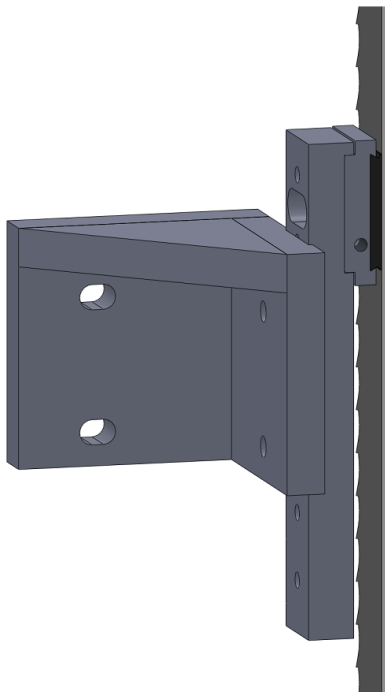
PRESSURE GUIDE



## UPPER BLADE GUIDE



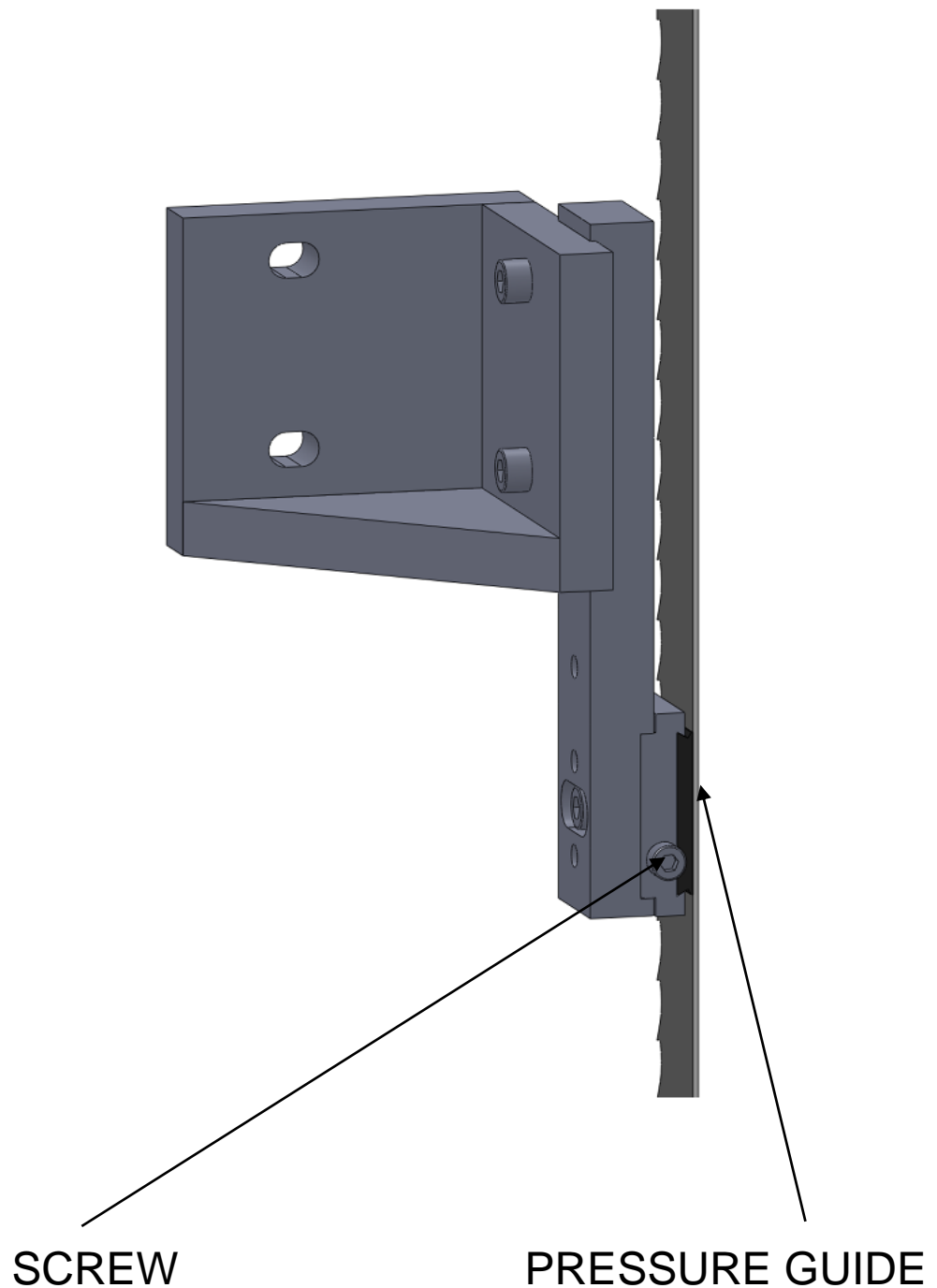
## DOWN BLADE GUIDE





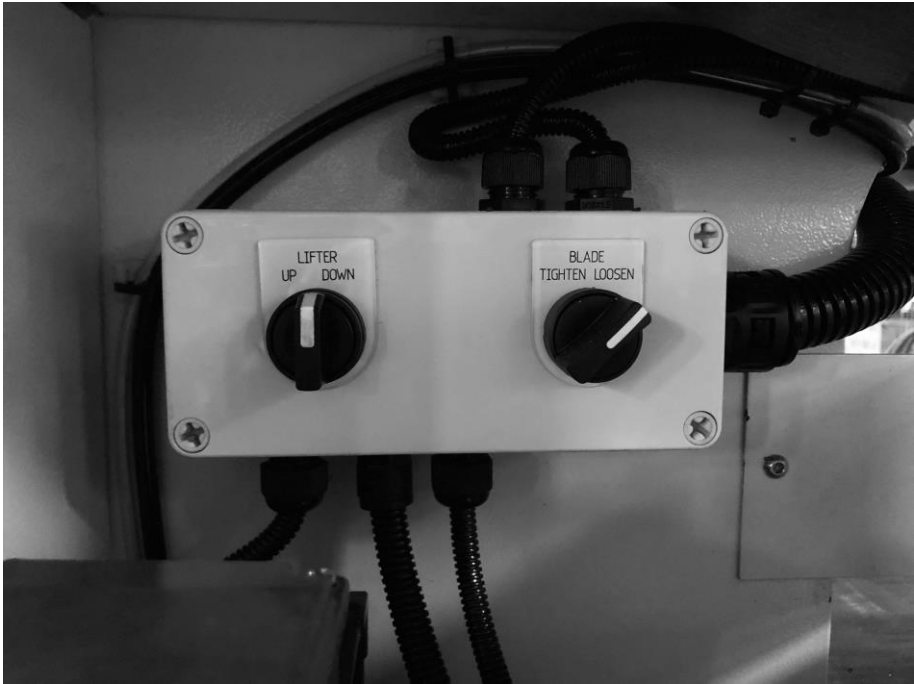
## CHANGING THE PRESSURE GUIDE

1. Loosen the screw, than you could take the pressure guide out.
2. If pressure guide not really fit the pressure guide bracket, please use mill file or sanding paper to fit the pressure guide bracket.
3. Do not use the hammer to fit the pressure guide.





# HYDRAULIC PUMP







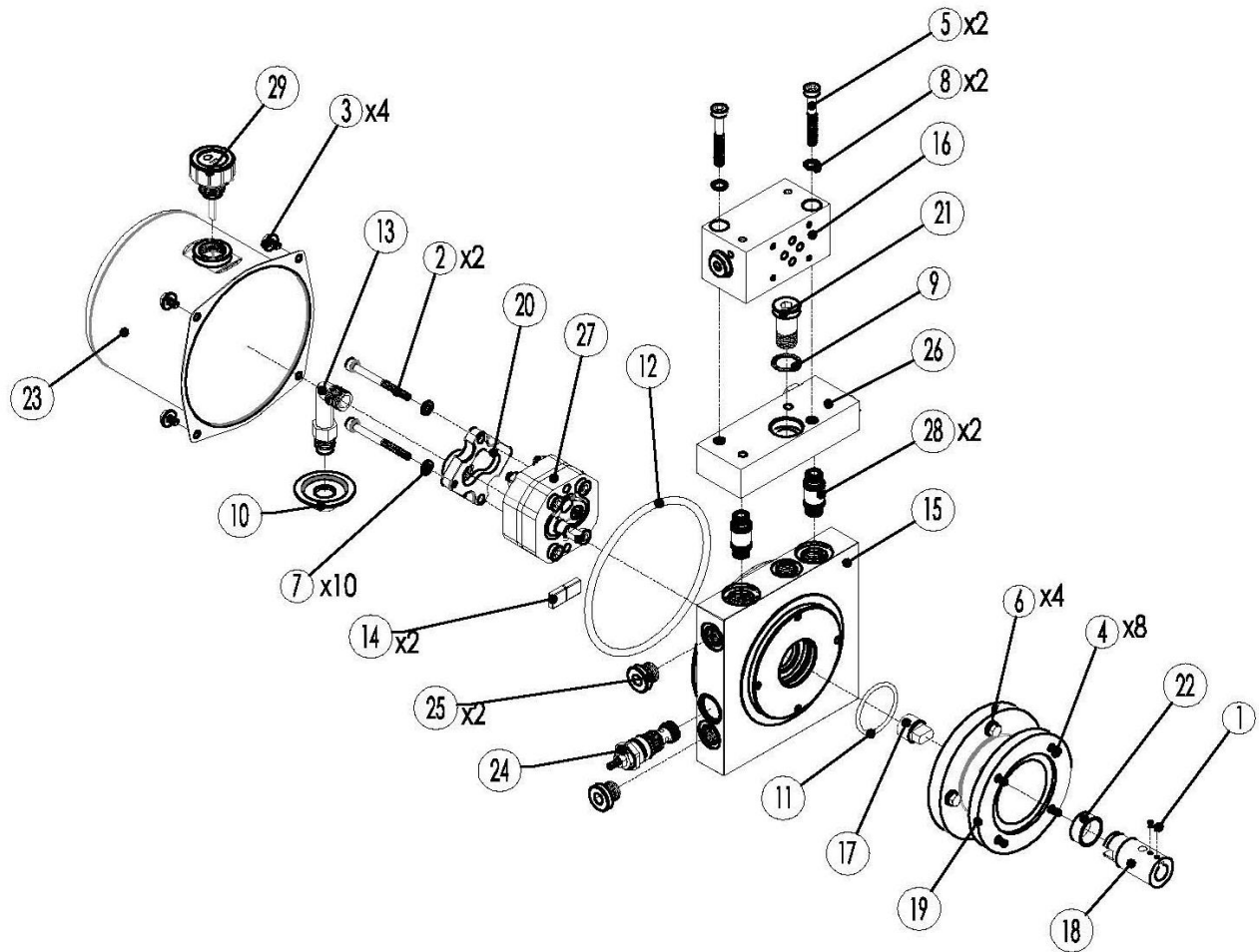
### Pre-check Item :

1. Please check oil level from the scale of the tank. For the oil type, we suggest ISO-va-32.
2. Please check the wiring to avoid damage of motor.

