INSTRUCTION MANUAL

WBS-1836
Wide Belt Sander (240V)
420mm

L124

HARE&FORBES MACHINERYHOUSE

Established 1930
Distributors of new & used workshop Equipment

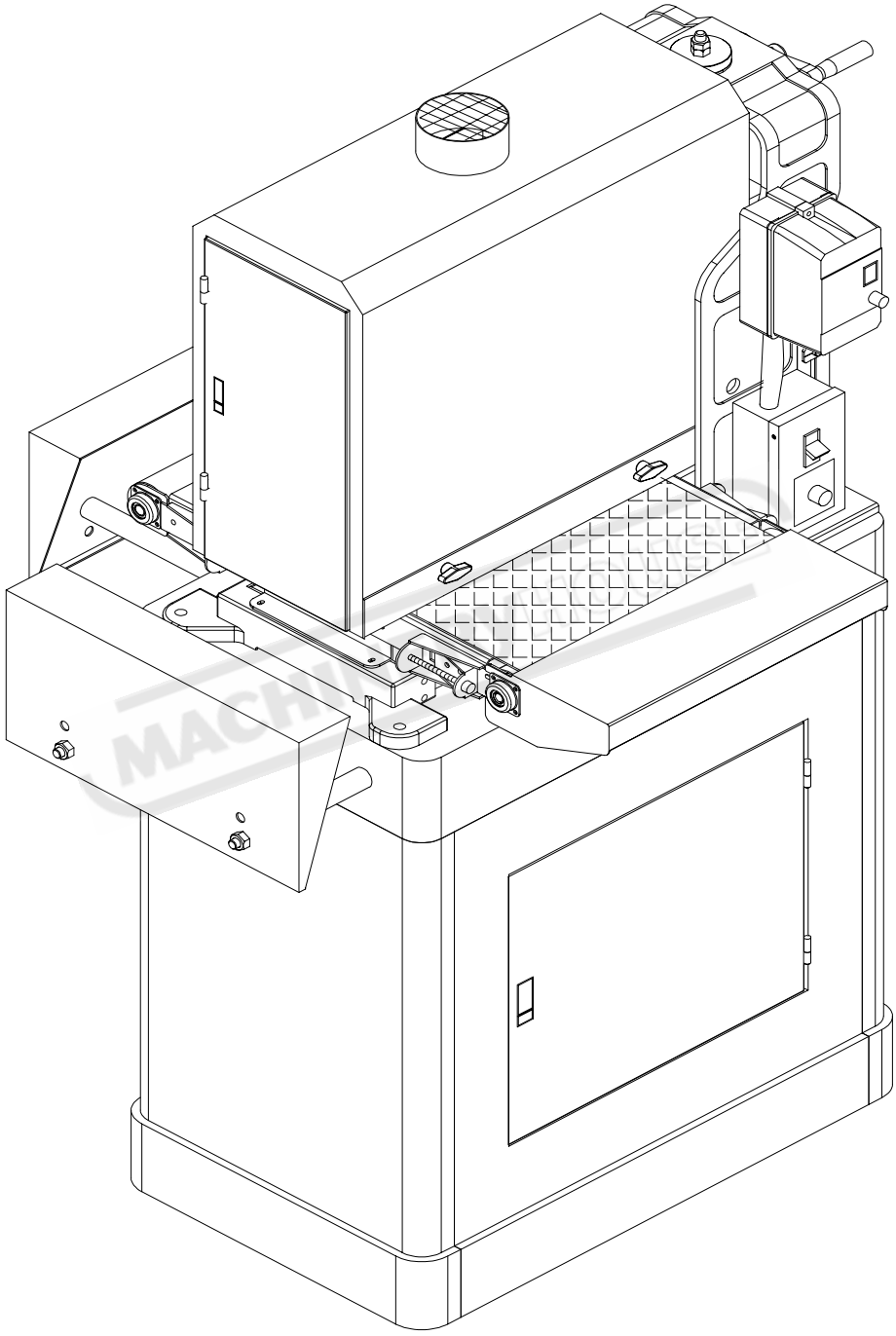
L124
WIDE BELT SANDER

WBS-1836

INSTRUCTION & PARTS MANUAL

7-10-10

WBS-1836
WIDE-BELT SANDER



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PREFACE

Thank you for choosing this Belt Sander. We are pleased to offer you our best machinery and service, and trust that you will find our machinery economical, productive and easy to operate.

This manual covers the proper operation, safety and maintenance of the machine. It is important that this manual be read in its entirety before operating the machine. Although the machine has been checked and inspected in compliance with relevant safety regulations, the machine's safety and best performance are dependent on proper maintenance and operation. Hazards that arise due to improper operation and maintenance are solely the responsibility of the operator.

We thank you again for you choice, and for your careful reading of this manual.

GENERAL SAFETY RULES FOR WOODWORKING MACHINERY

There is a certain amount of hazard involved with the use of woodworking machinery. Using the machine with the respect and caution demanded as far as safety precautions are concerned will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, severe personal injury to the operator can occur.

1. Read the operation manual before operating this machine.

2. The machine should be disconnected from the power source before performing maintenance or adjustments to the internal mechanisms, or when making repairs.

3. Before leaving the machine, make sure the work area is clean.

4. Check timber for loose knots, nails, or other items which may cause a hazard or affect the machine's performance.

5. Keep all guards in place and in working order.

6. Do not force the machine. It will do the job better and be safer working at the rate for which it was designed.

7. All children and visitors should be kept a safe distance from the working area.

8. The operator should keep proper footing and balance at all times.

9. Do not operate the machine while under the influence of drugs, alcohol, or any other medication.

10. Avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the sanding area.

11. Never leave the machine until it comes to a complete stop, and never leave the machine running unattended.

12. The employer is responsible for selecting competent and qualified employees.

13. Safety shoes should be worn to provide protection against rolling objects, falling objects, and sharp edges in the workplace.

14. Eye protection should be worn and such devices should be carefully selected, fitted and used. Compulsory wearing of glasses with impact resistant lenses and side shields is a good safety policy.

15. Wear hearing protection when operating the machine.

16. Do not wear rings, necklaces or jewelry around moving machinery.

17. Do not wear loose fitting clothes. Clothing should be comfortable, but long sleeves, neckties, etc. should not be worn.

GENERAL SAFETY RULES FOR WOODWORKING MACHINERY

18. Do not wear gloves or other hand covering articles around moving machinery.

19. Cover long hair with a hair net or cap.

20. Protective guards and shields must be in place at all times unless they must be removed for specific service or maintenance. They should be immediately replaced when service or maintenance is completed.

21. Make sure that operator clearly knows how to stop the machine before starting work.

22. Never clean or remove chips while the machine is running.

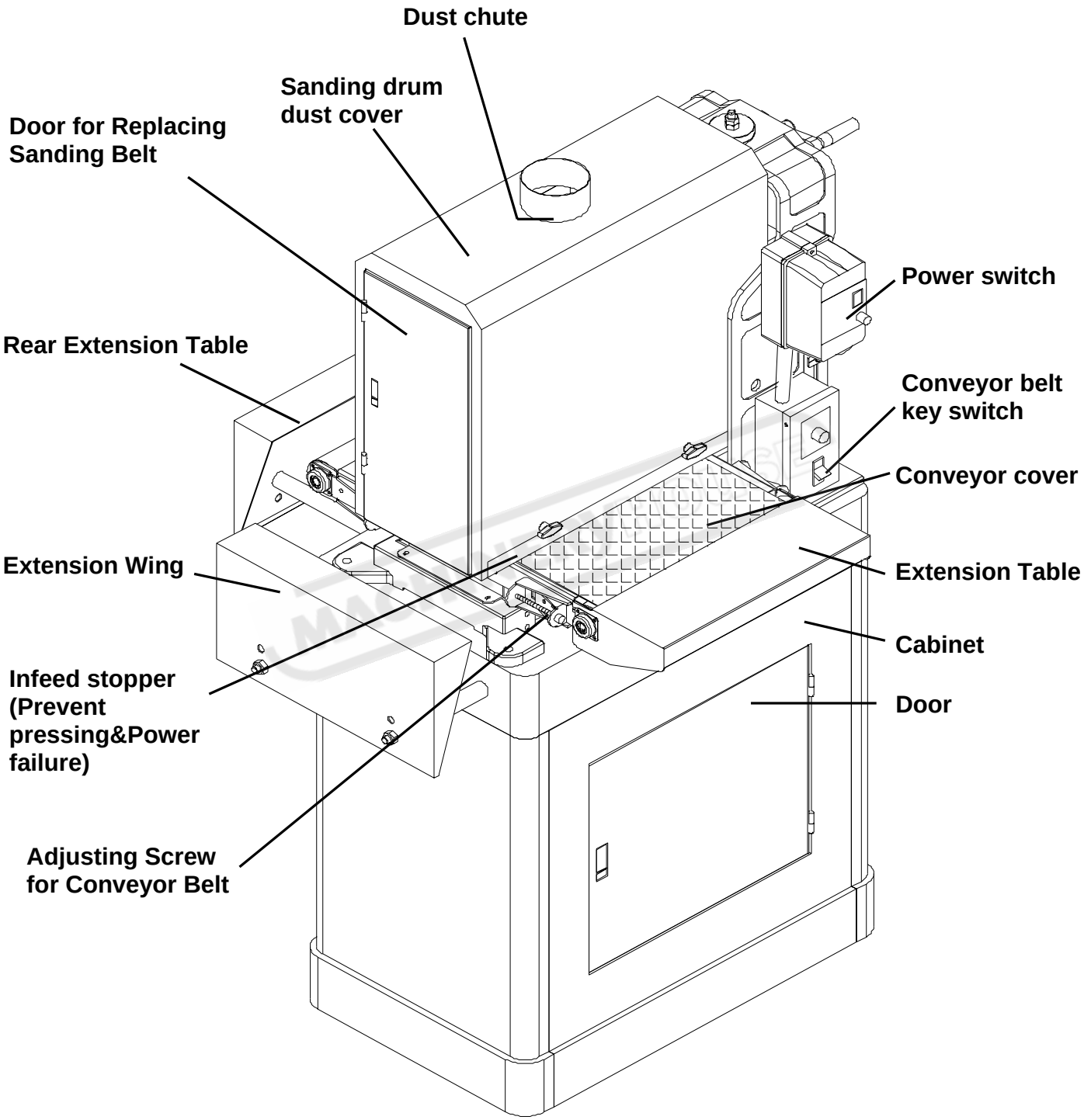
23. Do not alter or remove guards and warning labels.

