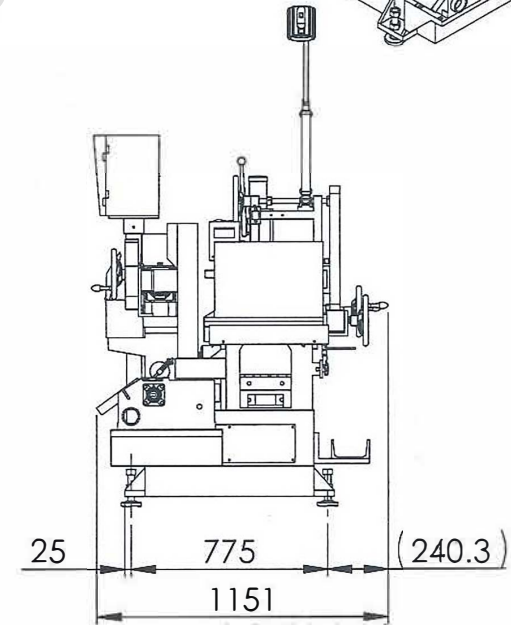
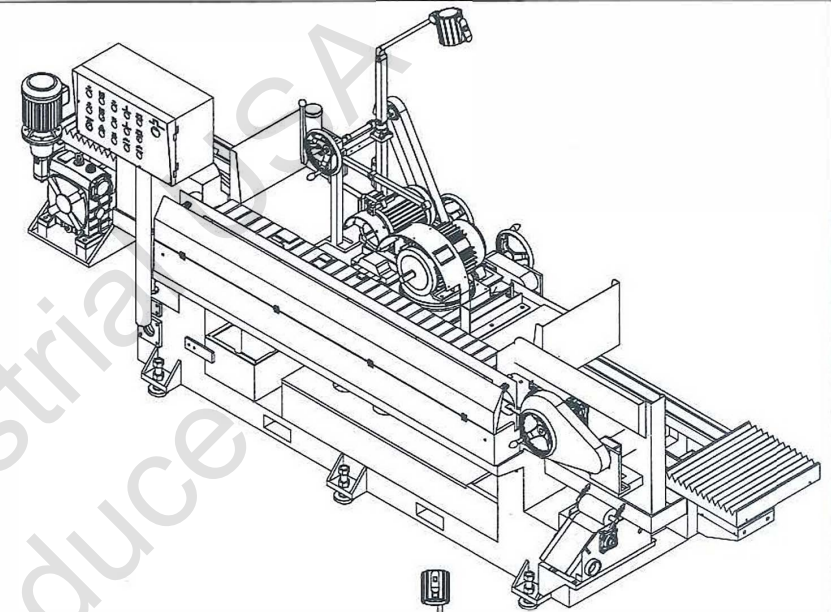
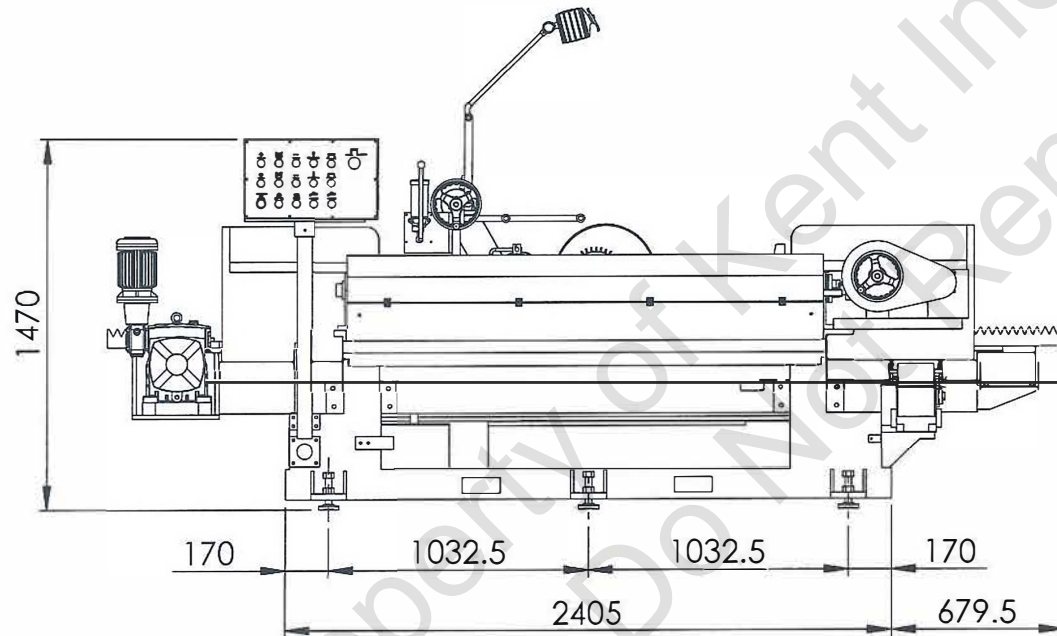
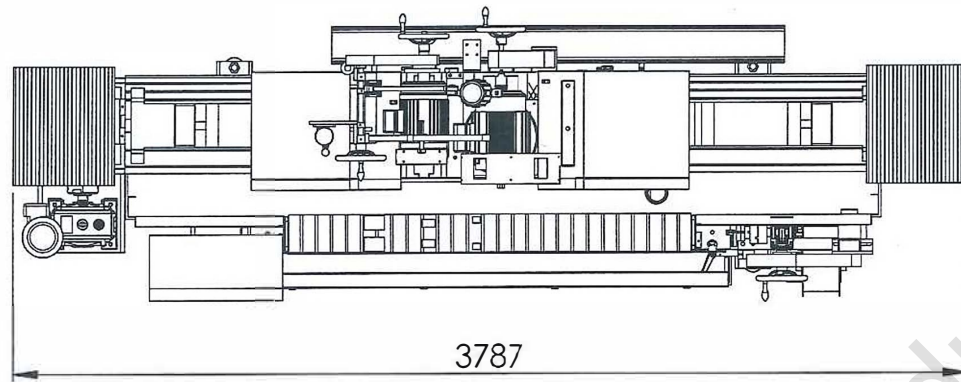




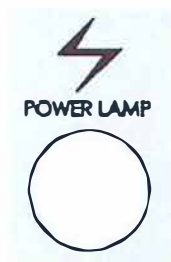
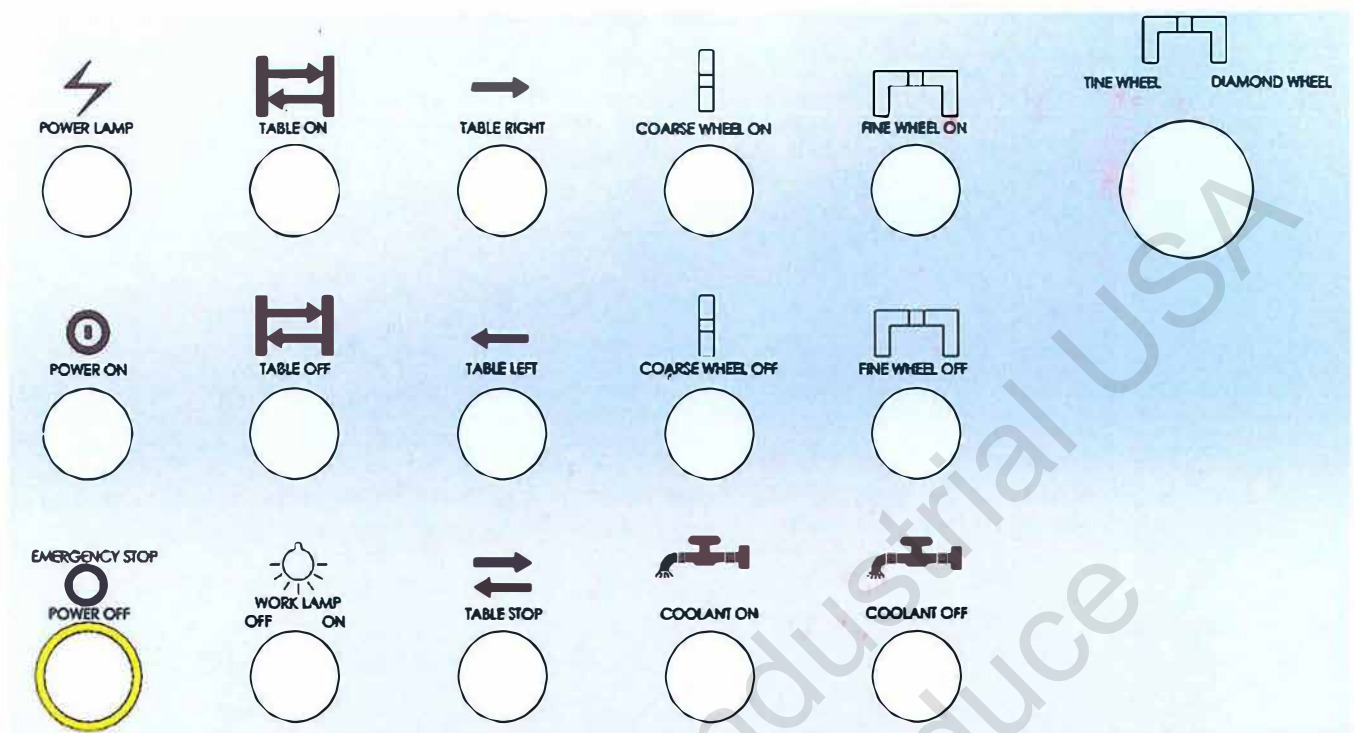
KENT USA KGK-60 Knife Grinders Manual