### Check Item While Operating :

1. Please check the direction of motor rotation. If direction is wrong, the hydraulic pressure cannot establish.
2. After hydraulic pressure establish, Please check if every parts are not leaked.
3. The value of pressure should be 150kg/cm<sup>2</sup>. If users want to change the pressure, please adjust the valve (3)
4. For the saw wheel pressure, please adjust the orange cursor in the pressure gauge(5). If the pressure less than green cursor, hydraulic pump will rotate the pressure to the value of orange cursor.

Alarm	Description	Solution
No movement in hydraulic pipe	The 3-phase of hydraulic motor is incorrect.	Please change 2 phase of main power.
	Motor broken	Please check motor.
	Oil level is low.	Please add some hydraulic oil.
Pump is too noisy	The filter is blocked or the level of hydraulic tank is too low.	Clean the filter or add some more oil.
	The noise from the shaft.	Check if installation is good.
Pump keep rotating and cannot stop	a) Check valve b) Check valve c) Check contact of hydraulic gauge.	Change a new parts.
Hydraulic cylinder cannot be clamped	No pressure in hydraulic system.	Check if motor is ok.
	Check if hydraulic valve (4) is broken.	Change a new hydraulic valve.
Hydraulic cylinder cannot go forward and backward.	Air in hydraulic cylinder.	
	(a) Problem in valve (6) (b) Problem in valve (4) or cylinder is broken.	

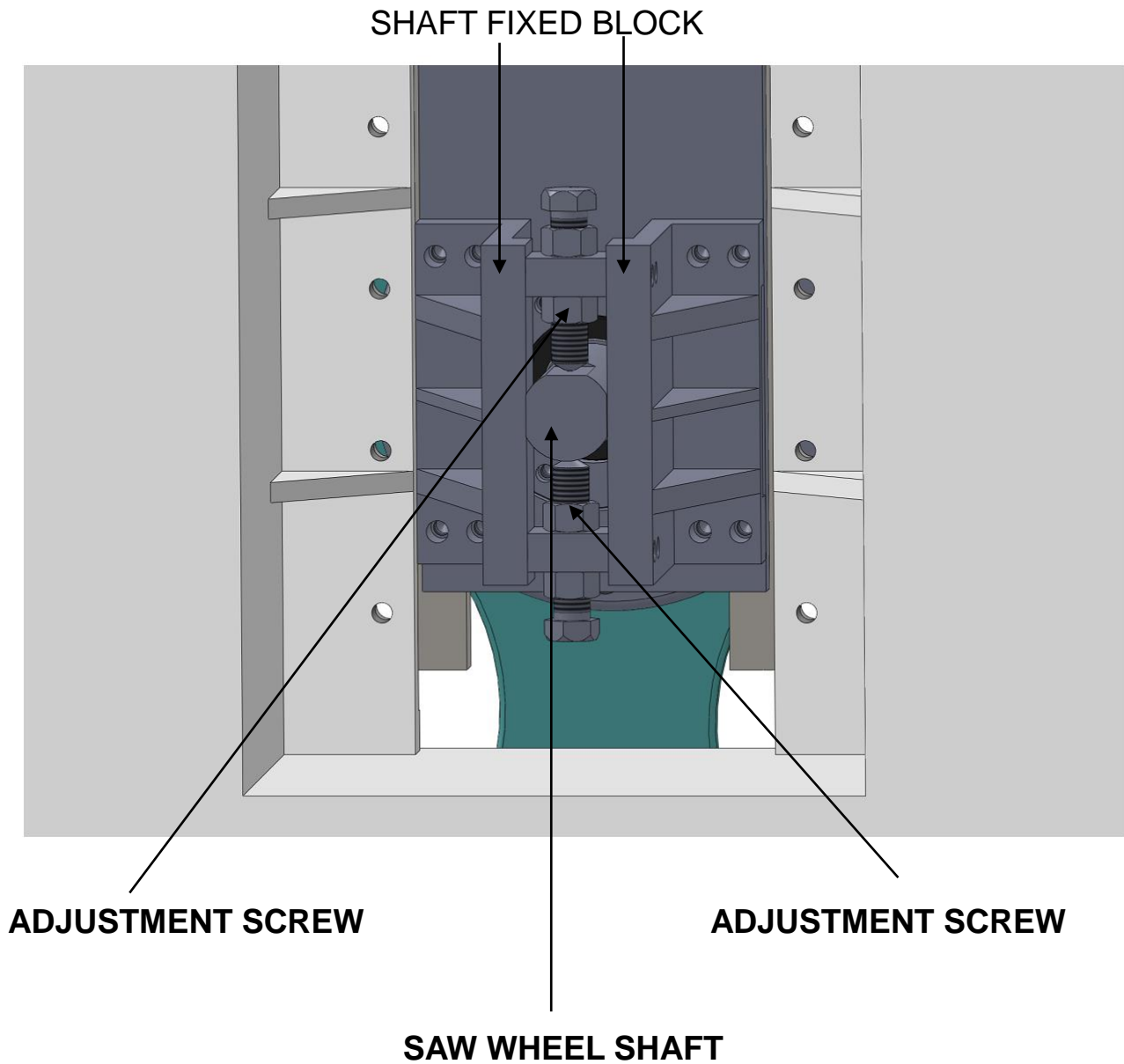


項次[ITEMS]	品號[CODE NO.]	品名[DRAWING NAME]	PRODUCT DENOMINATION	數量[QTY]	備註[REMARK]
1	4DCM04E003	M4無頭內六角螺絲	SCREW	2	
2	4DCM06A001	有頭內六角螺絲	SOCKET HEAD CAP SCREW	2	
3	4DCM06B001	油箱固定螺絲	M6 SCREW	4	
4	4DCM06B005	轉接板專用外六角螺絲	M6 SCREWS	8	
5	4DCM08A003	內六角螺絲	M8 SCREW	2	
6	4DGA061215001	M6平華司	WASHER	4	
7	4DGB061115001	固定M6彈簧華司	SPRING WASHER	10	
8	4DGC081207001	M8安全華司	WASHER	2	
9	4DGC172413001	M16安全華司	WASHER	1	
10	4DHA001	3/8"錐形吸油濾網	SUCTION FILTER	1	
11	4KAG040BA001	NBR材質O型環	O-RING	1	
12	4KAP128BA001	NBR材質O型環	O-RING	1	
13	5JAA040	短型90度幫浦尼龍吸油管	SUCTION TUBE	1	
14	5MA001	磁鐵	MAGNET	2	
15	6EALAN002	Y形標準油路板	MANIFOLD	1	
16	6EHA1AA8015	組零件-積層式並聯油路板	MANIFOLD	1	
17	6GBA001	歐姆聯軸器	OLDHAM COUPLING	1	
18	6GBG001	交流馬達聯軸器B14-71	MUFF COUPLING	1	
19	6GCD001	AC交流馬達長嘴B14-71	BELL HOUSING	1	
20	6GDLA8001	PT3/8"反轉吸油蓋板	SUCTION COVER	1	
21	6GX22A38001	G 3/8"長塞頭	PLUG	1	
22	6GX24A11002	軸端套環內孔φ22.0	SHAFT SHEATH	1	
23	6KAM120RD001	油箱容量1.0公升	TANK	1	
24	7BZRD20002	特殊外型調壓閥	RELIEF VALVE	1	
25	7DBC03A001	組零件-G3/8"內六角塞頭	PLUG	2	
26	7EHZ2ZZC001	A TYPE 轉接板組零件	A-TYPE ADAPTER PLATE	1	
27	7GA05A01L001	P型泵浦0.5cc/rev一體齒輪	GEAR PUMP	1	
28	7GX16A39001	組零件-A型轉接板開套	SLEEVE	2	
29	7JAA002	1/2"注油口濾清器附油尺25mm	FILLER BREATHER WITH DIPSTICK	1	



## ADJUSTING BLADE TRACK

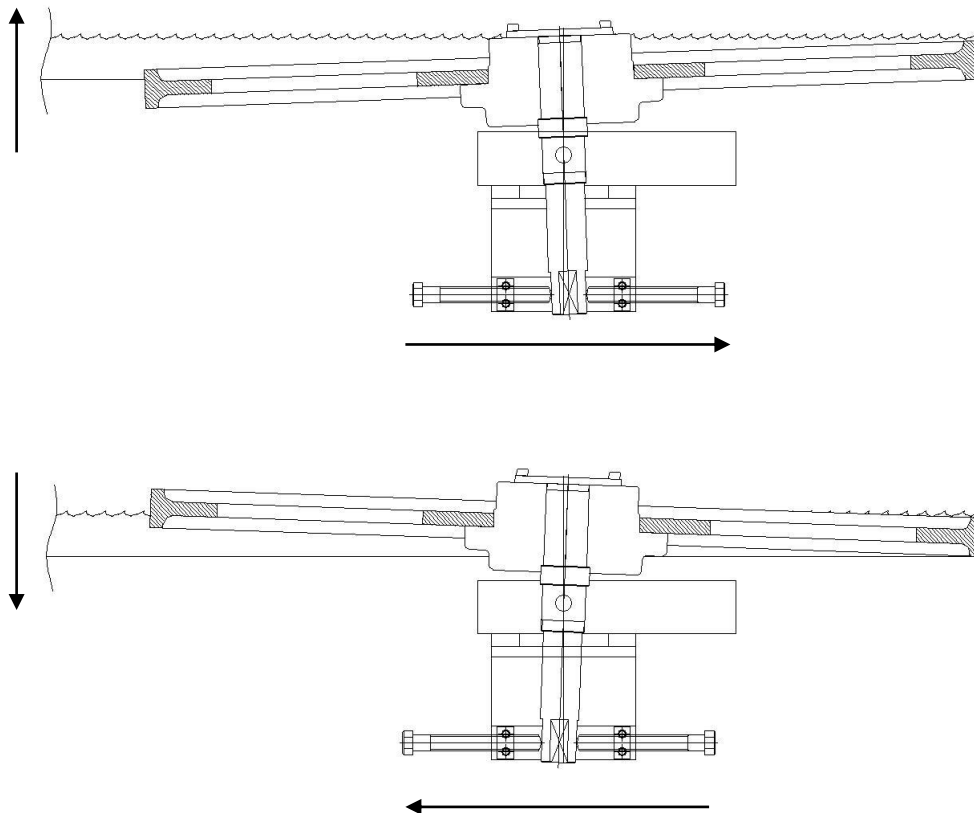
1. Please make sure the saw wheel shaft at the center of shaft fixed seat.