24. Keep the working area clean. Do not allow the floor to become slippery, or covered with dust or obstacles. Dust that accumulates in the work area is a hazard that can cause you to fall or slip against the machine or its controls.

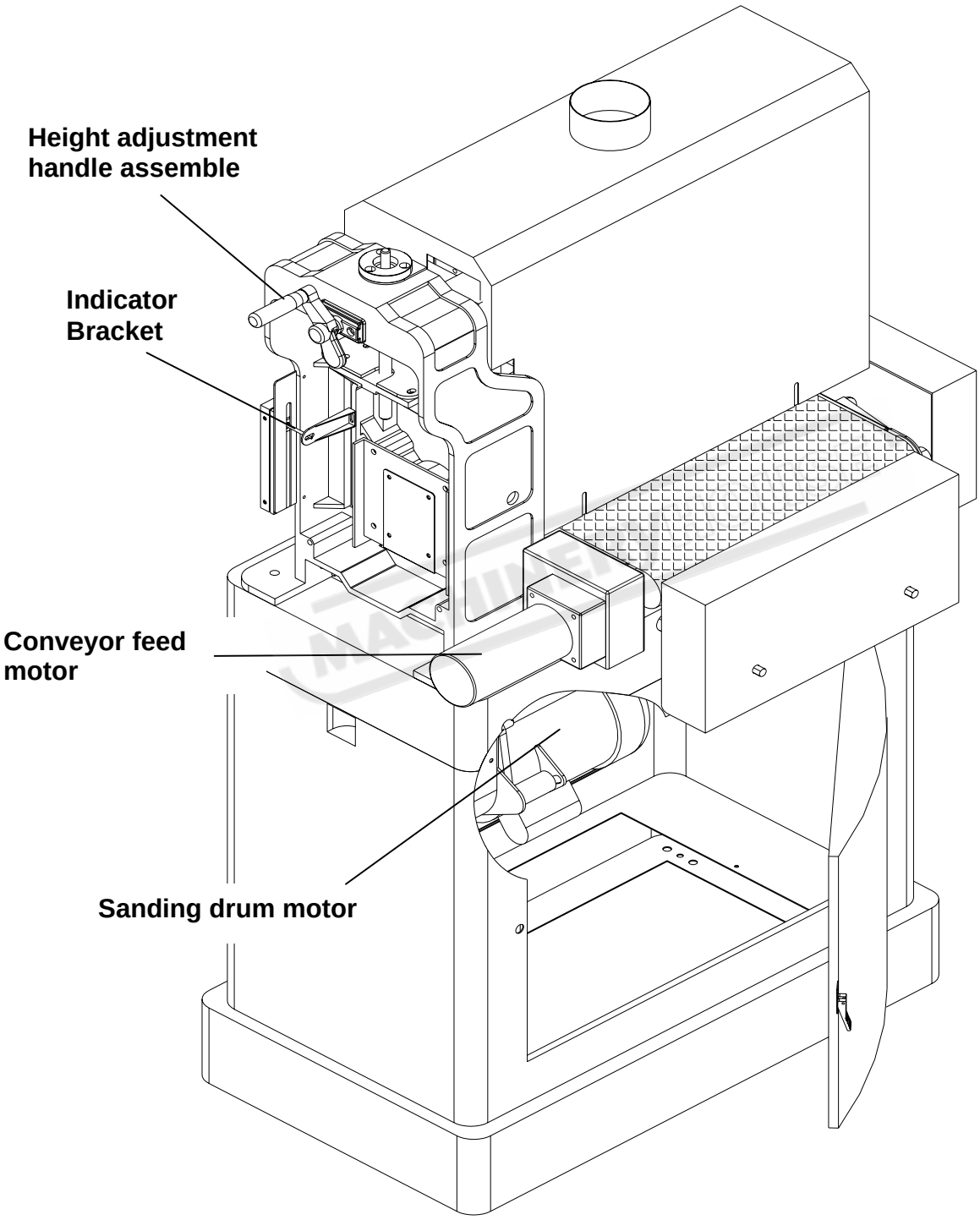
SPECIFICATIONS

MODEL	WBS-1836
Max. Sanding width	18"
Max. Thickness of work piece	4"
Min. thickness of work piece	1/4"
Drum speed	50Hz-1420rpm 60Hz-1720rpm
Freed speed	6 ~ 22 FPM
Drum Diameter	82mm
Drum Length	407mm
Drum Drive Motor	2.2Kw
Feed Drive Motor	130W
Dust Hood Outlet Diameter	O100mm
Net weight	215 kg
Gross weight	265 kg
Packing dimensions	103X86X174 cm
Noise Level	82dB

MACHINE LEGEND



MACHINE LEGEND



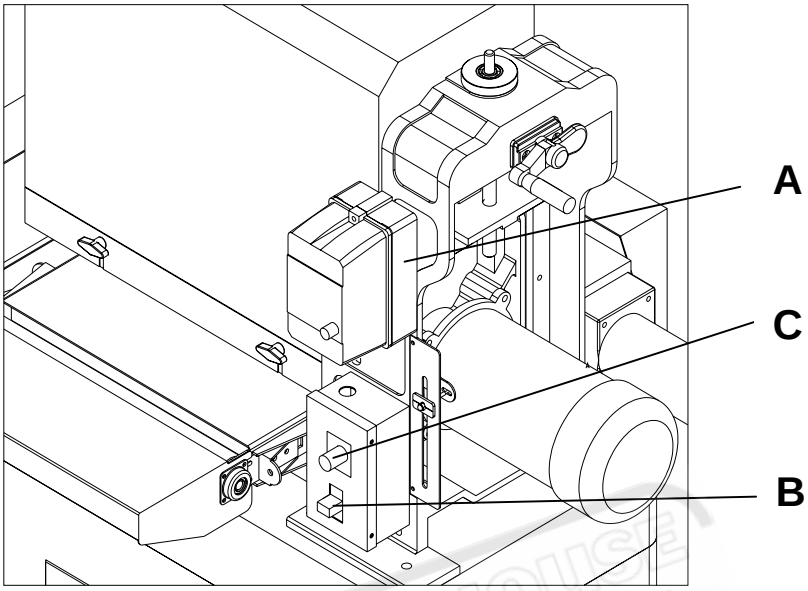
ELECTRICAL CONNECTION

A：Power Switch

B：Conveyor Belt Key Switch, it only works after turning on the power switch.