			KENT Industrial (USA) Inc.			Scale	1:30	KGK-60 floor space
				Unit	mm			

✳Mechanical control panel



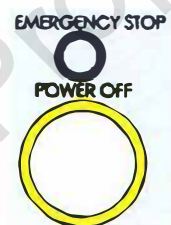
【Power Lamp】

When press the button of “Power On”, the power lamp will light.



【Power On】

The main power of machine— ON



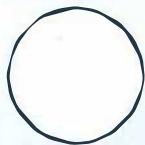
【Power Off】

The main power of machine— OFF



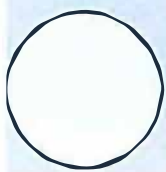
【Table On】

Grinding wheel shaft set starts right-left moving.



【Table Off】

Grinding wheel shaft set stops right-left moving.



【Work Lamp】

Switch ON/OFF the work lamp.



【Table Right】

Grinding wheel shaft set starts rightward moving.



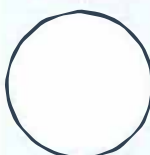
【Table Left】

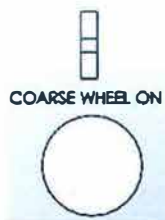
Grinding wheel shaft set starts leftward moving.



【Table Stop】

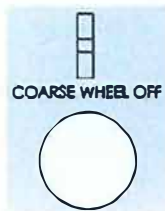
Grinding wheel shaft set stops right-left moving.





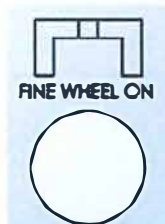
【Coarse Wheel On】

Coarse grinding wheel starts rotating.



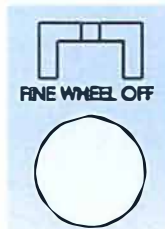
【Coarse Wheel Off】

Coarse grinding wheel stops rotating.



【Fine Wheel On】

Fine grinding wheel starts rotating.



【Fine Wheel Off】

Fine grinding wheel stops rotating.



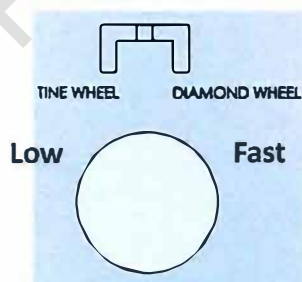
【Coolant On】

Water pump starts working.



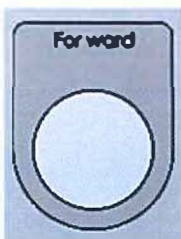
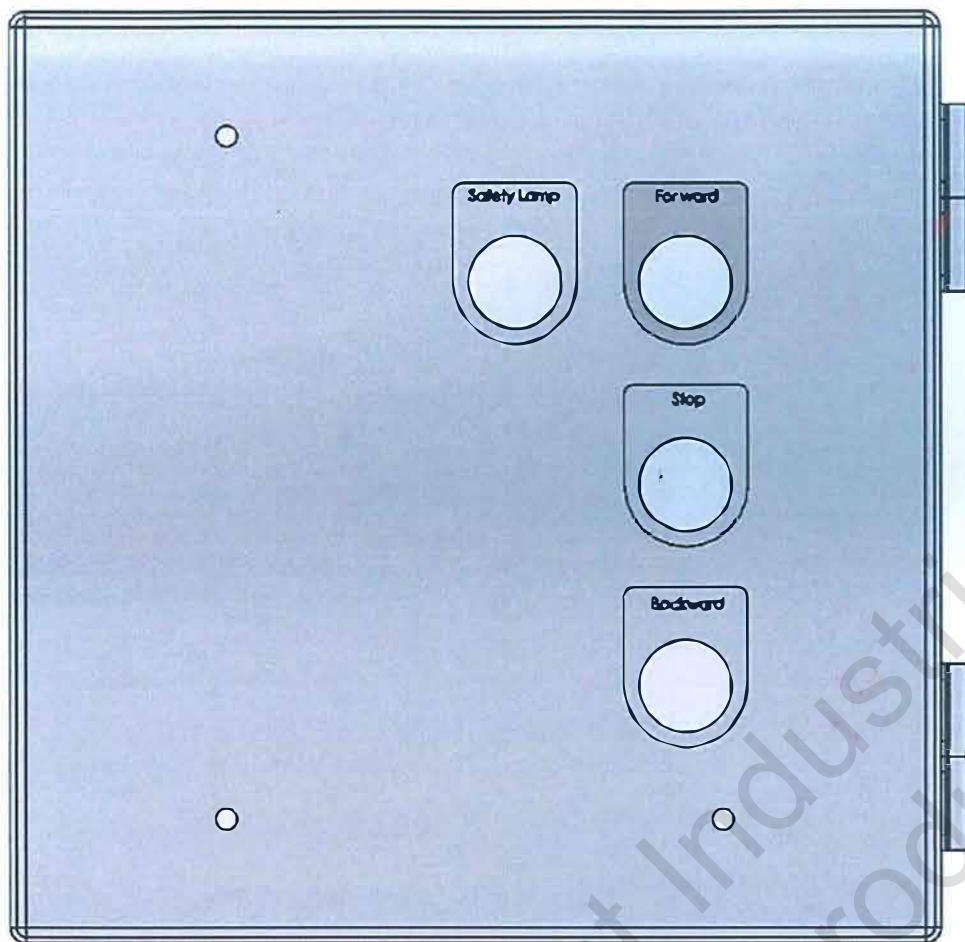
【Coolant Off】

Water pump stops working.



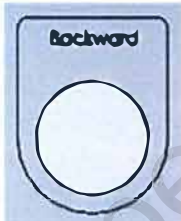
【The rotation fast/low speed of fine/coarse】

Switch turns left is low speed and turns right is fast speed.



【Forward】

Electromagnetic chuck rotates forward.



【Backward】

Electromagnetic chuck rotates backward.



【Stop】

Electromagnetic chuck stops rotating.



【Safety Lamp】

When the indicator of the electromagnetic chuck lights up, it means the electromagnetic chuck can be moved forward or backward.

Preface:

Your smart decision to buy Automatic Knife Grinder is highly appreciated. A machine is satisfied that not only depends on the manufacture's quality guarantee but also depends on the suitable maintenance of operators.

However, good maintenance is especially important.