## ADJUSTING BLADE TRACK

If saw wheel shaft goes on right side, saw blade would go out of the saw wheel, as you could check below picture.



If saw wheel shaft goes on left side, saw blade would go in of the saw wheel, as you could check above picture.



## MAINTENANCE



### CAUTION

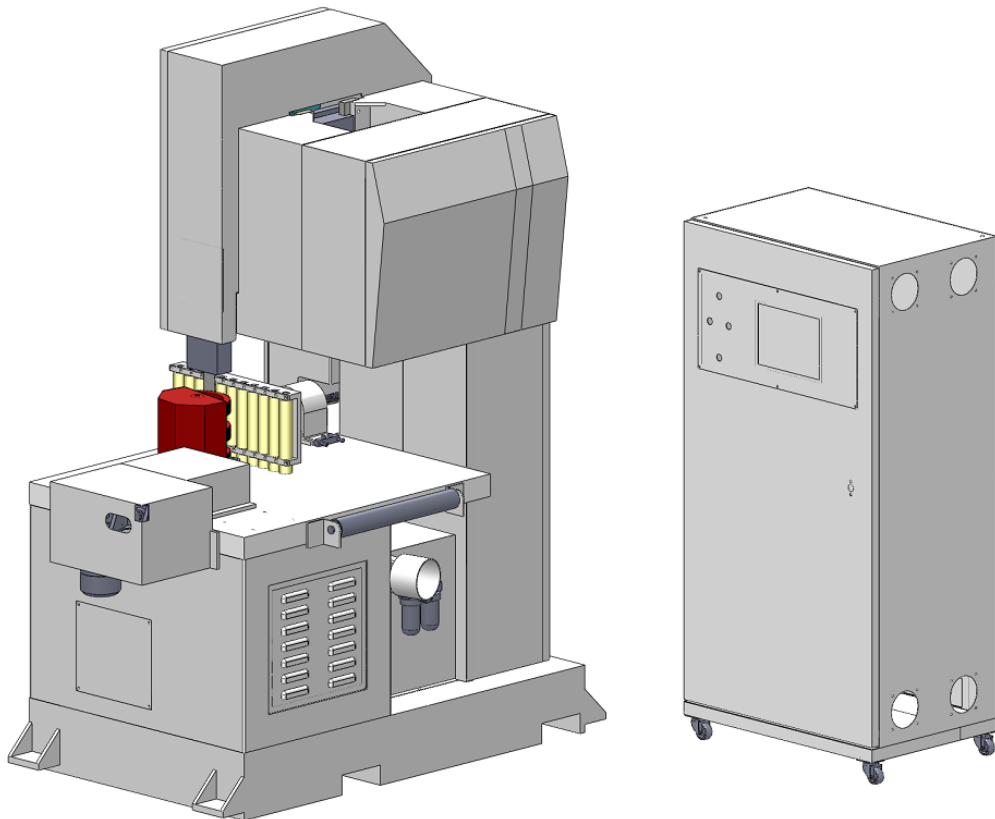
**Before starting maintenance, disconnect the machine from power source.**

1. Remove all chips and clean the machine everyday when job finished.
- 2.Keep blade sharp at all times.
- 3.Check if wheel brush works normally occasionally
- 4.Keep proper blade tension and tracking at all times.



## LUBRICATIION

1. Apply a grease gun to shot grease to all grease nipples provided on the machine at a proper time.
2. All feed screws should be coated with grease at a proper time.



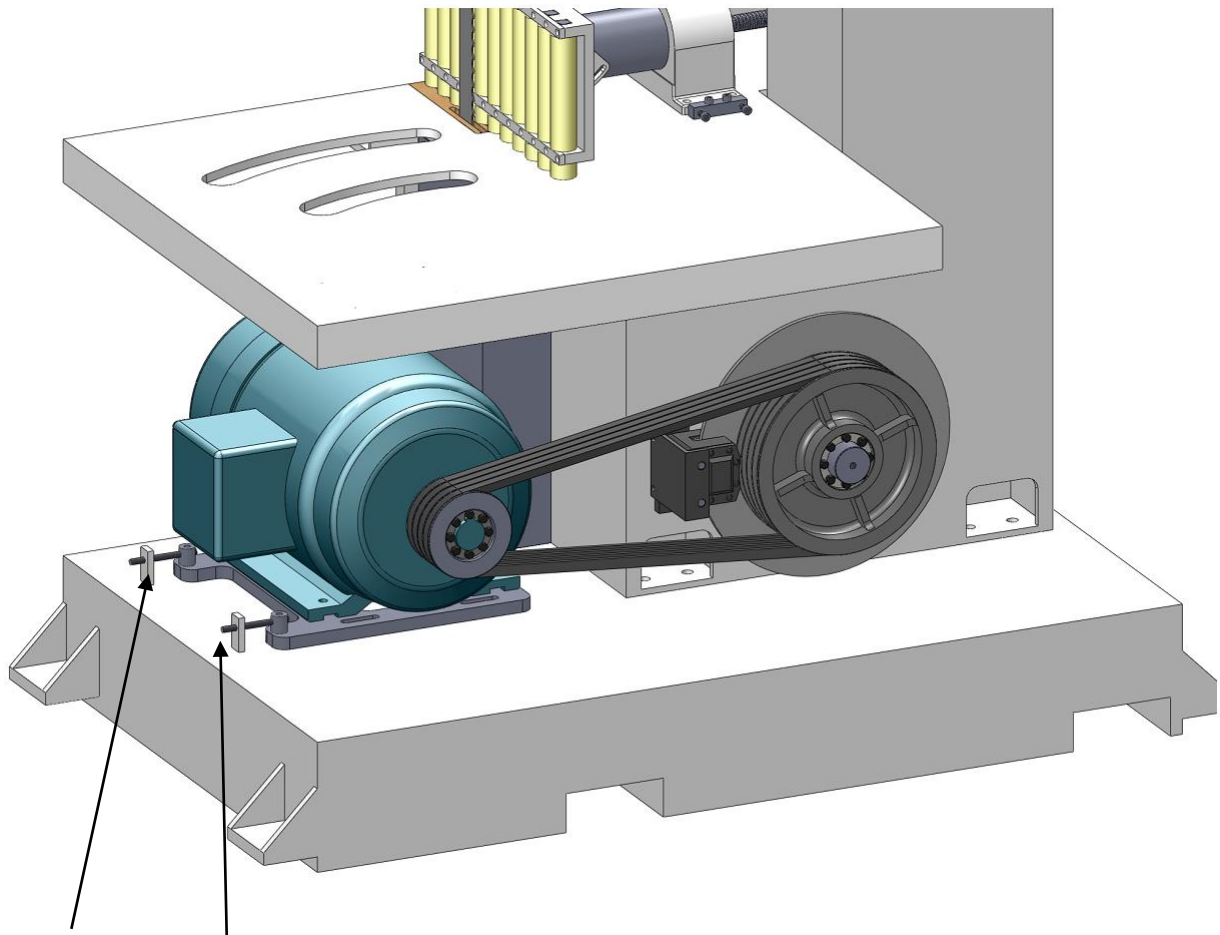


# ADJUSTING SAW WHEEL BELT TENSION

After the machine has been operated for long period, the belt tension may loosen gradually. At this time you need to adjust the belt tension.

To do this, slightly loosen the 4 lock screws, then tighten the 2 belt tension adjustment screws until a proper belt tension is obtained.

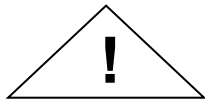
Tighten the 4 lock screws after belt tension has been properly adjusted.