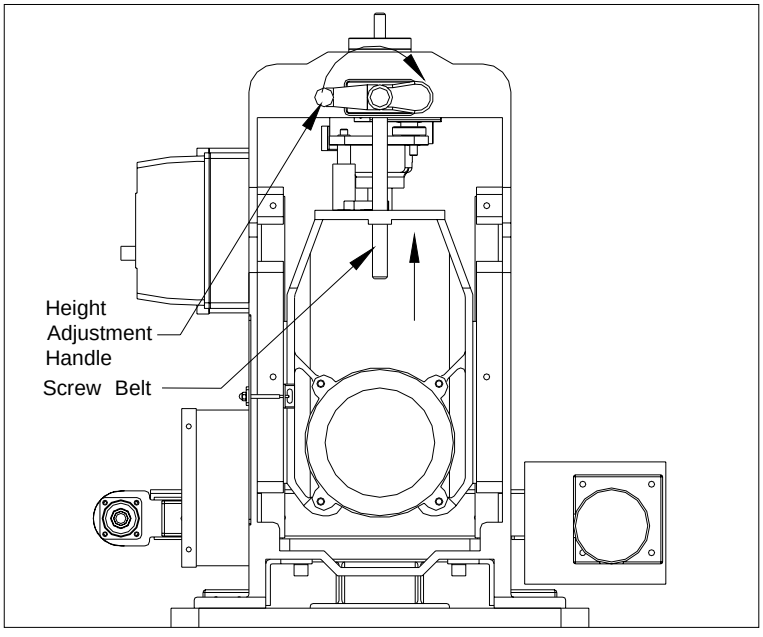
C：Conveyor Belt Speed Adjustment Konb ：

speed range：6FPM~30FPM



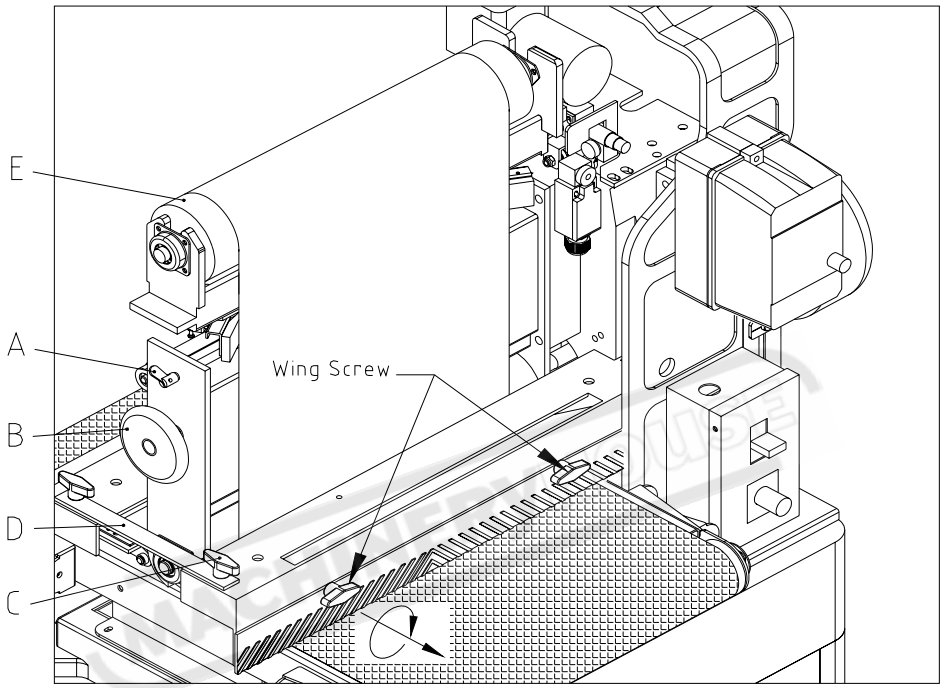
SANDING OPERATIONS

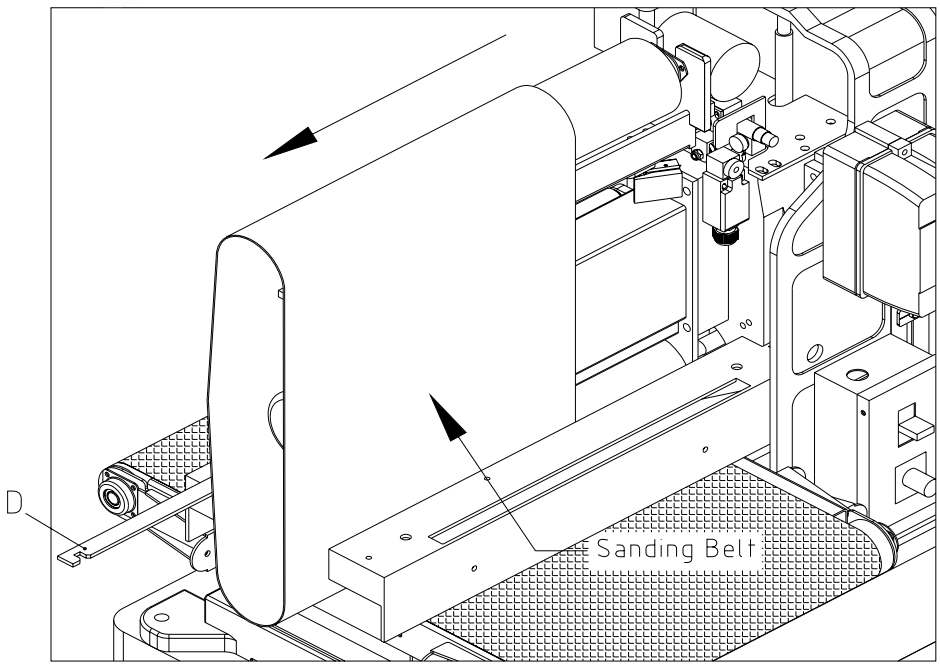
Using the Height Adjustment Handle to adjust the height according to the thickness of the work piece. Revolving to anti-clockwise can rise the height. Revolving to clockwise can low the height. Revolving to handle for a circle can make the height rise and low for 1/64 inch.



MOUNTING AND REPLACING SANDING BELT

1. Loose A
2. Afterwards, spinning object B（B）to anti-clockwise direction to low object F（F）down so that you can loose the sanding belt.
3. Then loose object C（wing screw）, remove object D.
4. Remove and replace the sanding belt.
5. Reverse the procedure to load the sanding belt back：screw and lock object D and C, spin B to object the sanding belt , finally screw A to finish the process.





ADJUSTING SANDING BELT TRACKING & TENSION

Motor is electrified when sanding belt touched limit switch A/B, the motor (C) turns front and reverse to control the roller swings.

Warning: please don't adjust dividing scale unless sanding belt swings unusually.

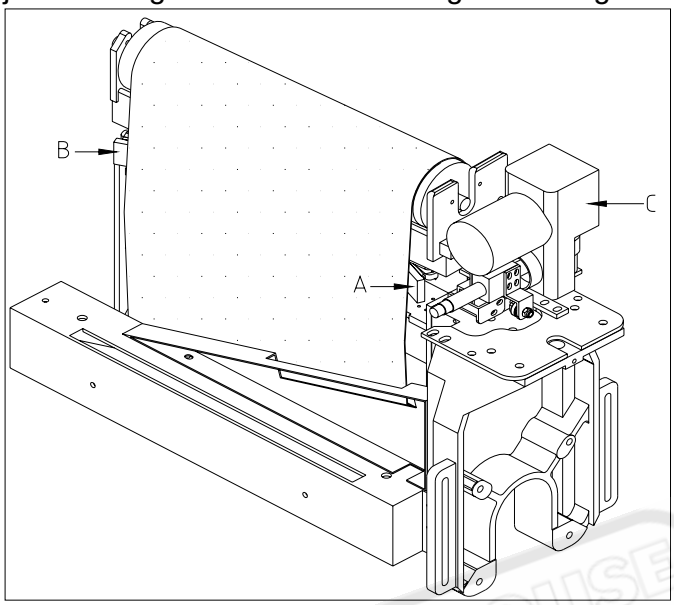


Figure5

ADJUSTING CONVEYOR BELT TRACKING

If the conveyor belt runs to the right or left during operation, or the conveyor belt tension is too loose or too tight, adjust it by turning the adjustment nuts on either side of the conveyor table. The conveyor belt should run at the center of the conveyor table, and should be tensioned so that there is good traction during stock feeding.