In this pamphlet of "Operation and Maintenance Instruction Manual", a right operation and maintenance procedure are explained briefly. To understand the afore-mentioned procedure will not only obtain long use from this machine but also promote the working efficiency.

A. Features:

1. With coarse and fine – fined wheels independently mounted, the knives can be sharpened accurately in a short time and no more handwork is required.
2. It is not necessary to adjust the knives angle from rough to fine grinding. The grinding process is clearly visible so that the operator can easily run the machine.
3. The table can be steadily moving back and forth controlled by an electro – magnetic control devise.
4. The sliding parts are well lubricated by "One shot Lubrication System".

B. Specification:

Grinding capacity (LxWxT)		1600 x 153 x 19mm (63"x 6"x 3/4")	
Sped of grinding wheel		1700 R.P.M.	
Grinding wheel size (Dia. x H x bore)	Coarse wheel	Ø255 x 133 x Ø31.75mm	
	Fine wheel	Ø150 x 65 x Ø50.8mm	
Motor	Coarse wheel	7.5HP (4P)	
	Fine wheel	1HP (4Px2P)	
	Automatic table	1/2HP	Knife holder turning motor 40W
	Cooling system	1/8HP	
One shot lubrication		YES	
Machine size (LxWxH)		3800x1100x1550mm (150"x43"x61")	
Packing size (LxWxH)		3880x1280x1750mm (153"x51"x69")	
Net weight		2300kgs (5060 lbs)	
Gross weight		2700kgs (5940 lbs)	

C. Installation :

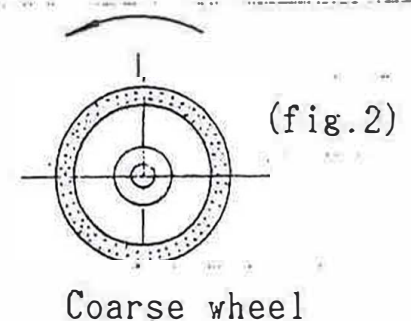
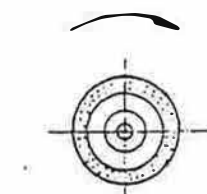
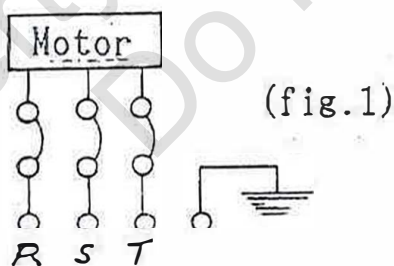
1. Please put this machine over flat and rigid concrete basement. In order to assure working precision, please make working table horizontal by adjusting base screws.

※ Caution : Don't push grinding wheel button before test working table moving is right.

2. Power Connecting : There is electrical wire on the left hand side of the machine base. Connect the wires to power source correctly and let earth wire grounded. (fig. 1)

coarse wheel : rotate counterclockwise.

fine wheel : rotate clockwise. (fig. 2)



D. Lubrication :

1. Pump grease into grease nipples in a proper period.
2. Put lubricant into oil cup and manual pump when oil is near empty.

E. Care must be taken before operation :

Please be sure to clean antirust grease and the dirt all over the machine. Also check following items respectively before operation.



1. Check grinding wheel by hand to see if the must fixed or not.
2. Check the slide way smoothly moving or not.
3. Make sure coolant is filled with tank.
(Proportion should be 1 to 30).
4. Check the power connection properly or not.



F. Control panel :

1.  : Coarse wheel. ON - OFF

 : Fine wheel. ON - OFF

 : Table power feed. ON - OFF

 : Push  then push this button to move table right direction.


 : Push  then push this button to move table left direction.


STOP : Purse stop the movement on table.

 : Coolant pump. ON - OFF.

EMERGENCY STOP : Emergency stop button.

2. Controlling for the working table on longitudinal stroke :

Right stop block 

 Left stop block



right limit switch

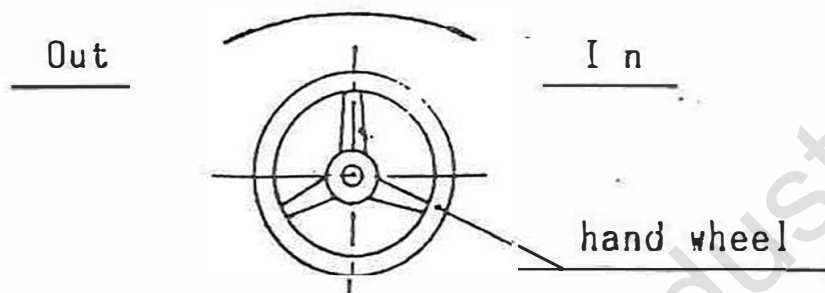


left limit switch

Left stop block : Control working table for left.

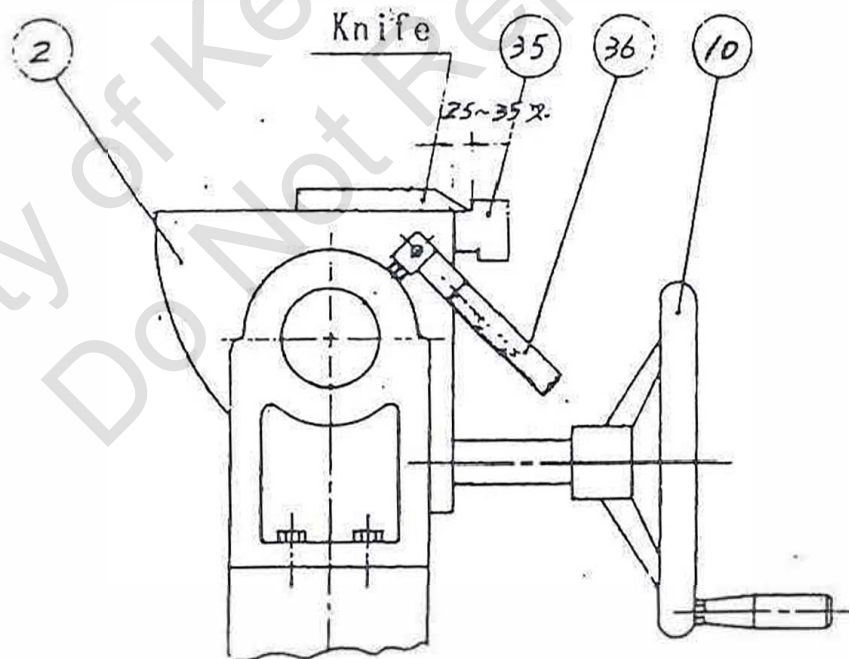
Right stop block : Control working table for right.

3. Grinding motor In - Out.


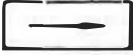






5. How to fix the knife on the cutter rest :

- ① Put the knife on the cutter rest (2) ,and set the desired extension shap-edge with two measuring magnetism (35) .
- ② Fix the knife with pinch plate
- ③ loosen the lock handle (36).
- ④ Turn the hand wheel (10), to obtain the desire angle of the knife then fix the lock handle (36).