## BELT TENSION ADJUSTMENT SCREW



## TROUBLE SHOOTING (FOR MACHINE)



### WARNING

**To avoid in injury, turn power off and remove plug from power Source before making trouble shooting**

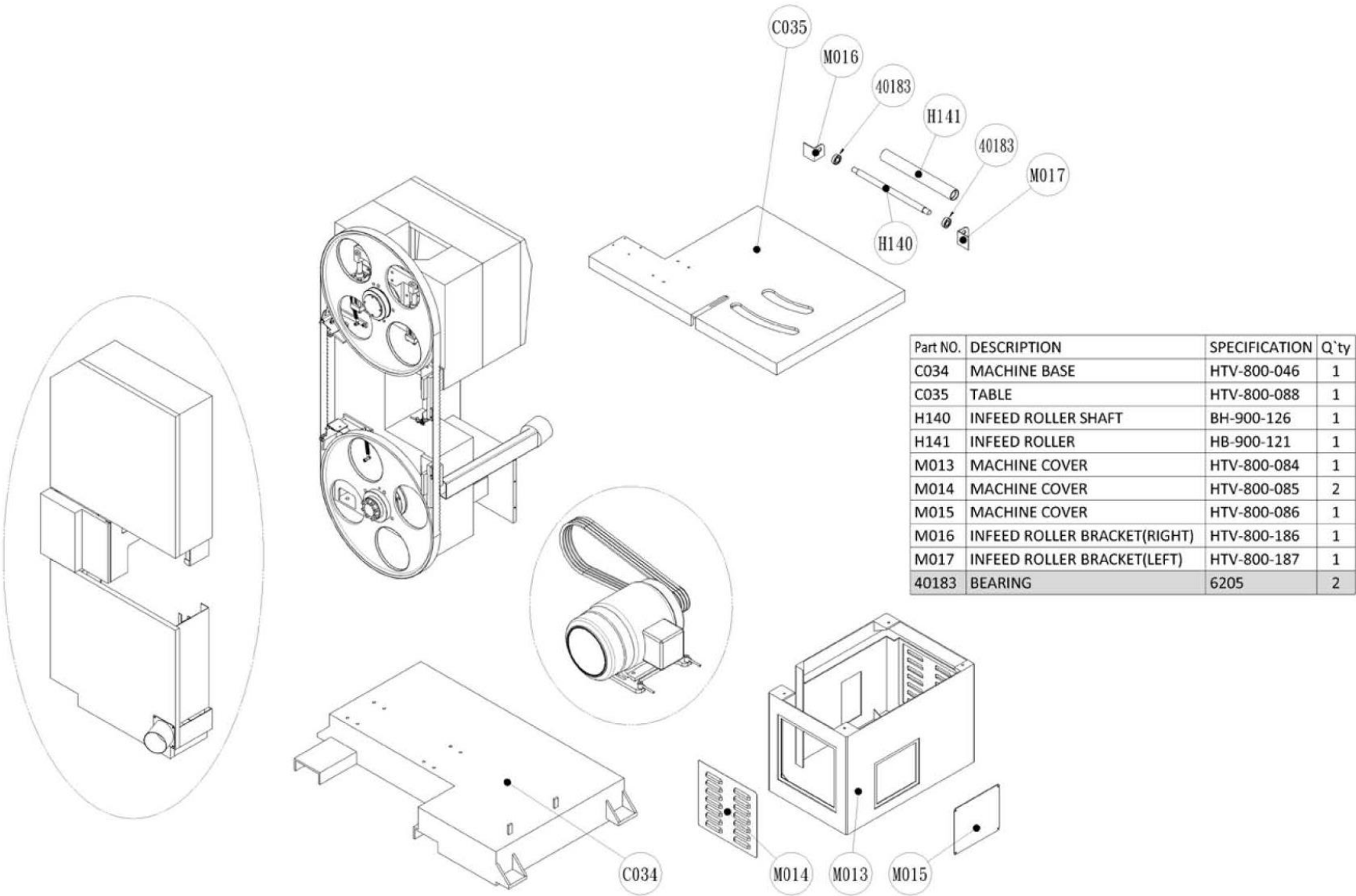
PROBLEM	PROBABLE CAUSE	CORRECTION
Blade dose not tun in correct track	Blade tracking is not properly adjusted.	Adjust blade tracking
Blade slow down during cutting	<ol style="list-style-type: none"> <li>1. Belt tension is too loose</li> <li>2. Blade dulled</li> <li>3. Motor overload</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust belt tension</li> <li>2. Sharpen or replace blade</li> <li>3. Reduce cutting load</li> </ol>
Blade breaking	<ol style="list-style-type: none"> <li>1. Too much tension on blade</li> <li>2. Too much friction on blade</li> <li>3. Wheel surface is not clean</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust blade tension</li> <li>2. Adjust blade guide</li> <li>3. Clean wheel surface</li> </ol>



## TROUBLE SHOOTING(FOR ELECTRIC)

PROBLEM	PROBABLE CAUSE	CORRECTION
Motor Overheat	Motor overload	Reduce feed speed
Motor can not reach full speed	<ol style="list-style-type: none"> <li>1. Low voltage</li> <li>2. Motor damaged</li> </ol>	<ol style="list-style-type: none"> <li>1. Check power source voltage</li> <li>2. Repair or replace motor</li> </ol>
Motor can not develop full power	<ol style="list-style-type: none"> <li>1. Circuit overload</li> <li>2. Wire size too small or circuit too long</li> </ol>	<ol style="list-style-type: none"> <li>1. Use an independent circuit</li> <li>2. Increase wire size or reduce wire length.</li> </ol>

PART LIST  
VBR-300

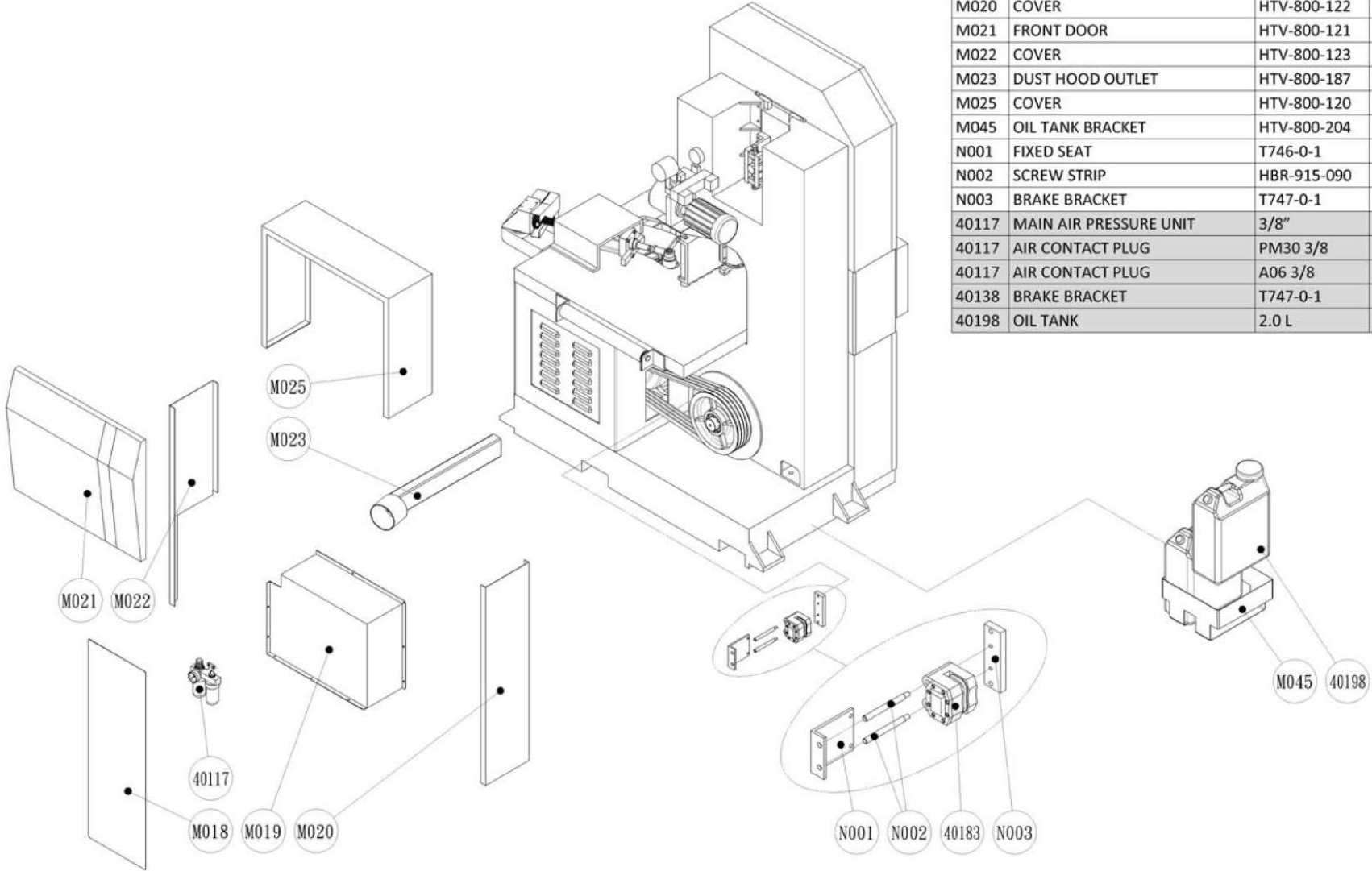


Spare Parts  
KENTWOOD VERTICAL BAND SAW

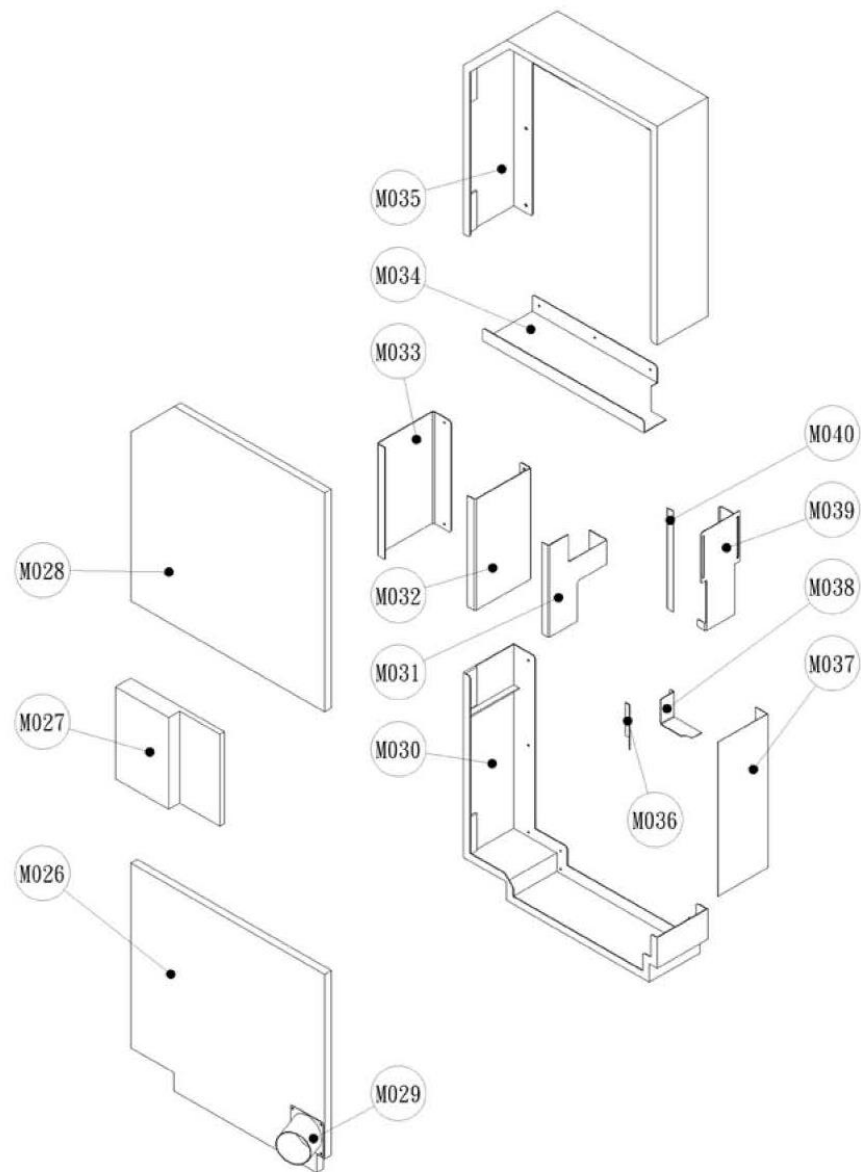
KENTWOOD

PART LIST  
VBR-300

Part NO.	DESCRIPTION	SPECIFICATION	Q`ty
M018	COVER	HTV-800-124	1
M019	COVER	HTV-800-119	1
M020	COVER	HTV-800-122	1
M021	FRONT DOOR	HTV-800-121	1
M022	COVER	HTV-800-123	1
M023	DUST HOOD OUTLET	HTV-800-187	1
M025	COVER	HTV-800-120	1
M045	OIL TANK BRACKET	HTV-800-204	1
N001	FIXED SEAT	T746-0-1	1
N002	SCREW STRIP	HBR-915-090	2
N003	BRAKE BRACKET	T747-0-1	1
40117	MAIN AIR PRESSURE UNIT	3/8"	1
40117	AIR CONTACT PLUG	PM30 3/8	1
40117	AIR CONTACT PLUG	A06 3/8	1
40138	BRAKE BRACKET	T747-0-1	1
40198	OIL TANK	2.0 L	2