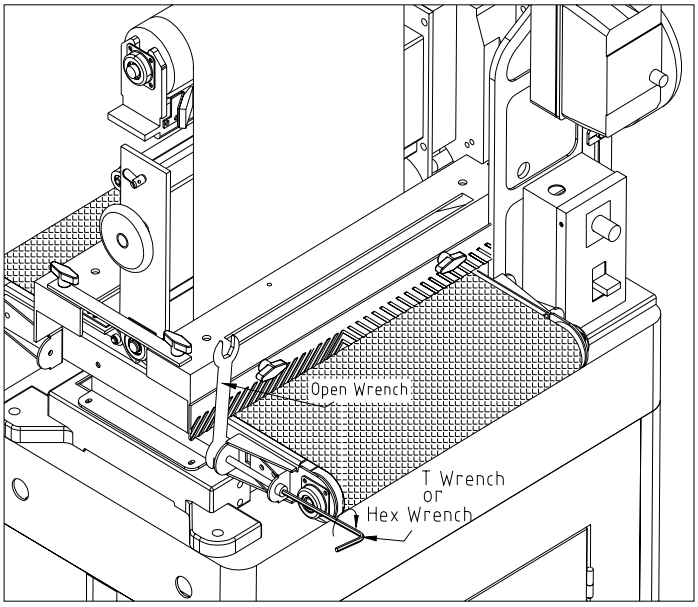


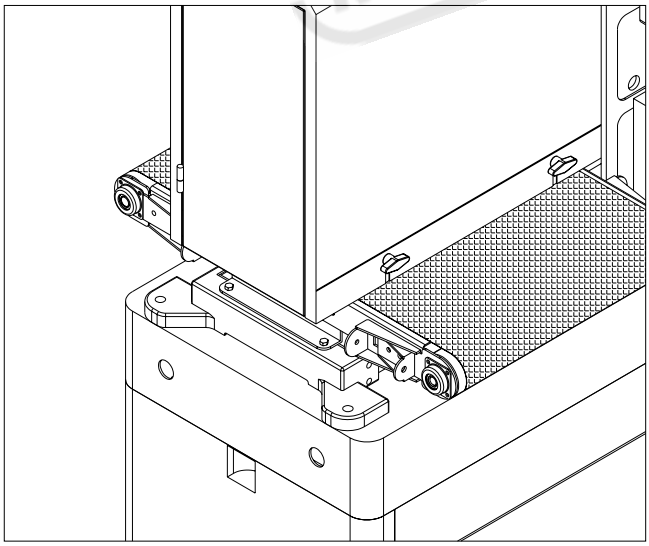
Figure6

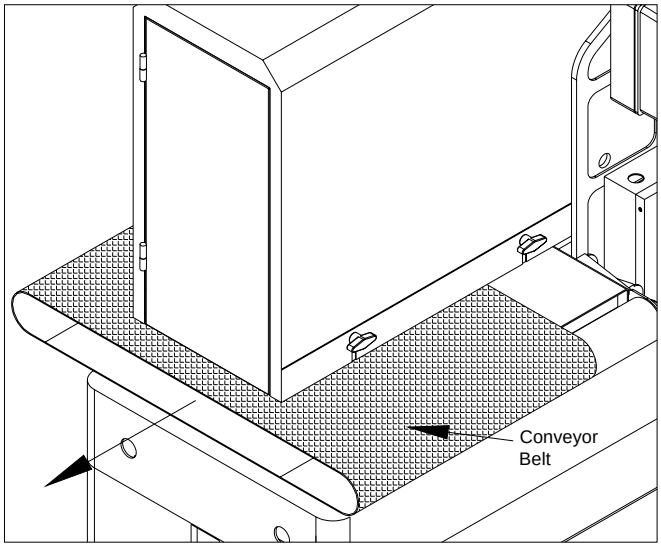
REPLACING THE CONVEYOR BELT

Common causes which require replacement of the conveyor feed belt are：normal wear and tear, inadvertent contact with the sanding drum abrasive during operation, tears caused by mistracking of the conveyor feed belt, or excessive build-up of non-removable film.

The following steps describe how to remove and replace the conveyor feed belt when necessary：

1. Disconnect the machine from the power source.
2. Using the Height Adjustment Handle, raise the sanding drum to its highest position（roughly 3” above the conveyor belt table）.
3. Using a Phillips type screwdriver, remove the 2 screws and star washers securing the front nip guard to the variable speed control box. Then remove the front nip guard by sliding it to the left and off the outboard drive roller bushing.（See Figure 21 for reference.）
4. Using the supplied 6 mm hex wrench key, remove both conveyor table mounting bolts on the outboard, open side of the wide drum sander.（See Figure 12 in the Drum Alignment section for reference.）
5. Reduce tension on the conveyor feed belt by rotating both the inboard and outboard conveyor feed belt tracking adjustment screws in a counterclockwise direction.（See Figure 14 and 15 in the Conveyor Feed Belt Tracking Adjustment section for reference.）
6. Remove the used conveyor feed belt by grasping both sides of the belt as shown in Figure 21. Gently lift the conveyor table as you slide off the conveyor feed belt. If the belt will not move, further reduce the tension on the feed belt and ensure you are lifting the table high enough to allow the feed belt to slide off.
7. To install the replacement conveyor feed belt, follow Step 6 through 3 in reverse order. Center the new feed belt on the conveyor feed belt table and evenly tension the new feed belt using the inboard and outboard tracking adjusters. If you experience tracking problems, consult the Conveyor Feed Belt Tracking Adjustment section.





ADJUSTING THE CONVEYOR BELT PARALLELISM

1. Check the tightness of the Elevation Tension Adjustment Screws（Figure 9）. The tightness of these screws must be adjusted to allow smooth height adjustments, while ensuring a tight enough fit to limit drum will deflection.（If the screws are too loose, the drum will deflect during use, causing an uneven sanding surface. If the screws are too tight, sanding drum height adjustments will be difficuit.）

   To adjust the Elevation Tension Adjustment Screws, loosen the locknuts, securing each screw in place. Loosen or tighten each screw, as required, in 1/4turn increments to attain the desired fit and smoothness. Retighten the locknuts to secure the tension screws in position.

2. Check the sanding drum to conveyor table alignment by first removing the abrasive strip from the drum. The purpose of this adjustment is to achieve equal distances at point A and point B, which will ensure that the drum is parallel to the feed table, and provide uniform sanding.（See Figures 10.）

If the measurement at A is greater than the same point at B by .020 or less, proceed as follows：

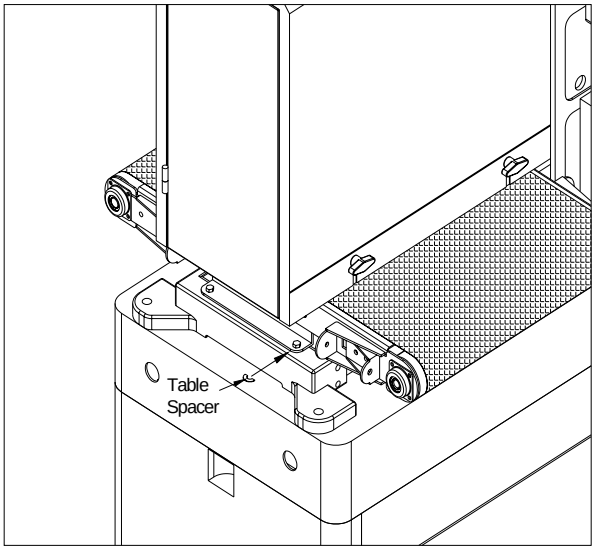
1. Loosen the 2 outboard conveyor table mounting bolts as shown in Figure 12.
2. Slide one or both of the supplied shims as needed under the edge of the conveyor table as shown.
3. Tighten conveyor table mounting bolts. Recheck the measurement at A and at B.
4. Test sand a piece of wood and check for uniform thickness.

If the measurement at A exceeds B by more than .020”, or if distance B is greater than A, proceed as follows：

1. Loosen the two front and two rear adjustment bolts as shown assembly to pivot.

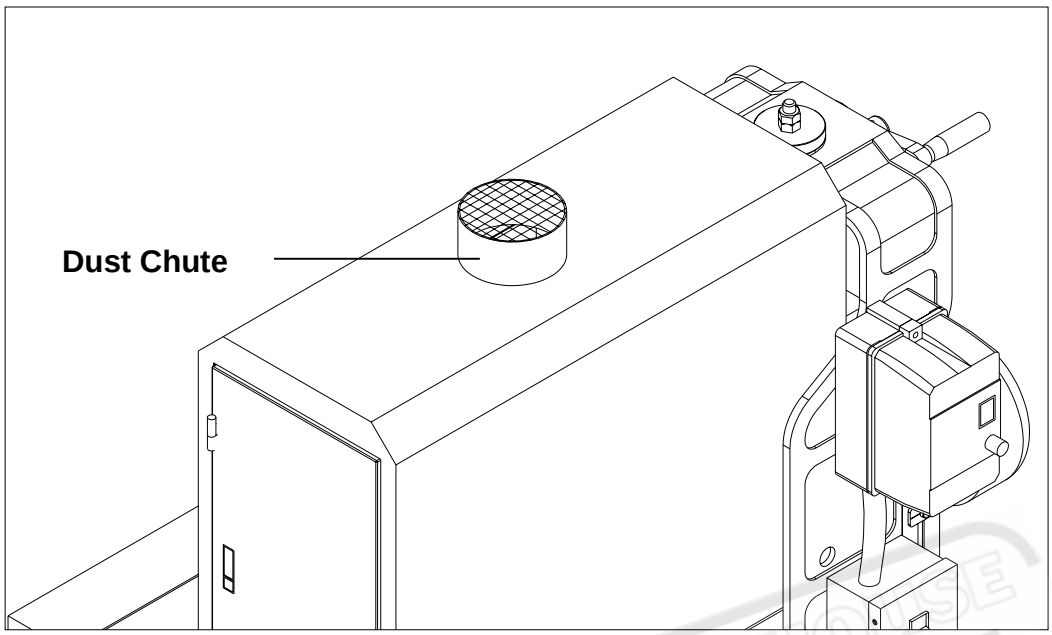
NOTE：If the unit is bolted to a stand or bench, loosen the mounting bolts at the motor end.