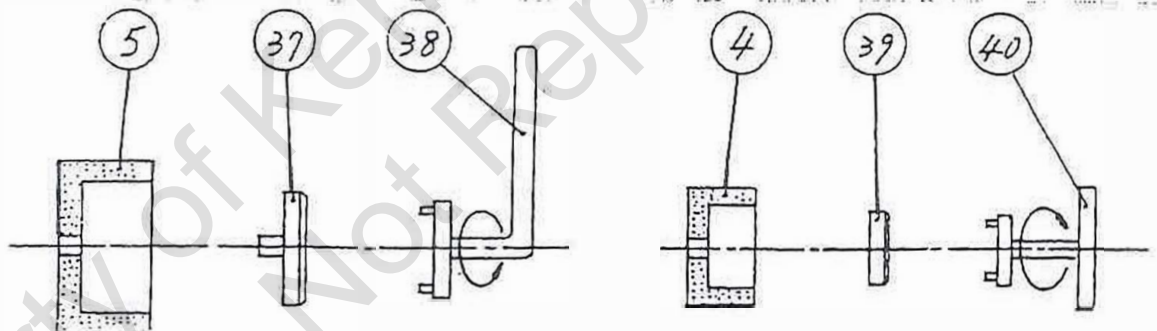


6. Operation :

- ① Infeed the grinding wheel about 2 mm. before touching the knife.
- ② Push the button. 
- ③ Push the button.  or  , and lubricate the working table by pulling the one-shot lubrication pump.
- ④ Preset the stroke of the working table.
- ⑤ Push the button.   on, and test for 3 minutes.
- ⑥ Turn on the cooling pump, and turn on the right coolant valve.
- ⑦ In feed the right handwheel till the knife is sharpened.
- ⑧ Push the button.  on, and infeed the left handwheel till it is finished 0.5 - 1 mm, width on the sharp edge, then turn off the left hand coolant valve.
- ⑨ Outfeed the left & right grinding wheel, then take off the knife.
- ⑩ Rotation Left-handed Hand wheel (6), about (15) handle wheel (10), before rotation.

7. How to replace the grinding wheel :

You may loosen the lock nut (37) ,by nut handle (38) rotate counter clockwise, then replace the new corase wheel (5). And loosen the fine wheel lock nut (39) by nut handle (40) .rotate clockwise, then replace the new fine wheel.

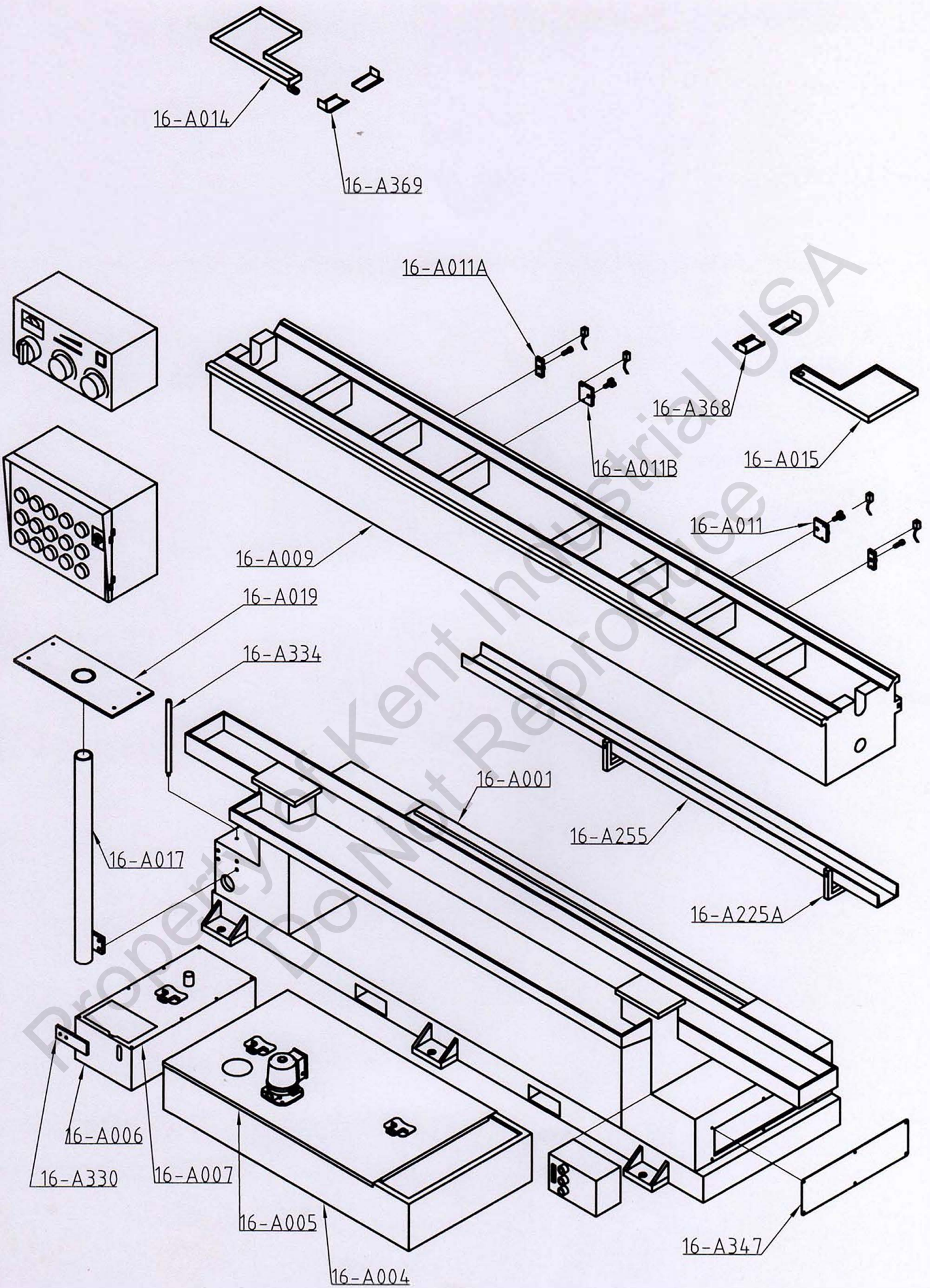


How to order replacement parts :

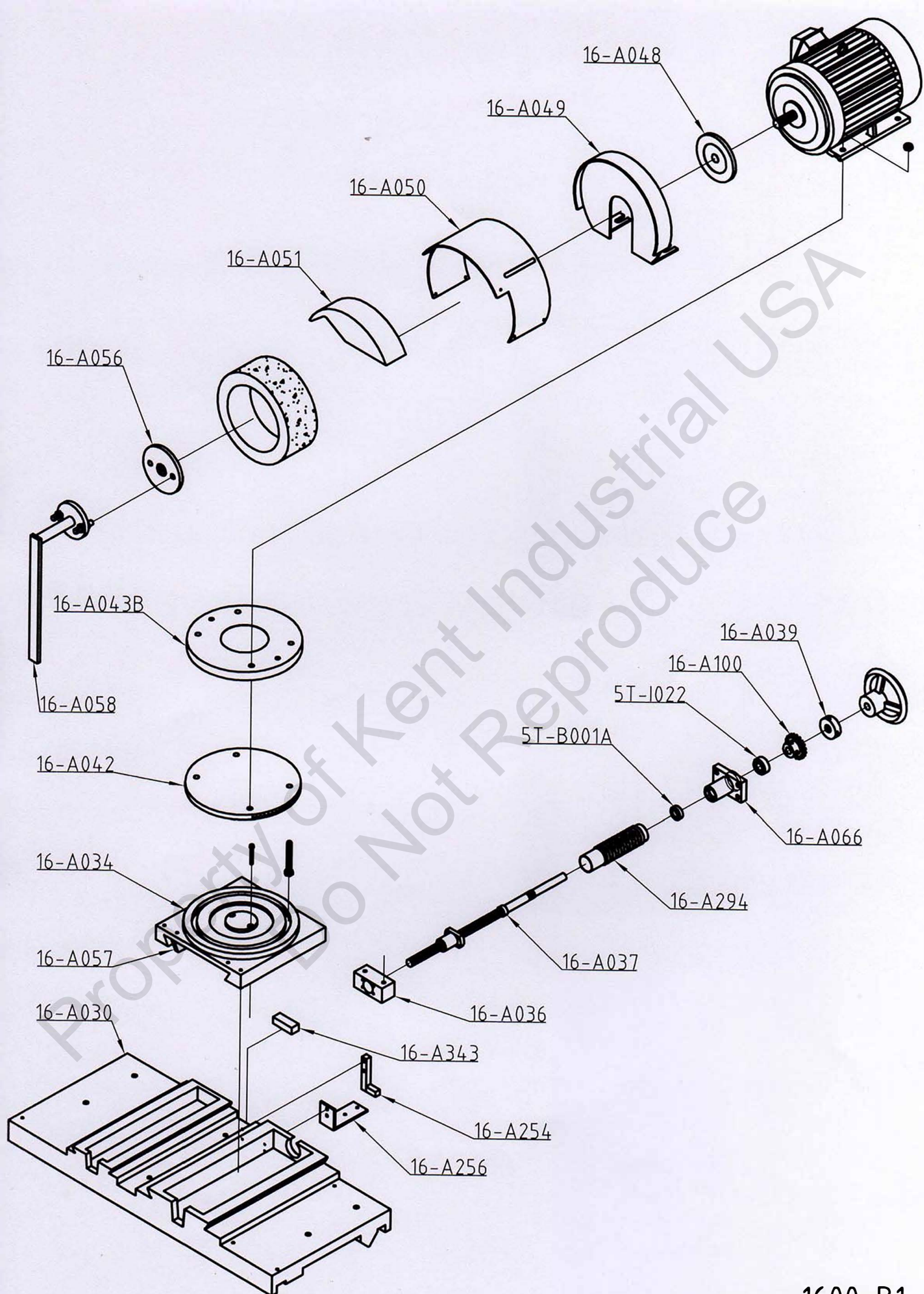
1. Please locate serial number (S/N) by checking parts drawing then you are able to get the parts number (P/N) and nomenclature.
2. Please advise parts number (P/N) and nomenclature whenever you require. We will mail replaced parts to you for maintaining our machine in good condition as soon as possible.