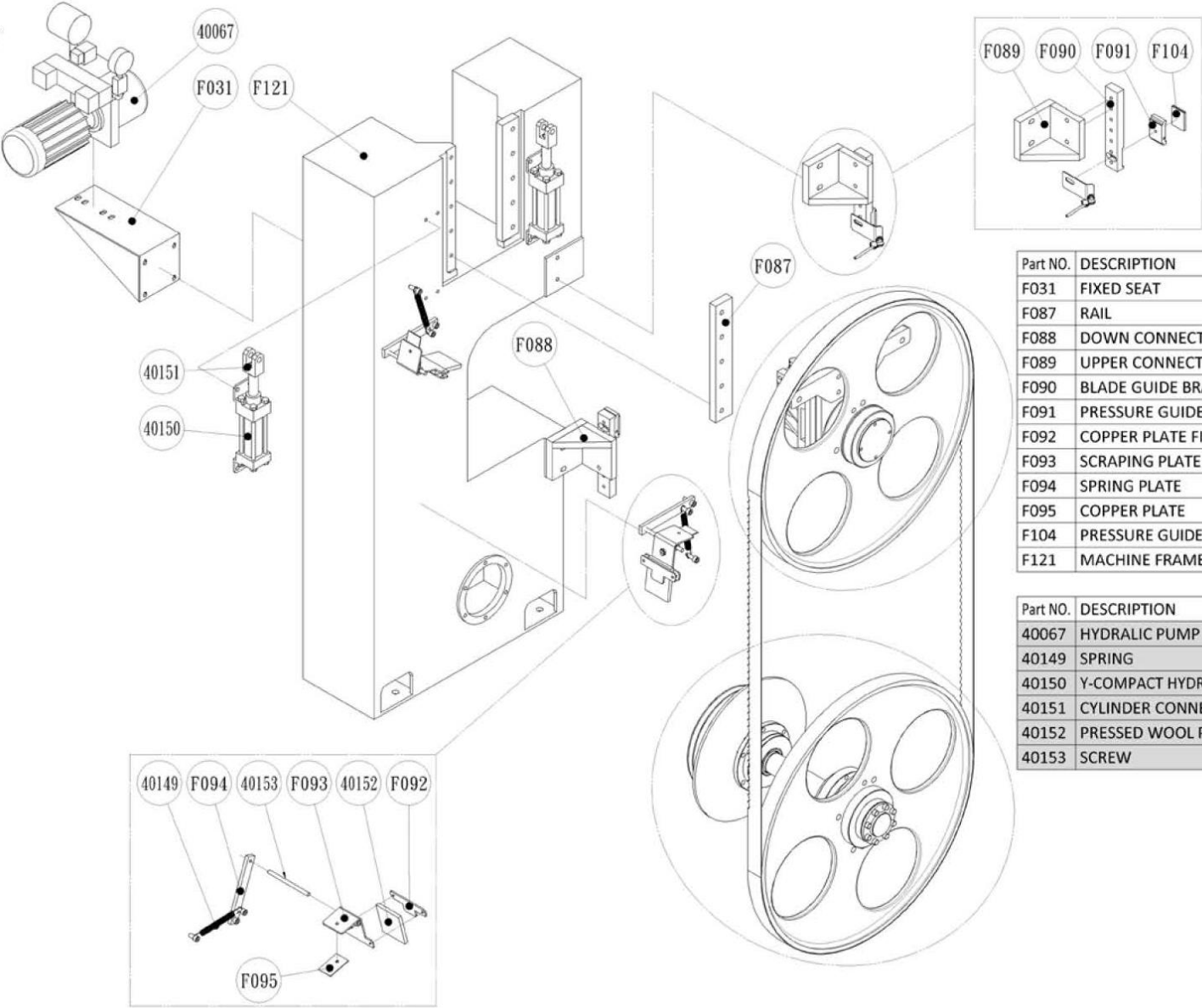


PART LIST  
VBR-300



Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
M026	DOWN WHEEL DOOR	HTV-800-095	1
M027	MIDDLE DOOR	HTV-800-157	1
M028	UPPER WHEEL DOOR	HTV-800-096	1
M029	DUST HOOD OUTLET	300W7-048-1	1
M030	DOWN WHEEL COVER	HTV-800-091	1
M031	POSITION MOROT COVER	HTV-800-156	1
M032	COVER	HTV-800-094	1
M033	COVER	HTV-800-093	1
M034	UPPER WHEEL COVER	HTV-800-092	1
M035	UPPER WHEEL COVER	HTV-800-090	1
M036	DUST HOOD COVER	HTV-800-159	1
M037	UPPER WHEEL COVER	HTV-800-163	1
M038	DUST HOOD COVER	HTV-800-158	1
M039	SAW BLADE SAFETY COVER	HTV-800-161	1
M040	SAW BLAPE SAFETY COVER	HTV-800-162	1

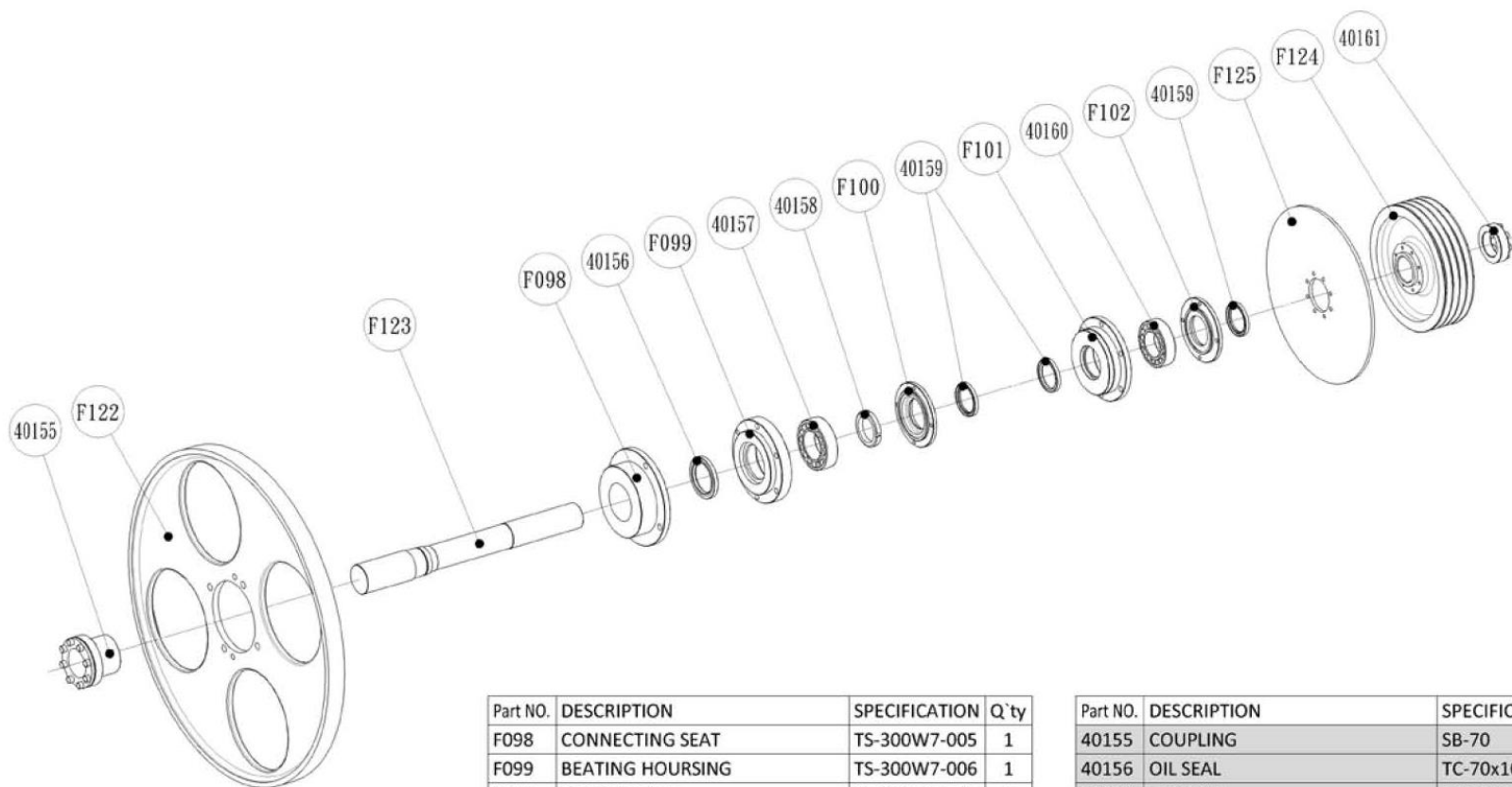
PART LIST  
VBR-300



Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
F031	FIXED SEAT	300W7-209	1
F087	RAIL	TS-300W7-012	2
F088	DOWN CONNECT BRACKET	TS-300W8-007	1
F089	UPPER CONNECT BRACKET	TS-300W8-008	1
F090	BLADE GUIDE BRACKET	TS-300W8-009	2
F091	PRESSURE GUIDE BRACKET	TS-300W8-010	2
F092	COPPER PLATE FIXED SEAT	T529-0-1	2
F093	SCRAPING PLATE	T528-0-1	2
F094	SPRING PLATE	T737-0-1	2
F095	COPPER PLATE	T742-0-1	2
F104	PRESSURE GUIDE	T634-0-1	2
F121	MACHINE FRAME	HTV-800-001-2	1

Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
40067	HYDRALIC PUMP	1/2HP	1
40149	SPRING		1
40150	Y-COMPACT HYDRAULIC CYLINDERS	40x80L	2
40151	CYLINDER CONNECTOR	M20-Y	2
40152	PRESSED WOOL PAD		1
40153	SCREW	M10x150L	1