2. Using the Height Adjustment Handle Assembly, lower the drum until the distances at A and B are equal. Tighten the alignment bolts and the mounting bolts.
3. Test sand a piece of wood and check for uniform thickness. Repeat the above procedure if necessary.



ATTACHING A DUST COLLECTOR

The machine is provided with one 4-inch dust chutes. Use ring clamps to attach dust collection hoses to the chutes.



WARNING

Do not operate this machine without a dust collector attached and running.

LUBRICATION AND MAINTENANCE

NOTE
Before performing any maintenance or lubrication, disconnect the machine from the power source.

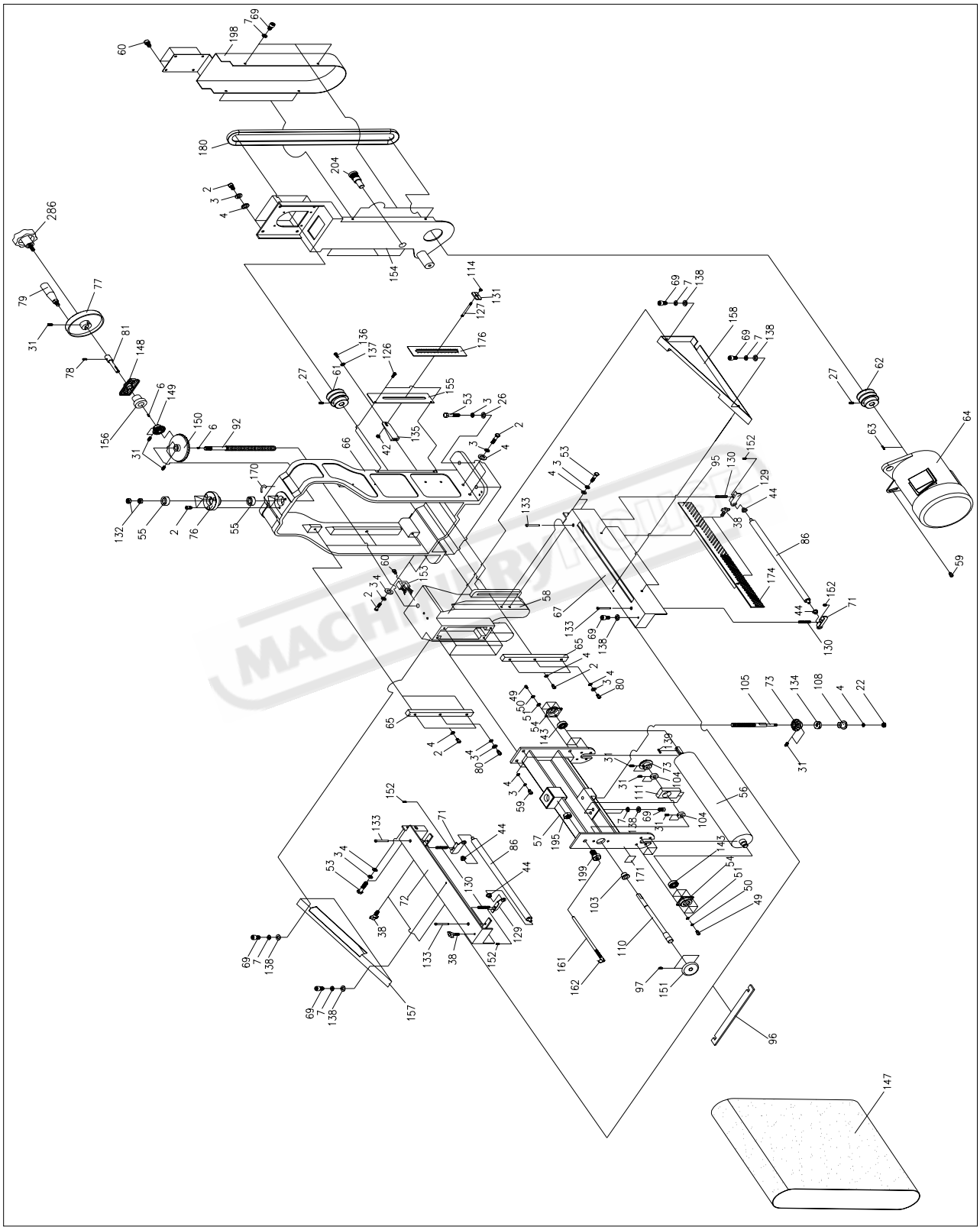
1. The table height adjustment screw shafts located at either end of the machine must be well lubricated with grease.
2. Make sure all nuts and screws are tight before sanding. Check that the sanding belts are mounted properly, and have not become loose or torn.
3. Do not allow excessive dust to accumulate on or in the machine.

TROUBLESHOOTING

TROUBLE	PROBABLE
Sanding belt clogs too quickly	**1.** Sanding belt grit too fine. **2.** Too much material being removed in one pass. **3.** Dirty workpiece suction. **4.** Insufficient dust suction. **5.** Workpiece contains too much moisture.
Rounding occurs at edges or workpiece.	Too much material being removed in one pass.
Uneven thickness of right and left sides of workpiece after sanding.	**1.** Sanding drum is not parallel to the table. **2.** Uneven wear on sanding belt
Stock slips on conveyor belt.	**1.** Too much material being removed in one pass. **2.** Sanding belt grit too fine.
Shiny spots on sanded workpiece.	**1.** Conveyor belt is too smooth. **2.** Conveyor belt tension is insufficient **3.** Excessive dust accumulated on conveyor belt surface.
Marks on sanded surface of workpiece.	**1.** Sanding belt too worn. **2.** Sanding height set incorrectly **3.** Sanding belt damaged.
Conveyor belt does not run smoothly, or stops.	Insufficient conveyor belt tension.