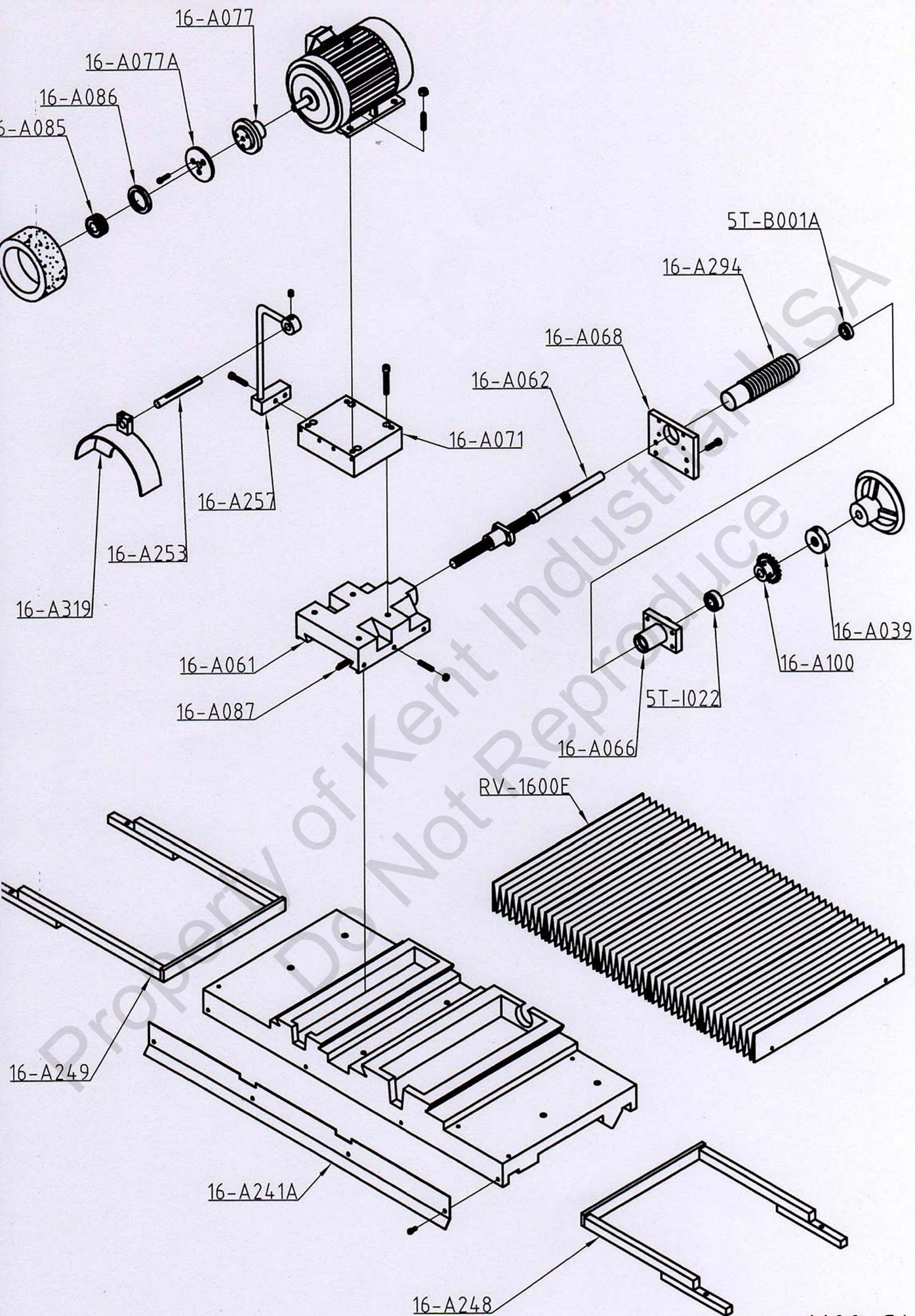
Example :