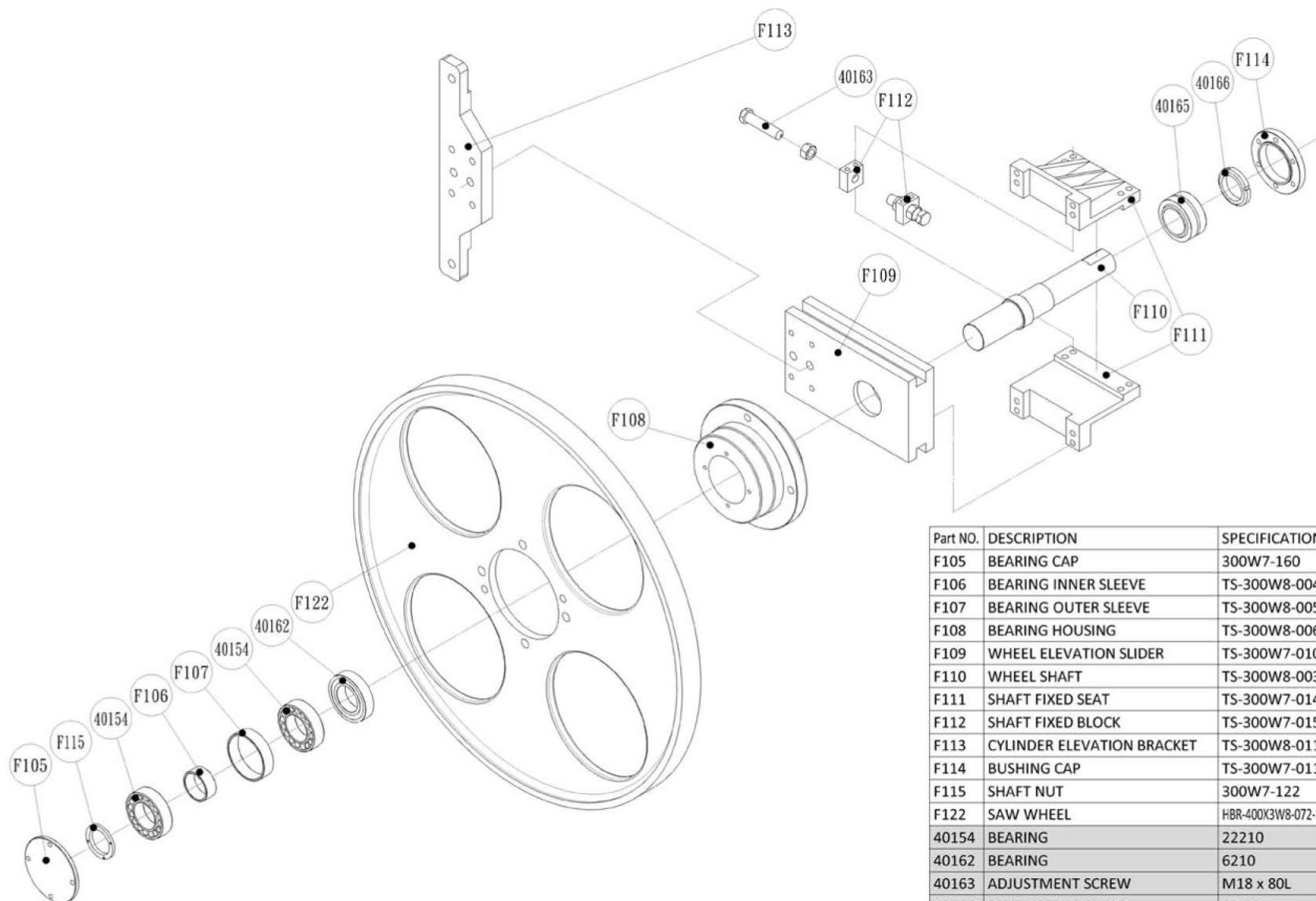
PART LIST  
VBR-300



Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
F098	CONNECTING SEAT	TS-300W7-005	1
F099	BEATING HOUSING	TS-300W7-006	1
F100	BEARING NUT	TS-300W7-007	1
F101	BEATING HOUSING	TS-300W7-008	1
F102	FIXED SEAT NUT	TS-300W7-009	1
F122	SAW WHEEL	HBR-400X3W8-072-2	1
F123	WHEEL SPINDLE	HTV-800-008	1
F124	SAW WHEEL PULLEY	HTV-800-018	1
F125	BRAKE DISC	HTV-800-135	1

Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
40155	COUPLING	SB-70	1
40156	OIL SEAL	TC-70x100x10	1
40157	BEARING	22213 K	1
40158	BEARING NUT	AN-13 M65	1
40159	OIL SEAL	TC-60x80x8	3
40160	BEARING	22212	1
40161	COUPLING	SA-60	1

PART LIST  
VBR-300



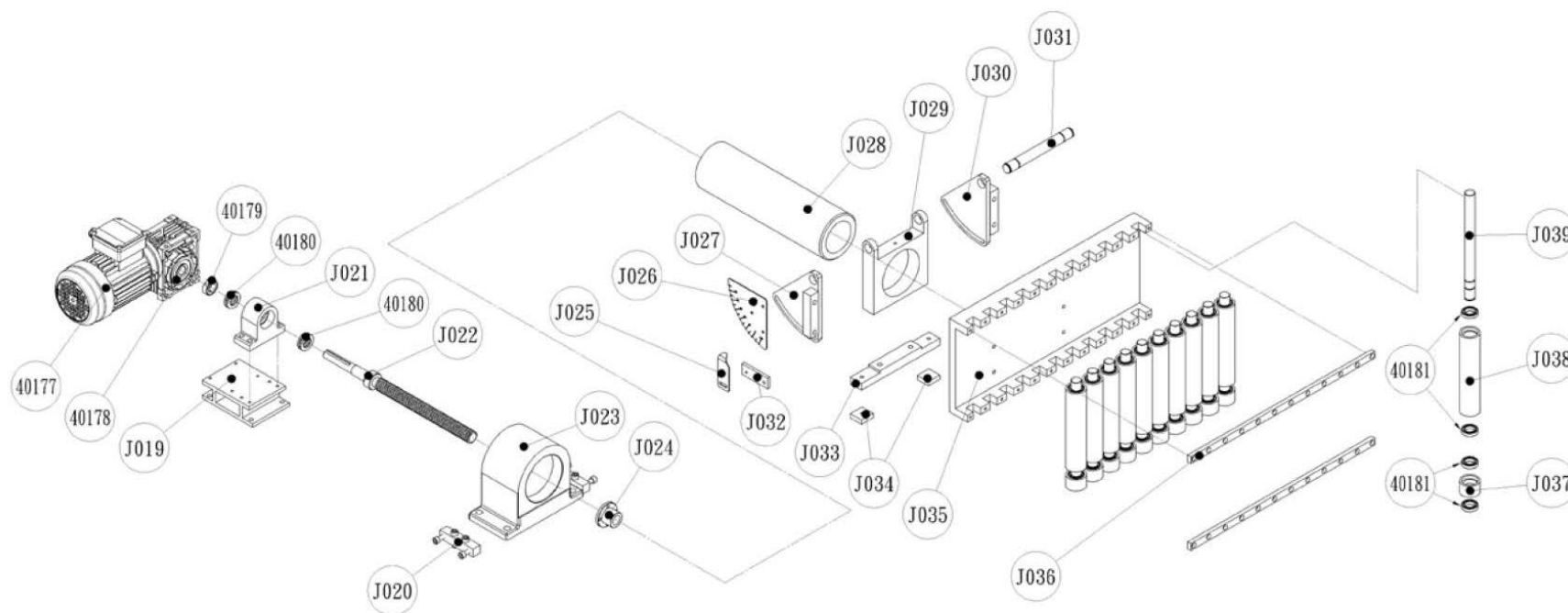
Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
F105	BEARING CAP	300W7-160	1
F106	BEARING INNER SLEEVE	TS-300W8-004	1
F107	BEARING OUTER SLEEVE	TS-300W8-005	1
F108	BEARING HOUSING	TS-300W8-006	1
F109	WHEEL ELEVATION SLIDER	TS-300W7-010	1
F110	WHEEL SHAFT	TS-300W8-003	1
F111	SHAFT FIXED SEAT	TS-300W7-014	1
F112	SHAFT FIXED BLOCK	TS-300W7-015	1
F113	CYLINDER ELEVATION BRACKET	TS-300W8-011	1
F114	BUSHING CAP	TS-300W7-011	1
F115	SHAFT NUT	300W7-122	1
F122	SAW WHEEL	HBR-400X3W8-072-2	1
40154	BEARING	22210	2
40162	BEARING	6210	1
40163	ADJUSTMENT SCREW	M18 x 80L	2
40165	SPHERICAL BUSHING	SB-50A	1
40166	NUT	AN-10 M50	1