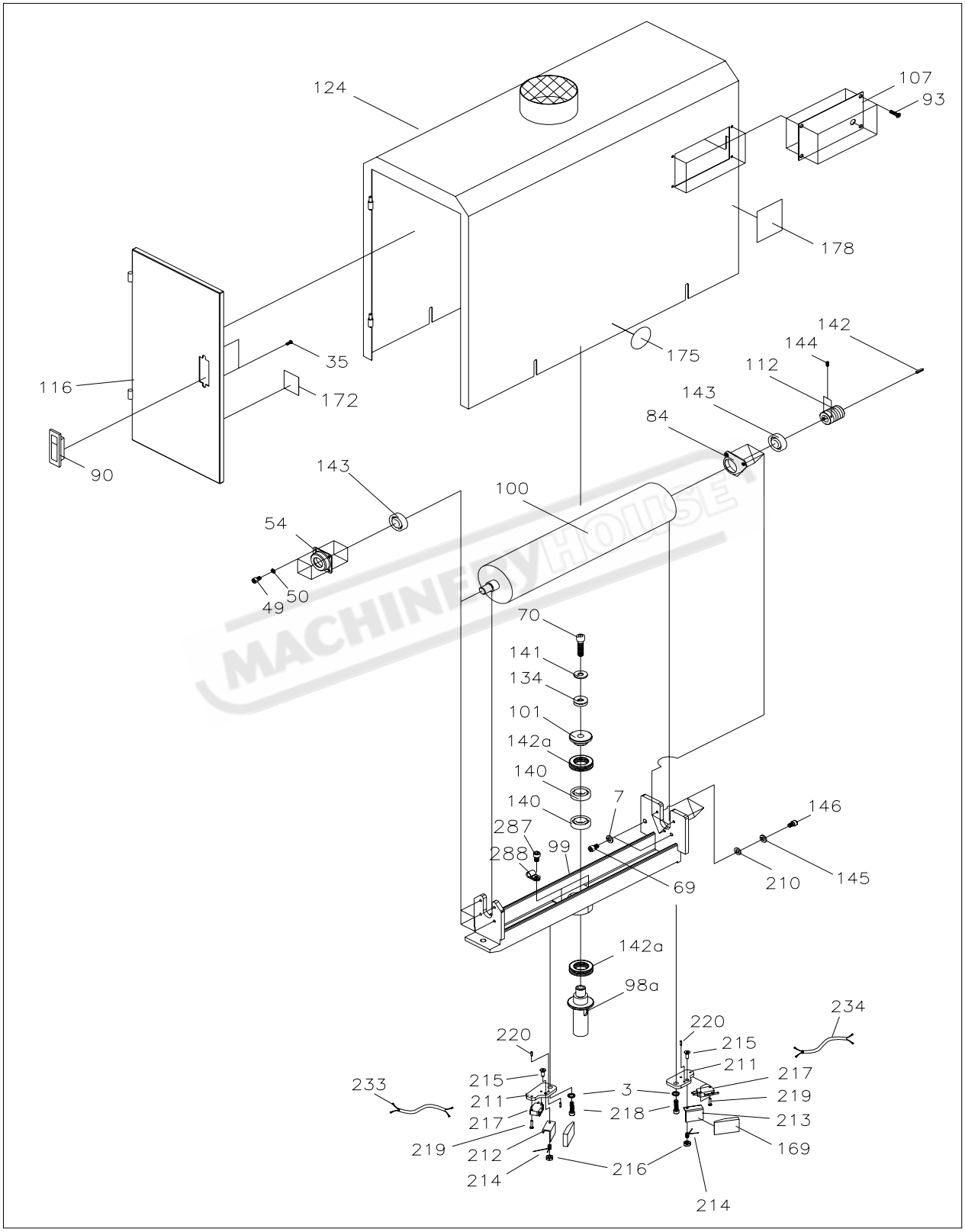
ASSEMBLY DIAGRAM

WBS-1836



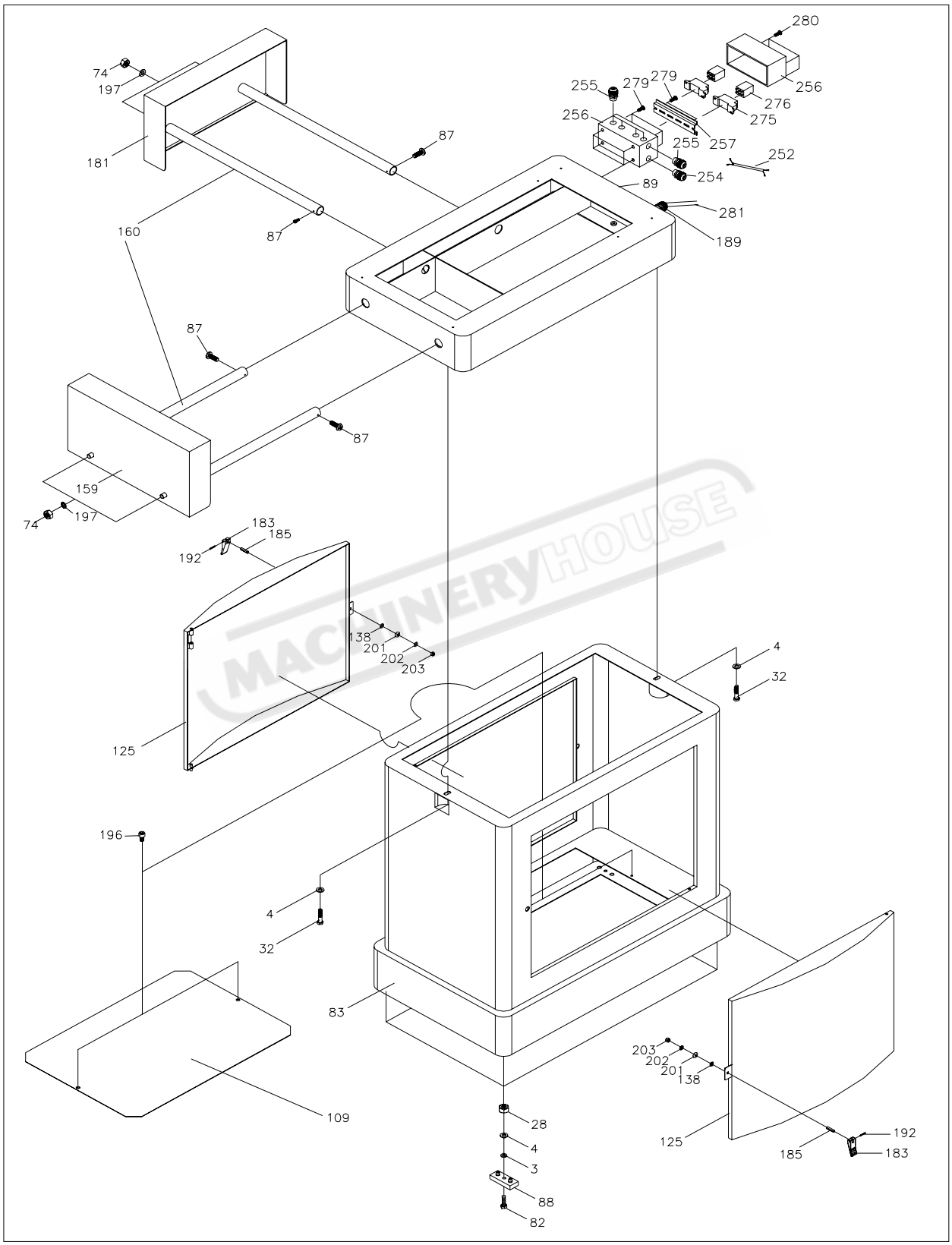
ASSEMBLY DIAGRAM

WSB-1836



ASSEMBLY DIAGRAM

WBS-1836



ASSEMBLY DIAGRAM

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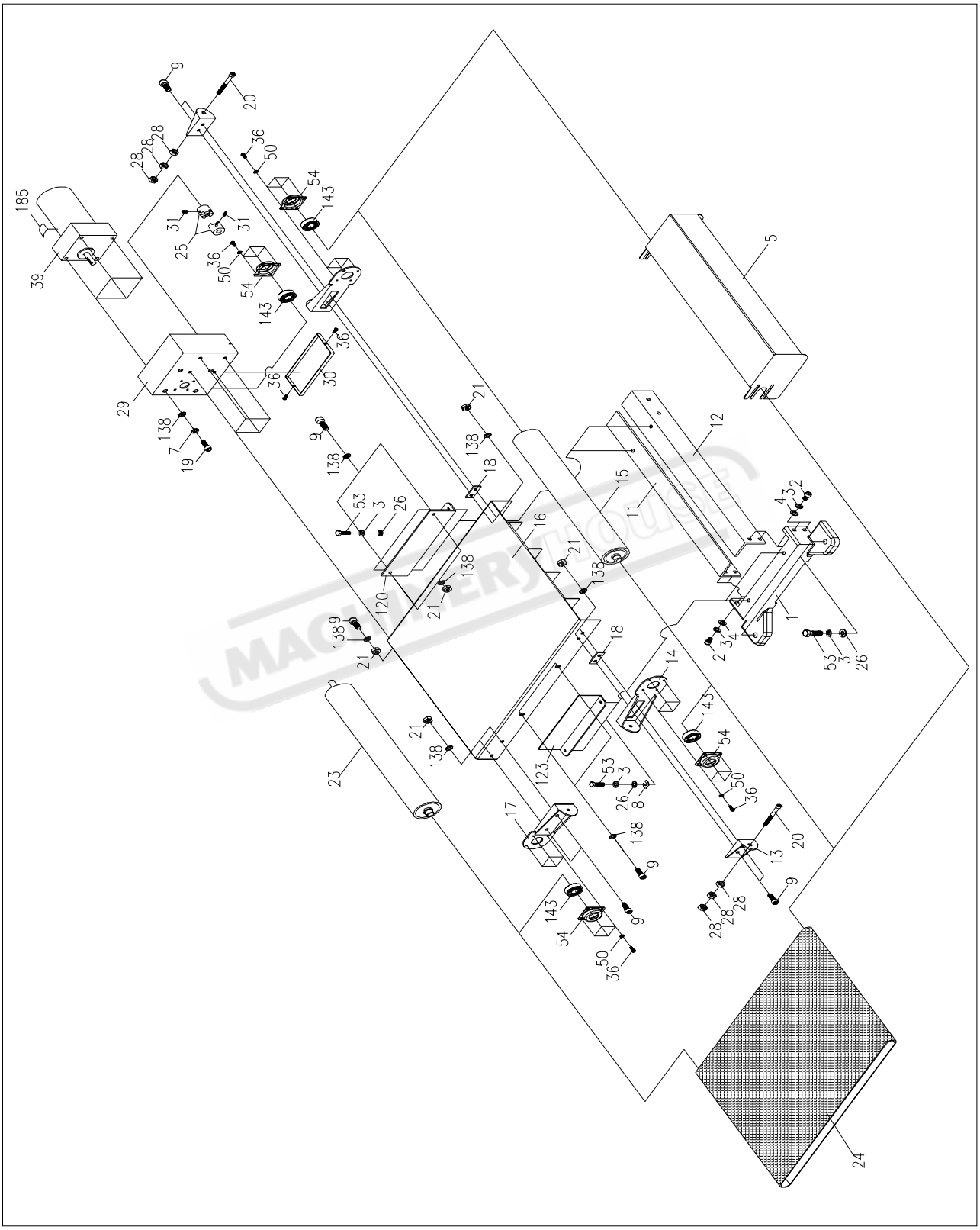