1. Parts drawing ----- (5)
2. Parts number (P/N) ----- 95 - 0412.
3. Nomenclature ----- coarse grinding wheel.

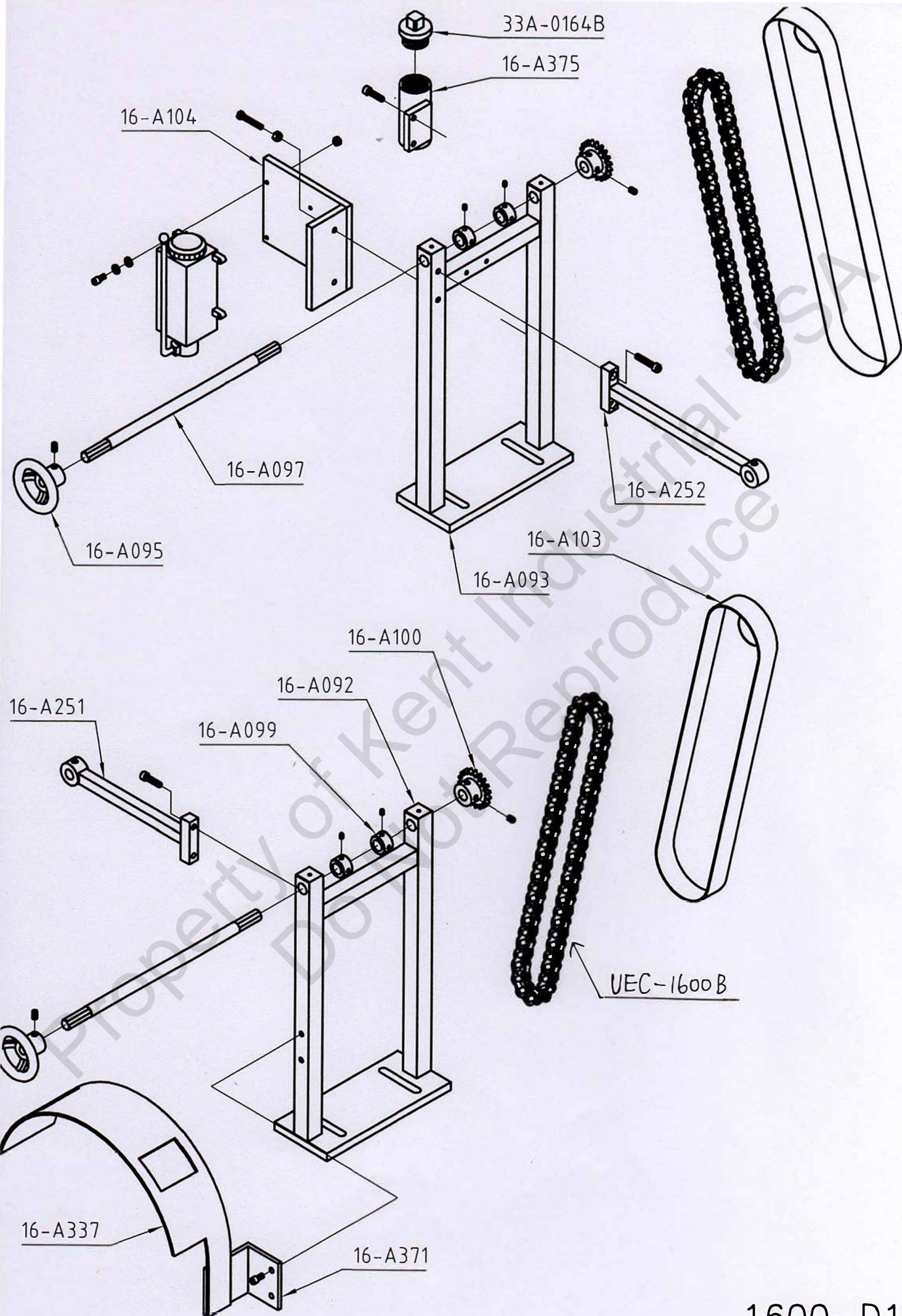


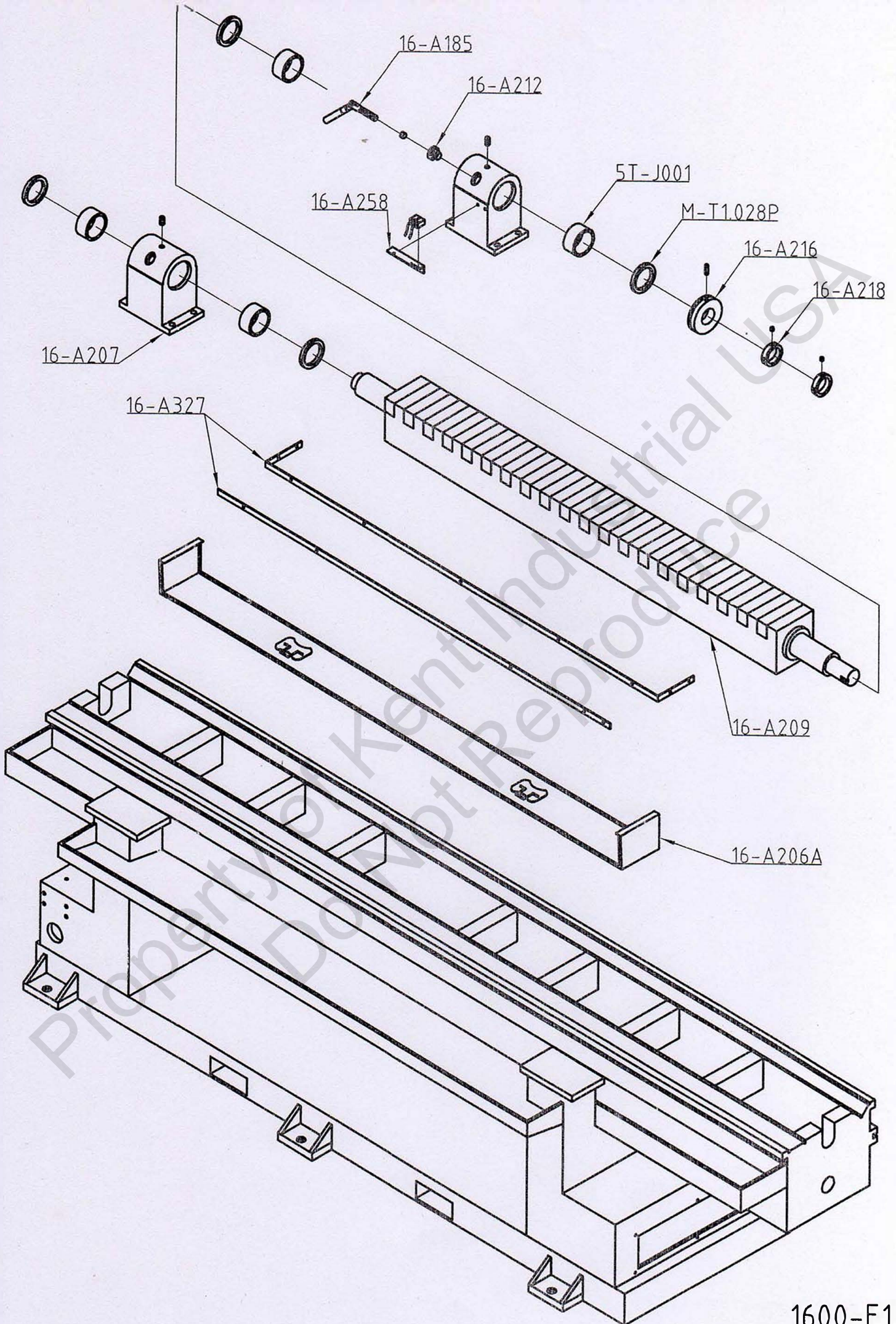
1600-A1

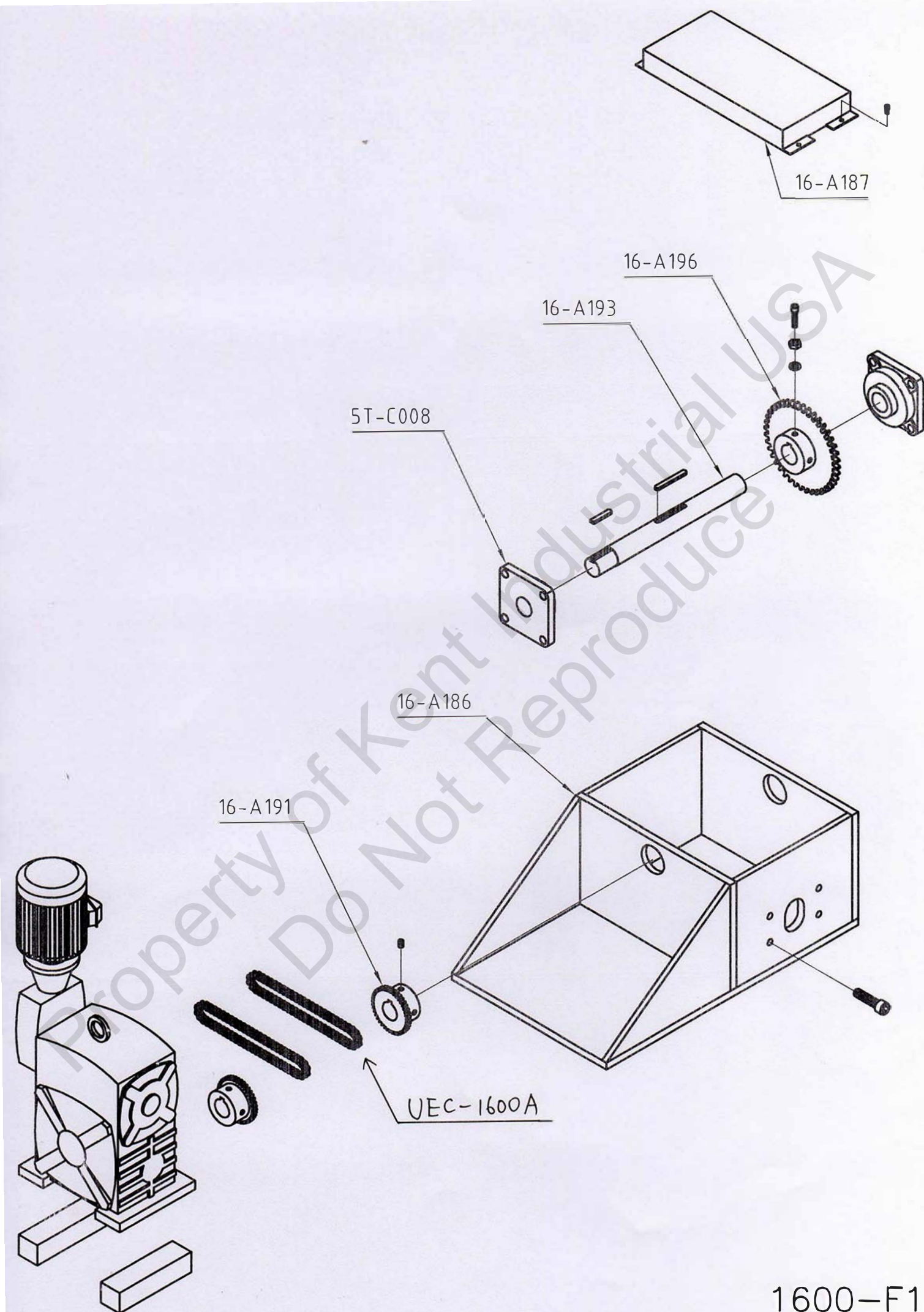




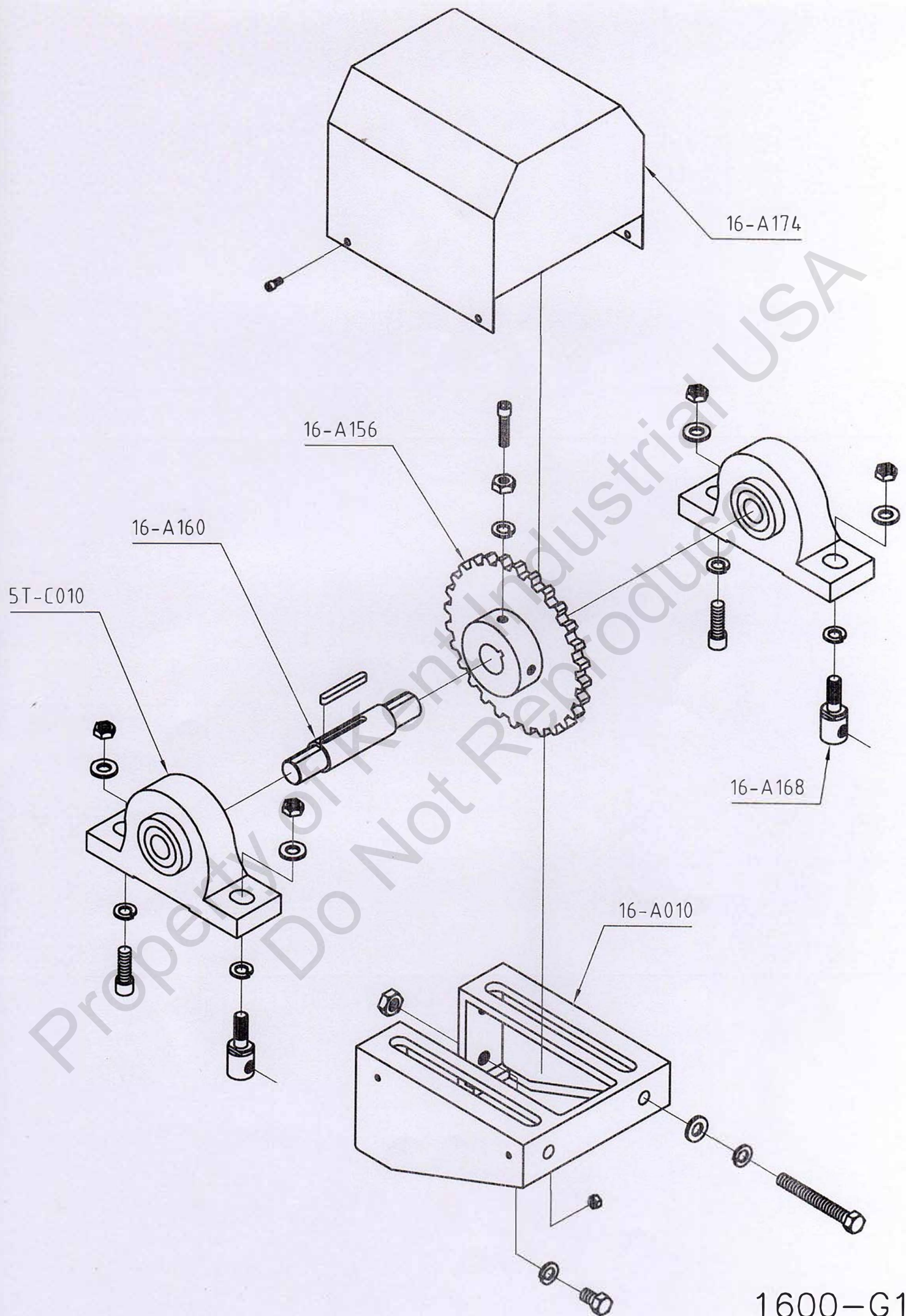
1600-C1



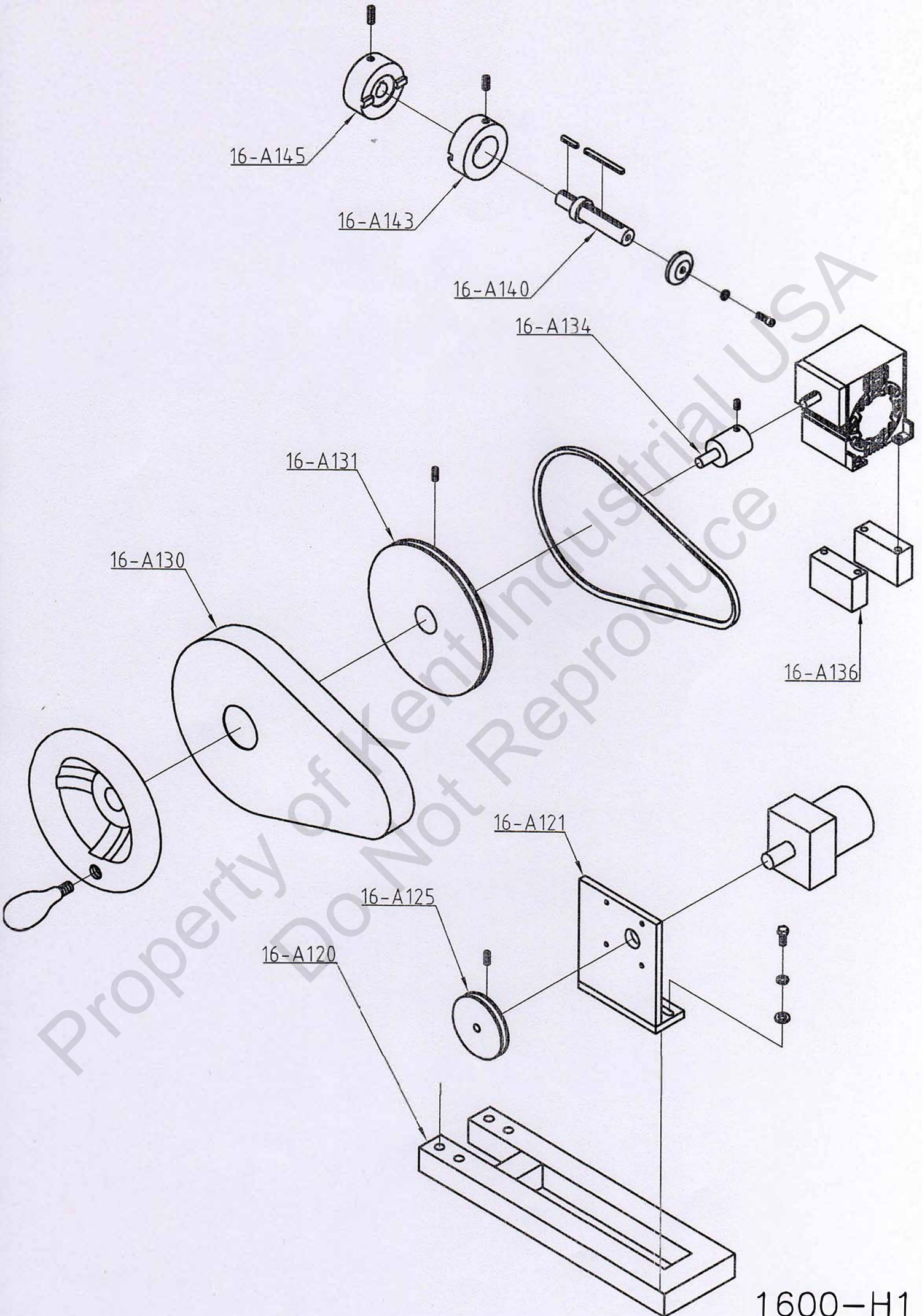




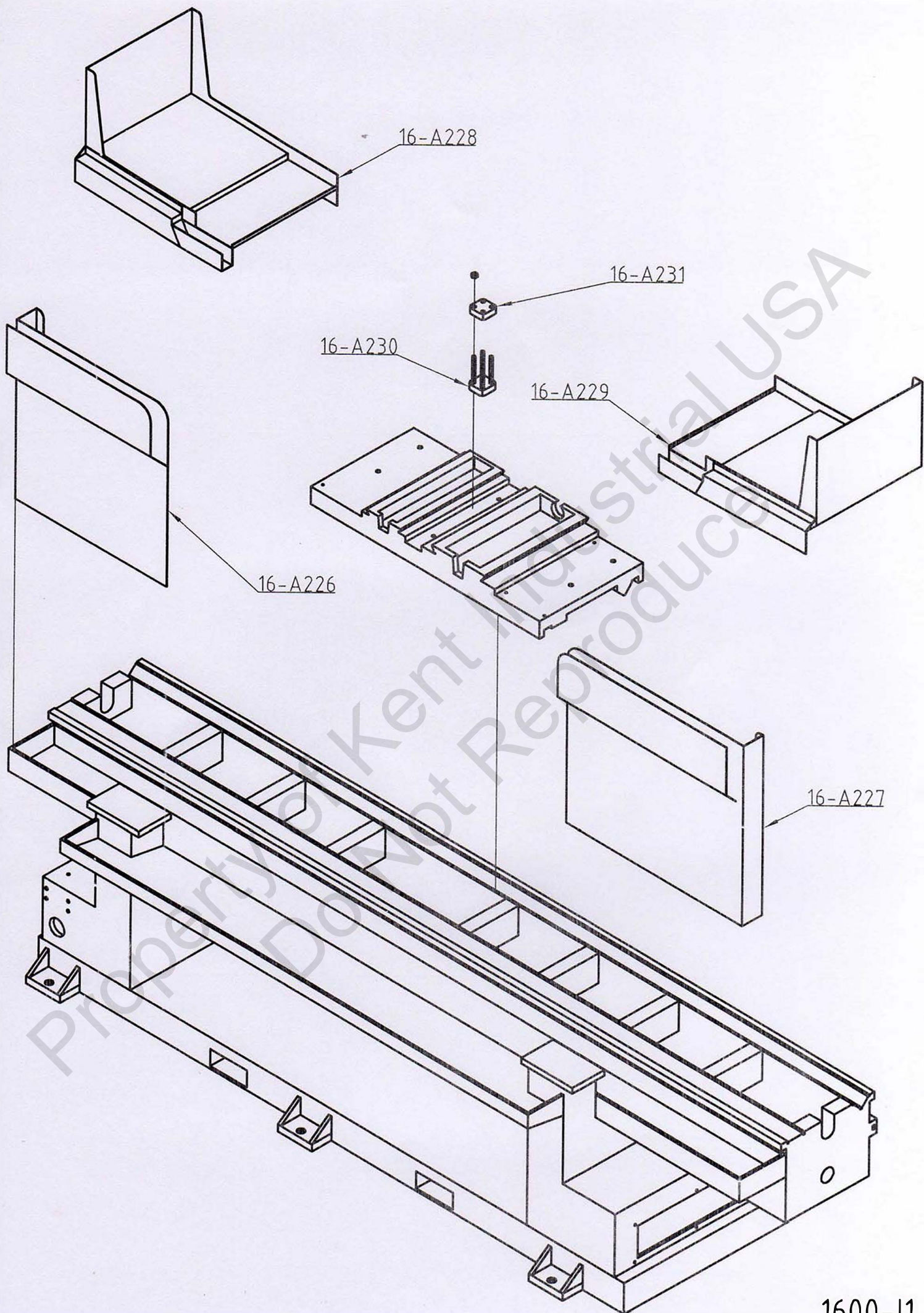
1600-F1



1600-G1



1600-H1



PART LIST

1600-A1			
PART NO	PART NAME	QTY	REMARKS
16-A001	Machine base	1	
16-A255	Fixing tank	1	
16-A225A	Fixing tank	2	
16-A347	Base door plate	1	
16-A004	Water tank	1	
16-A005	Water tank cover	1	
16-A006	Oil tank (A)	1	
16-A007	Oil tank cover	1	
16-A330	Oil tank fixing plate	1	
16-A017	Control box fixing seat A	1	
16-A019	Control box fixing seat B	1	
16-A334	Electric cord fixing lever	1	
16-A009	Saddle seat	1	
16-A014	Left recycle tank	1	
16-A369	Guard cover	2	
16-A011A	Horizontal limit switch plate	2	