## PART LIST

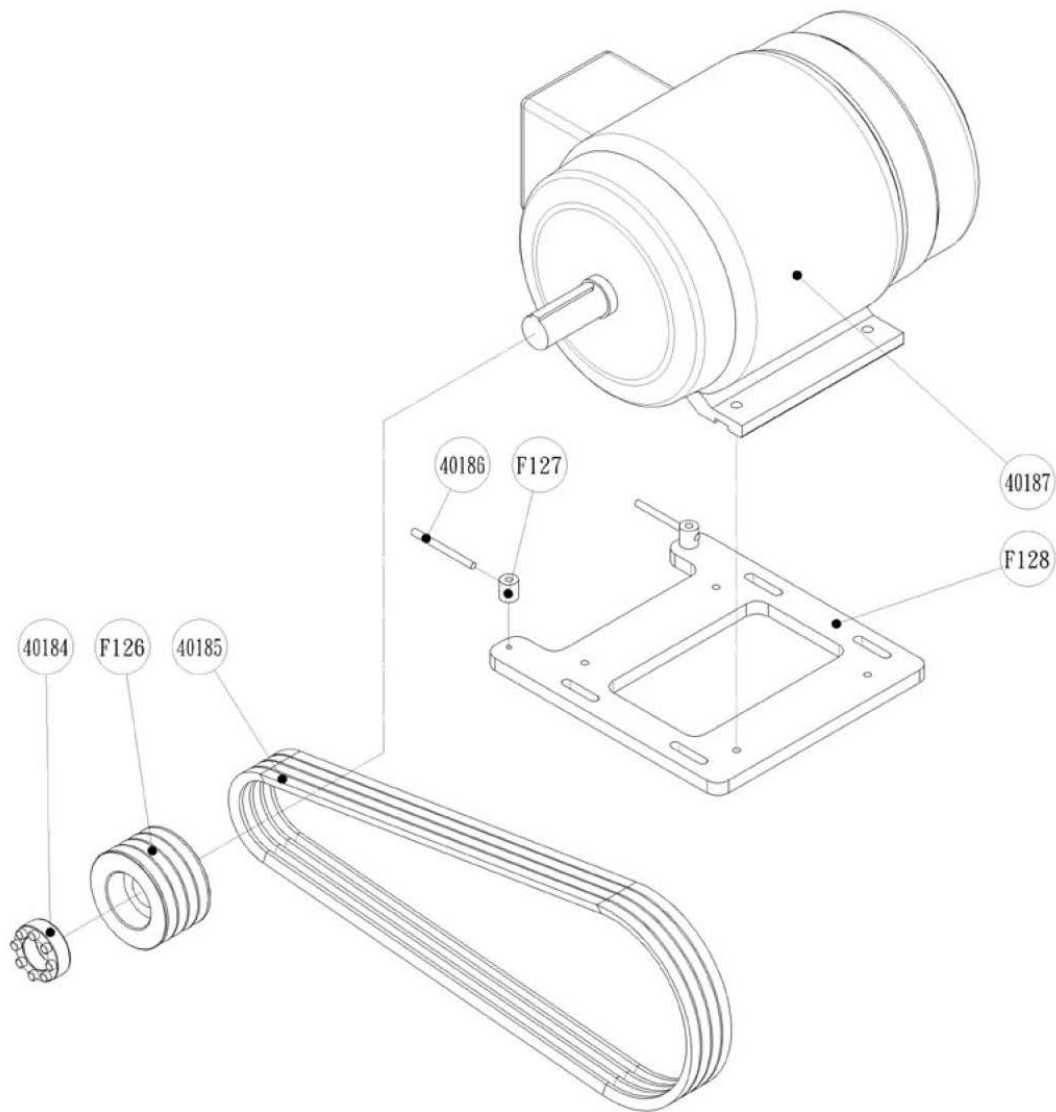
VBR-300

Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
J019	POSITION MOTOR FIXED SEAT	HTV-800-062	1
J020	ADJUSTMENT BLOCK	HTV-800-182	2
J021	POSITION SCREW FIXDE SEAT	HTV-800-063	1
J022	POSITION SCREW	HTV-800-064	1
J023	FENCE MOVEMENT FIXED	HTV-800-048	1
J024	POSITION NUT	HTV-800-065	1
J025	TILTING GUIDE	HTV-800-183	1
J026	ANGLE GAUGE	HTV-800-154	1
J027	TILING BRACLEU	HTV-800-055	1
J028	FENCE MOVEMENT SHAFT	HTV-800-066	1
J029	FLANGE FIXED SEAT	HTV-800-050	1
J030	TILTING BRACKET	HTV-800-055	1
J031	TILTING SHAFT	HTV-800-068	1

Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
J032	TILTING GUIDE	HTV-800-184	1
J033	FENCE FIXED SEAT	HTV-800-053	1
J034	FENCE FIXED BLOCK	HTV-800-054	2
J035	FENCE	HTV-800-057	1
J036	FENCE ROUER BRACKET	HTV-800-067	2
J037	DOWN FENCE ROLLER	HTV-800-060	11
J038	UPPER FENCE ROLLER	HTV-800-059	11
J039	FENCE ROLLER SHAFT	HTV-800-058	11
40177	MOTOR	SW040	1
40178	GEAR REPUCER	0.25HP	1
40179	NUT	YSR-M20xP1.0	1
40180	THRUST BEARING	51104	2
40181	BEARING	6804	44

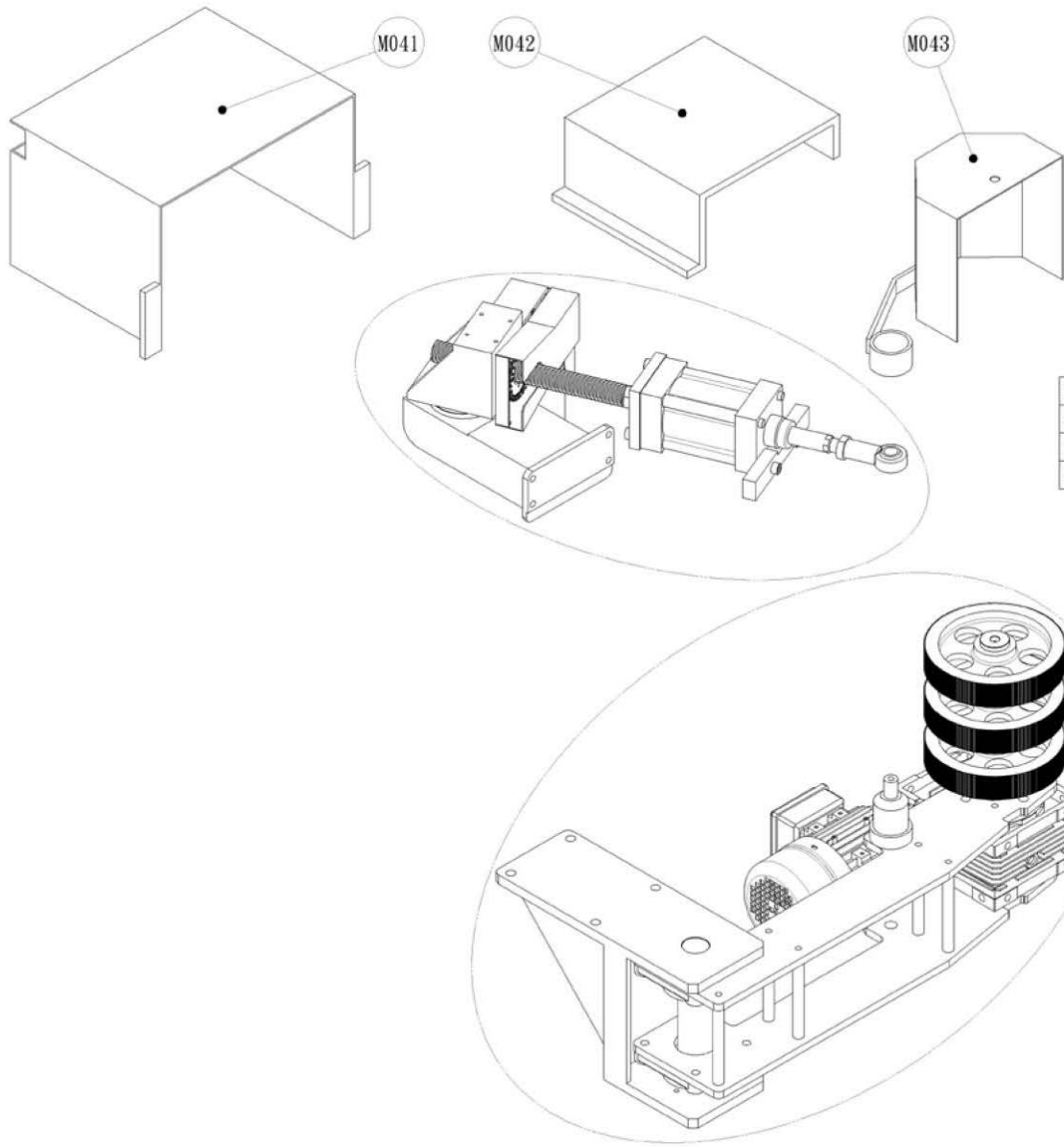


PART LIST  
VBR-300



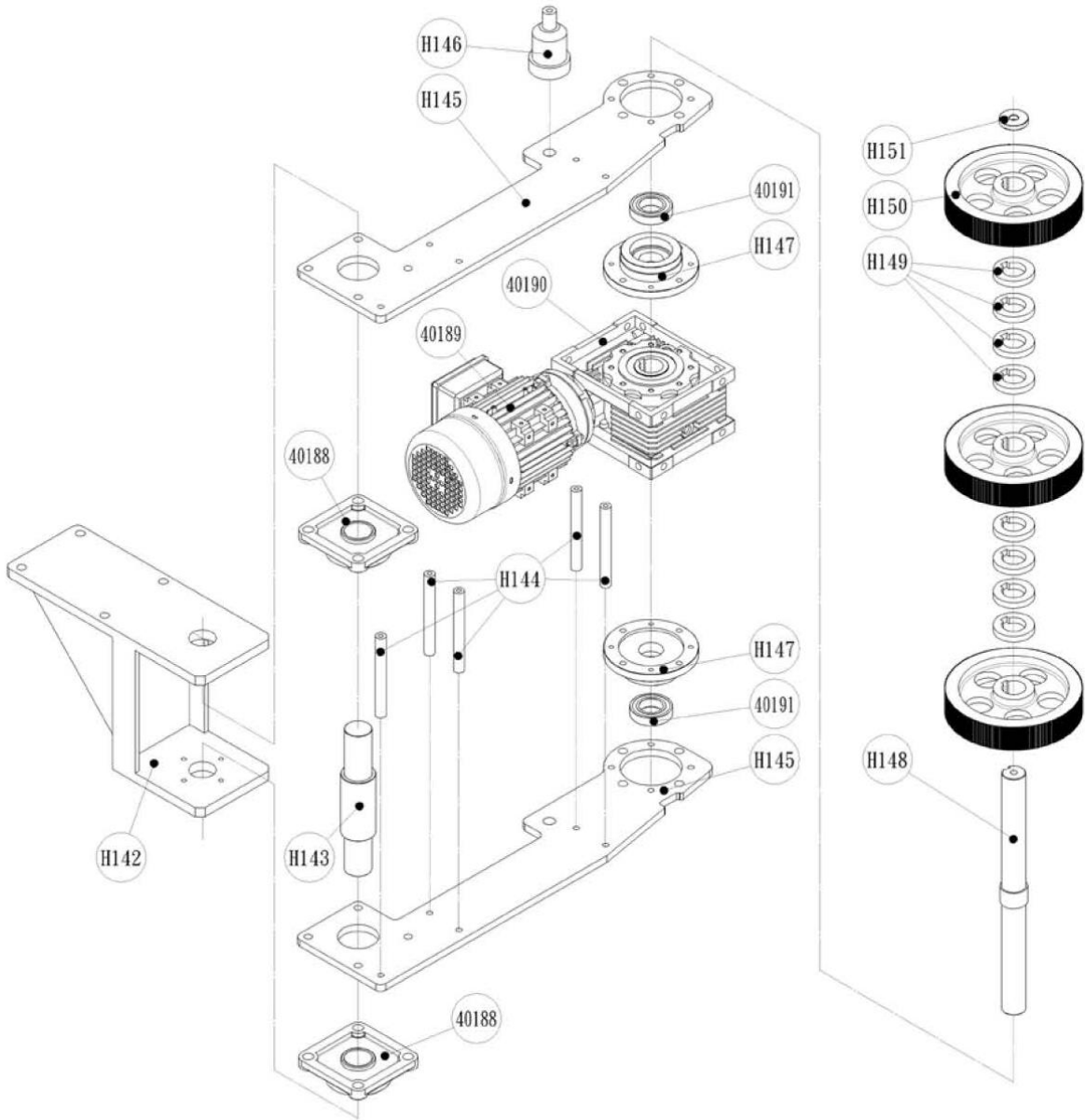
Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
F126	MOTOR PULLEY	HTV-800-019	1
F127	ADJUSTMENT BLOCK	HBR-300W7-190-1	2
F128	MOTOR PLATE	HTV-800-089	1
40184	COUPLING	SA-48	1
40185	MOTOR BLET	B76	4
40186	SCREW STRIP	3/8" 110L	2
40187	SAW WHEEL MOTOR	30HP	1