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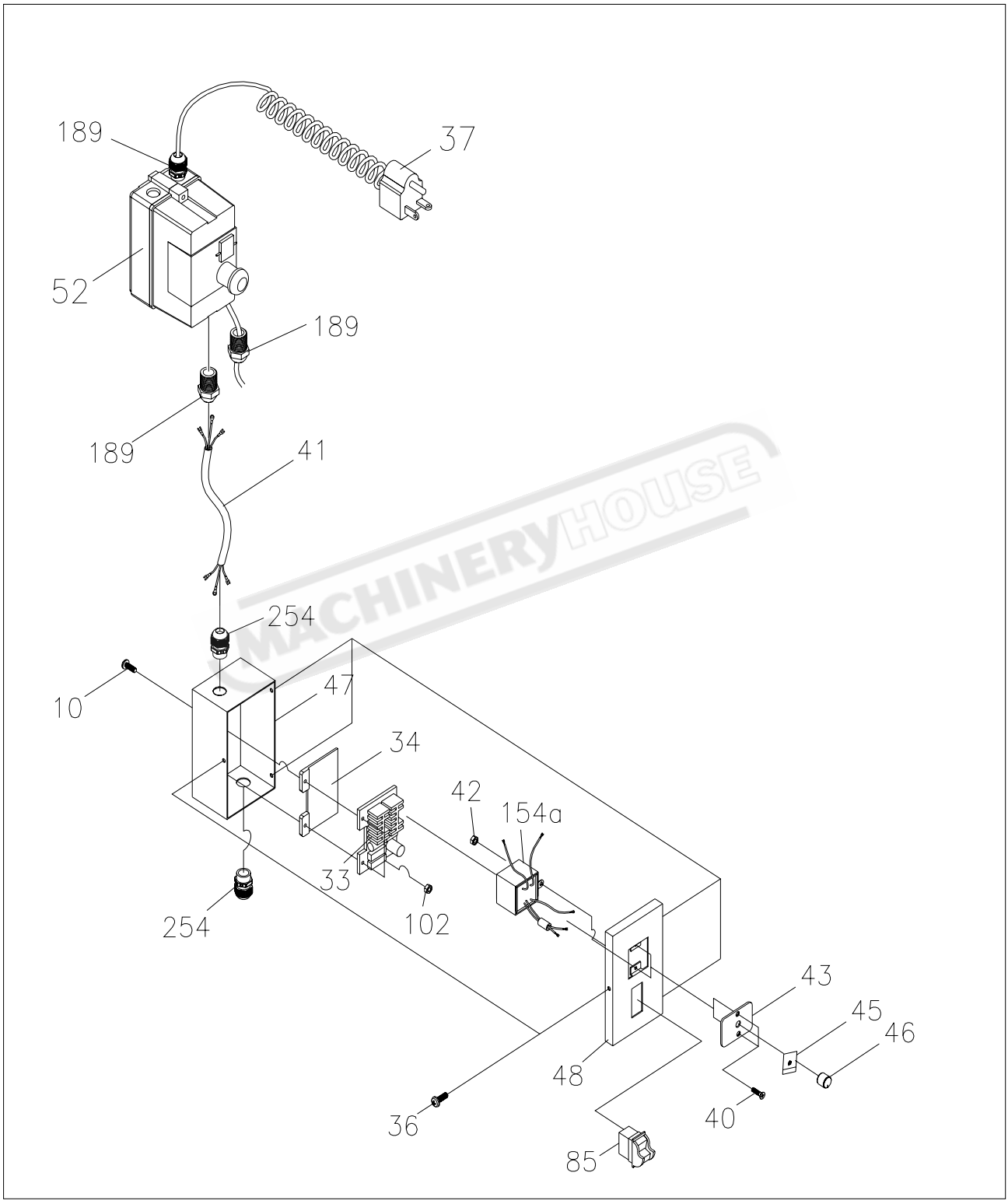

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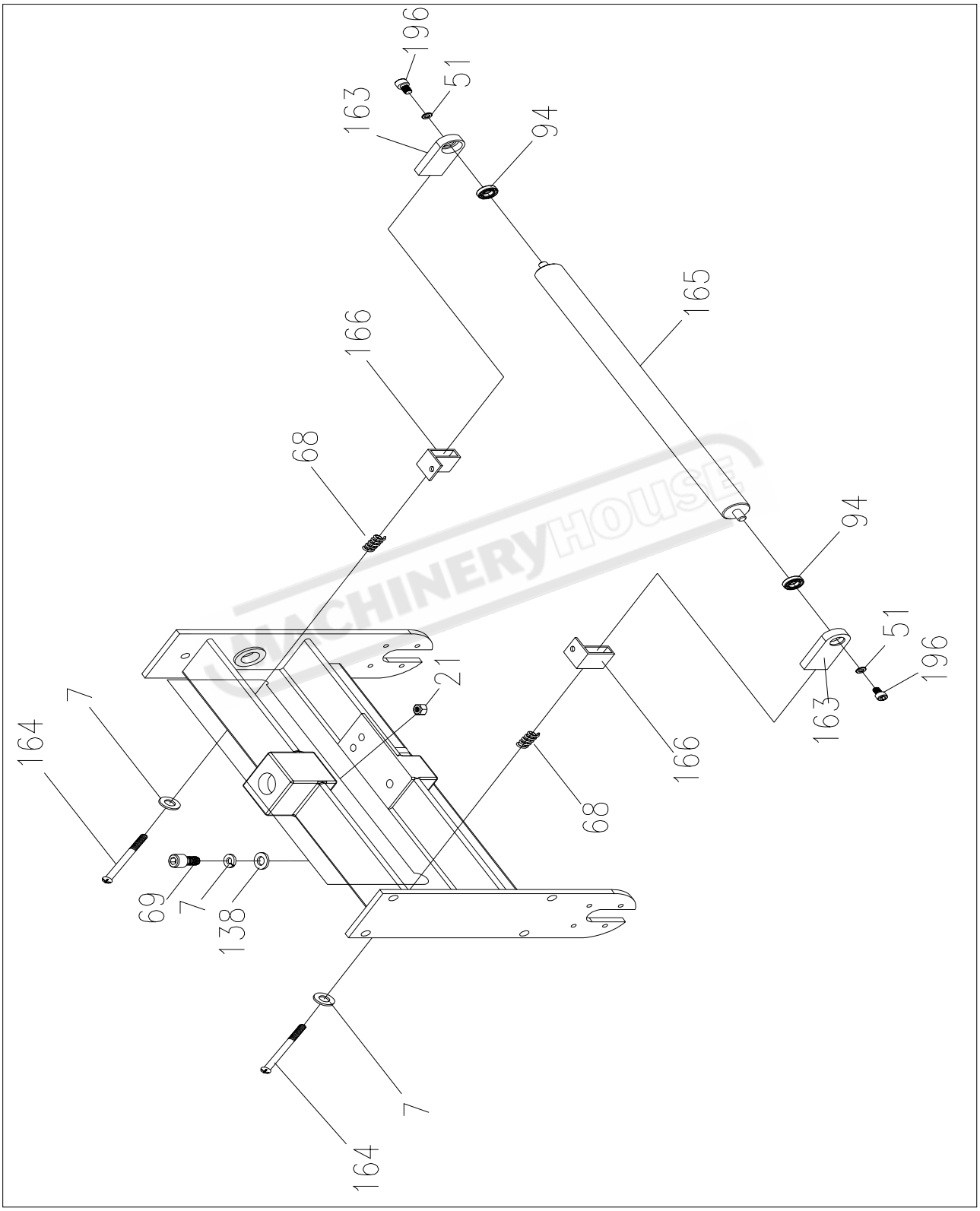