16-A011B	Horizontal limit switch plate	1	
16-A011	Horizontal limit switch plate	1	
16-A368	Guard cover	2	
16-A015	Right recycle tank	1	

PART LIST

1600-B1			
PART NO	PART NAME	QTY	REMARKS
16-A030	Work table	1	
16-A057	Longitudinal slide seat wedge	1	
16-A034	Longitudinal slide seat	1	
16-A042	Motor rotary seat	1	
16-A043B	Coarse wheel height block	1	
16-A048	Wheel fixing ring	1	
16-A049	Coarse wheel cover support seat	1	
16-A050	Wheel guard cover	1	
16-A051	Coarse wheel front cover A	1	
16-A056	Wheel nut	1	
16-A058	Wheel nut handle	1	
16-A256	Transmission fixing block	1	
16-A254	Horizontal stop block	1	
16-A036	Coarse wheel longitudinal fixing nut	1	
16-A037	Shaft	1	
16-A294	Micro adjust screw dust cover	1	
5T-B001A	Thrust bearing	1	51104
16-A066	Longitudinal rod screw seat	1	
5T-I022	Roller bearing	1	32004J
16-A100	Hand chain wheel	1	
16-A039	Fixing nut	1	
16-A343	Fence	1	

PART LIST

1600-C1			
PART NO	PART NAME	QTY	REMARKS
16-A241A	Work table inner fence	1	
16-A249	Left dust cover fixing seat	1	
16-A248	Right dust cover fixing seat	1	
RV-1600E	Dust cover	2	
16-A087	Left slide seat wedge	1	
16-A061	Fine motor seat A	1	
16-A071	Fine wheel height block	1	
16-A257	Fine wheel cover fixing seat	1	
16-A253	Fine wheel cover adjust lever	1	
16-A319	Fine wheel guard cover	1	
16-A077	Fine wheel fixing seat	1	
16-A077A	Fine wheel washer	1	
16-A086	Motor nut pipe (A)	1	
16-A085	Motor nut (A)	1	
16-A062	Shaft (A)	1	
16-A068	Fine wheel front fixing plate	1	
16-A294	Micro adjust screw dust cover	1	
5T-B001A	Thrust bearing	1	51104
16-A066	Longitudinal rod screw seat	1	
5T-I022	Roller bearing	1	32004J
16-A100	Hand chain wheel	1	
16-A039	Fixing nut	1	

PART LIST

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PART LIST

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PART LIST

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PART LIST

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