PART LIST  
VBR-300



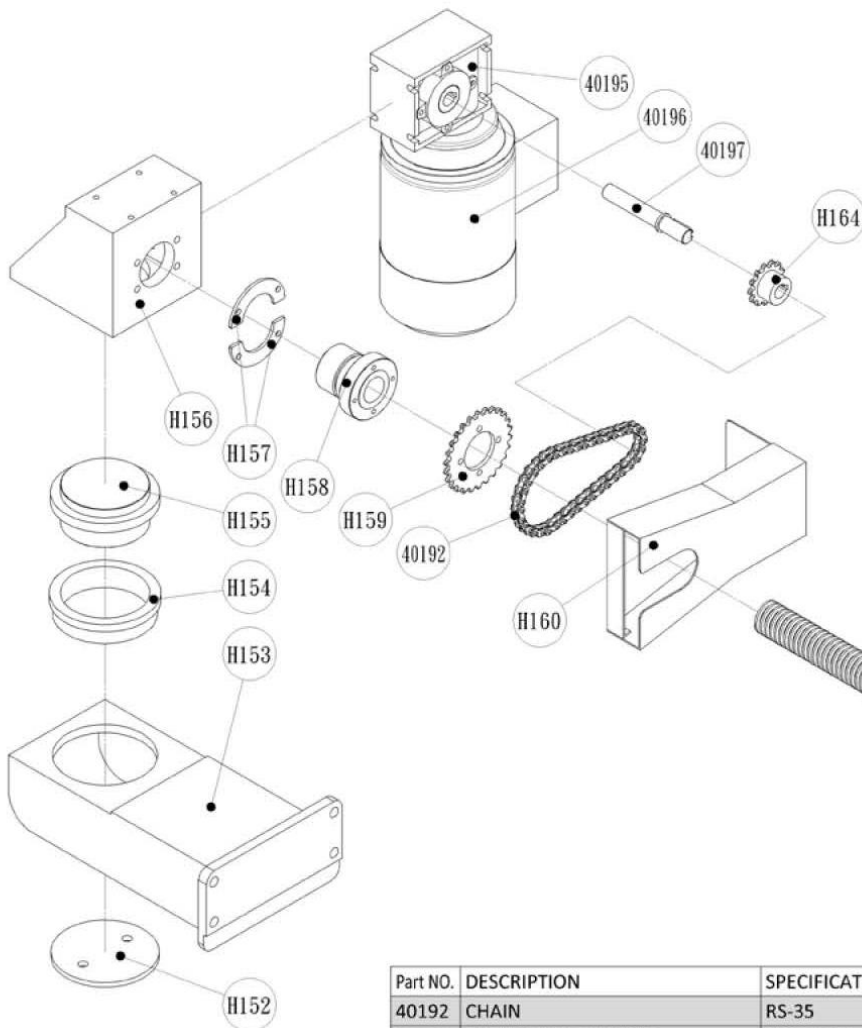
Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
M041	COVER	HTV-800-185	1
M042	RETURN TABLE	HTV-800-144	1
M043	FEEDING ROLLER COVER	HTV-800-133	1

PART LIST  
VBR-300



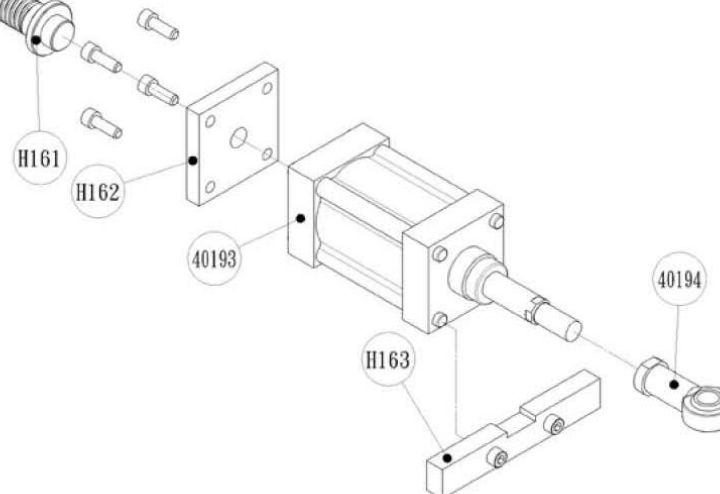
Part NO.	DESCRIPTION	SPECIFICATION	Q`ty
H142	FEEDING ROLLER FIXED SEAT	HTV-800-069	1
H143	SHAFT	HTV-800-071	1
H144	BRACKET SPACING SHAFT	HTV-800-072	5
H145	FEEDING ROLLER	HTV-800-070	2
H146	CYLINDER MOVEMENT SHAFT	HTV-800-080	1
H147	BEARING HOUSING	HTV-800-073	2
H148	FEEDING ROLLER SHAFT	HTV-800-077	1
H149	FEEDING ROLLER GASKET	HTV-800-078	8
H150	FEEDING ROLLER	HTV-800-079	3
H151	WASHER	HTV-800-076	1
40188	BEARING	UCF208	2
40189	MOTOR	1HP	1
40190	GEAR REPUCER	SW075	1
40191	BEARING	6007	2

PART LIST  
VBR-300

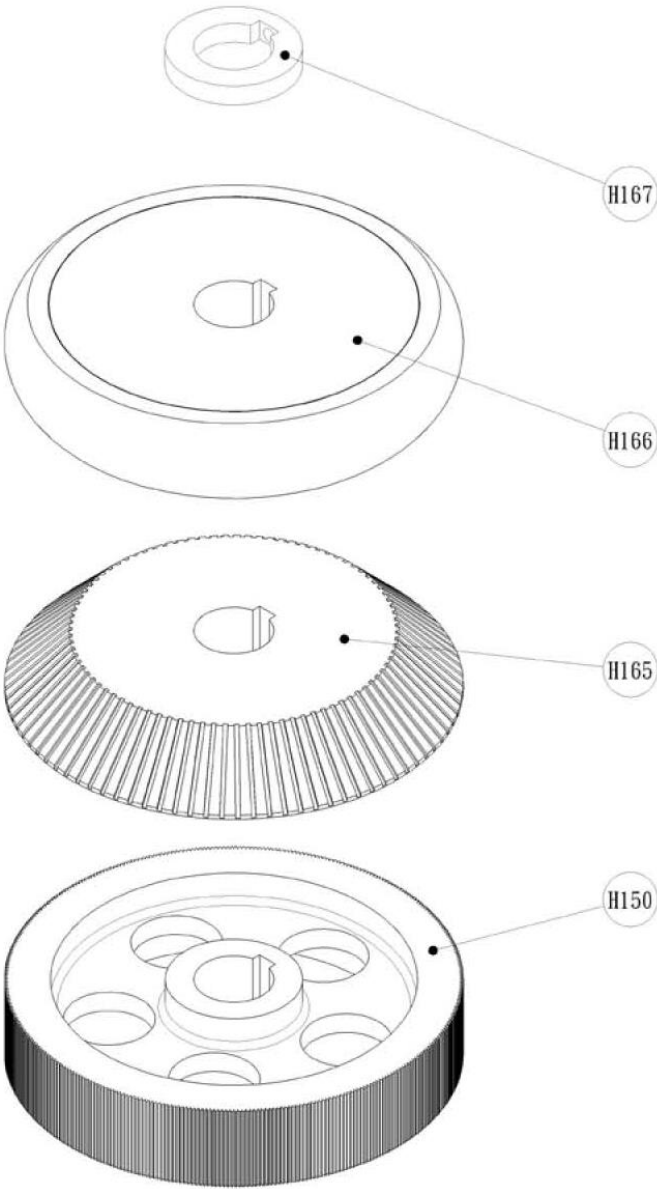


Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
40192	CHAIN	RS-35	42
40193	PNEUMATIC CYLINDER	SI80x50CA	1
40194	CYLINDER CONNECTOR	PHS-20	1
40195	GEAR REDUCER	SW030	1
40196	MOTOR	0.18HP	1
40197	SPROCKET WHEEL SPINDLE	AS-030	1

Part No.	DESCRIPTION	SPECIFICATION	Q'ty
H152	BRACKET SHAFT FIXED SEAT	HTV-800-175	1
H153	CYLINDER BRACKET	HTV-800-082	1
H154	BRACKET SHAFT HOUSING	HTV-800-172	1
H155	BRACKET SHAFT	HTV-800-173	1
H156	ELEVATION SCREW FIXED SEAT	HTV-800-164	1
H157	C RING	HTV-800-165	2
H158	ELEVATION NUT	A09FA021	1
H159	CHAIN WHEEL	HTV-800-166	1
H160	CHAIN COVER	HTV-800-177	1
H161	ELEVATION SCREW	HTV-800-170	1
H162	CYLINDER FIXED SEAT	HTV-800-171	1
H163	CYLINDER FIXED PLATE	HTV-800-175	1
H164	SPROCKET WHEEL	HTV-800-167	1



PART LIST  
VBR-300



Part NO.	DESCRIPTION	SPECIFICATION	Q'ty
H150	FEEDING ROLLER	HTV-800-079	3
H165	FEEDING ROLLER	HTV-800-152	2
H166	FEEDING ROLLER	HTV-800-152-1	1
H167	FEEDING ROLLER GASKET	HTV-800-078-1	2