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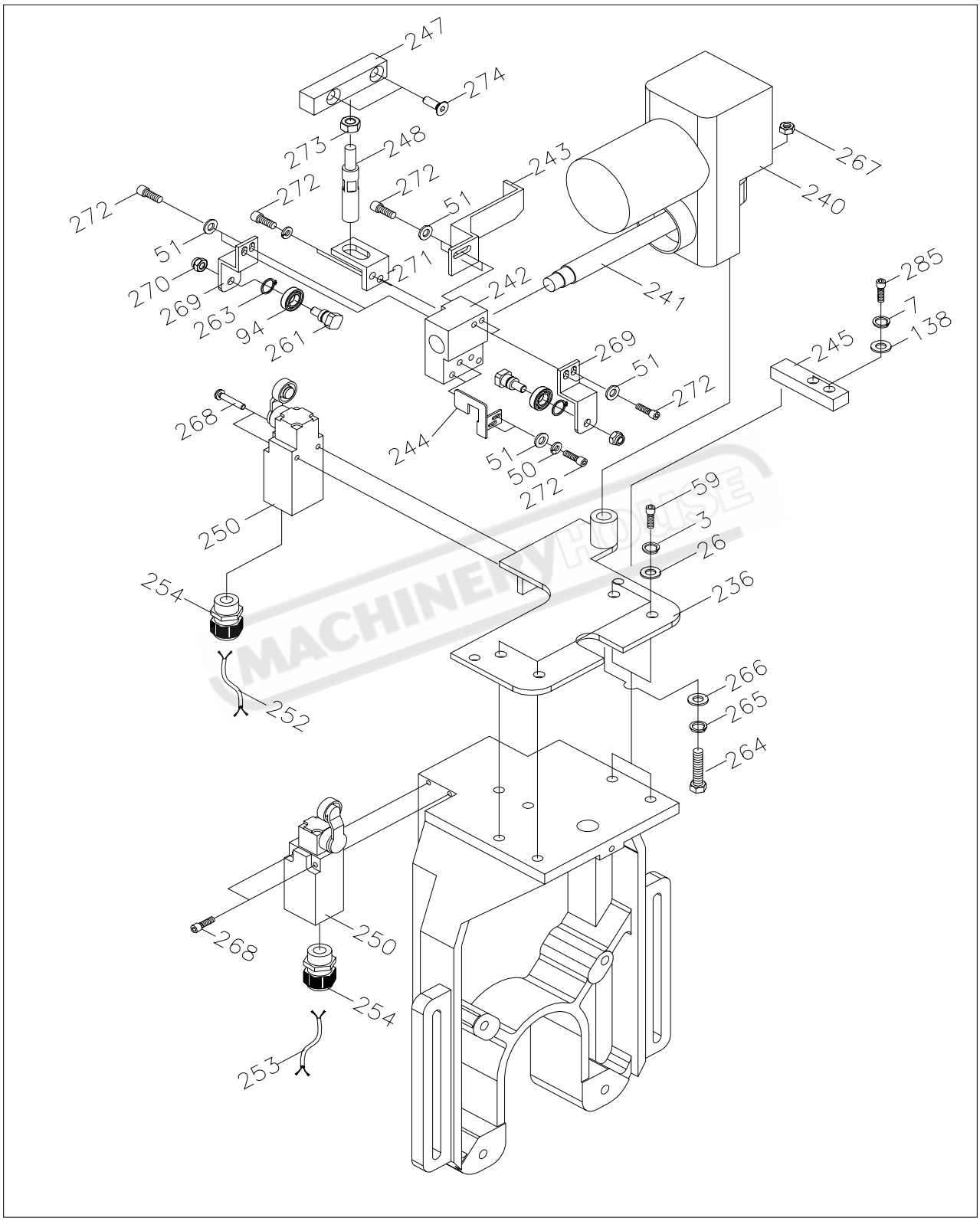

PART NO.	REFENCE NO.	DESCRIPTION	QTY
1	20702015a	FRONT STAND	1
2	S0010505	CAP SCREW	19
3	S0230506	SPRING WASHER	42
4	S0210500c	FLAT WASHER	33
5	22200002	COVER	1
6	S0400420	KEY	2
7	S0230400	SPRING WASHER	22
8	21600020	TABLE SPACER	4
9	S0010615M	CAP SCREW	14
10	S0030307	ROUND HEAD CROSS SCREW	4
11	22200008	LEFT HOLDER	1
12	22200009	RIGHT HOLDER	1
13	20900047	MICRO ADJUSTMENT BLOCK	2
14	20900048	MICRO ADJUSTMENT POSITION PLATE	2
15	22200003	TRANSMISSION SHAFT	1
16	22200004	SANDING BELT PLATEN	1
17	20900051	POSITION PLATE	1
18	20900053	PAD	2
19	S0010616M	CAP SCREW	4
20	S0010503a	CAP SCREW	2
21	S0120200	HEX NUT	14
22	S0120201	NYLON NUT	1
23	22200005	CONVEYOR BELT ROLLER	1
24	22200090	CONVEYOR BELT	1
25	20900054	SHAFT JOINT	2
26	S0210516	FLAT WASHER	14
27	S0050406	SET SCREW	2
28	S0110500	HEX NUT	10
29	20900055	ELECTRICAL CONTROL BOX	1
30	20900056	BUTTOM COVER	1
31	S0050404N	SET SCREW	15
32	S0020516	SCREW	2
33	20900073	PC BOARD	1
34	40501018	FIXED BOARD	1
35	S0030413	ROUND HEAD CROSS SCREW	2
36	S0030304	ROUND HEAD CROSS SCREW	22
37	L000000	POWER CORD	1
38	S0080415	WING SCREW	6
39	M2090002	REDUCTION SPEED MOTOR	1
40	S0040510M	FLAT HEAD SCREW	2
41	LC1430101	PC BOARD CORD	1
42	S0110500M	HEX NUT	1
43	20701011	ELECTRICAL INSULATION BOARD	1
44	20701006	BEARING	4
45	J2090004	INDICATOR	1
46	40501019	KNOB	1
47	21600022	SWITCH BOX	1
48	21600023	SWITCH BOX COVER	1
49	S0010303	CAP SCREW	12
50	S0230500M	SPRING WASHER	32
51	S0210303	FLAT WASHER	18
52	W2092301	MAGNETIC SWITCH	1

PART NO.	REFENCE NO.	DESCRIPTION	QTY
53	S0020501	SCREW	14
54	20900049	BEARING COVER	7
55	C1106201	BEARING 6201	2
56	22200006	LOWER ROLLER	1
57	22200007	ROLLER HOLDING BRACKET	1
58	21600008	MOTOR BASE	1
59	S0010502	CAP SCREW	9
60	S0010305	CAP SCREW	5
61	22200048	DRIVEN ROLLER	1
62	20900033	MOTOR ROLLER	1
63	S0430640	KEY	1
64	M2220003	MOTOR	1
65	21600010	GUIDE ROD	2
66	21600011	ARCH	1
67	22200015	FRONT GUIDE ROD BRACKET	1
68	21600013	SPRING	2
69	S0010409	CAP SCREW	17
70	S0010638	CAP SCREW	1
71	20900086	POSITION PLATE (RIGHT)	2
72	22200012	REAR GUIDE ROD BRACKET	1
73	20900022	BEVEL GEAR	2
74	S0110812	HEX NUT	4
76	21600016	WORM BUSH	1
77	11500048	HANDWHEEL	1
78	S0310525	SPRING PIN	1
79	10105056a	HANDLE	1
80	S0010504	CAP SCREW	2
81	21600019	HANDLE SHAFT	1
82	S0090512	ROUND HEAD SCREW	4
83	22200047	CABINET	1
84	21700017	BEARING BASE	1
85	W0000001	SWITCH	1
86	22200010	FASTEN BAR	2
87	S0070412a	TAPPING SCREW	4
88	10401029	RUBBER FEET	4
89	22200046	BASE	1
90	20101064	FLAT HANDLE	1
92	21600017	SCREW BAR	1
93	S0040300	FLAT HD. SCREW	4
94	C1106800	BEARING 6800	3
95	22200071	BAFFLE PLATE	1
96	21600059	FIXED HOLDING BRACKET PLATE	1
97	S0050408M	SET SCREW	2
98a	21600066	WORM BAR BUSH	1
99	22200030	UPPER ROLLER FRAME	1
100	22200035	UPPER ROLLER	1
101	21600031	BEARING PRESS PLATE	1
102	S0110300	HEX NUT	2
103	20900023	GEAR BUSH	1
104	20900024	FIXED RING	2
105	21600064	ADJUSTING PLATE	1
107	21600106	ADJUSTMENT BLOCK	1

PART NO.	REFENCE NO.	DESCRIPTION	QTY
108	21600063	WORM SHAFT BUSH	1
109	21600096	BUTTOM PLATE	1
110	22200062	HANDLE ROD	1
111	21600061	HANDLE ADJUSTMENT BLOCK	1
113	S0010440M	CAP SCREW	6
114	S0190500M	HEX NUT	1
116	21600088	COVER BOARD	1
120	21600085	TABLE BRACKET (RIGHT)	1
123	21600086	TABLE BRACKET (LEFT)	1
124	22200045	COVER	1
125C	22200050C	DOOR PLANK	2
126	S0030411	ROUND HEAD SCREW	2
127	21600076	INDICATOR BAR	1
129	20900087	POSITION PLATE (LEFT)	2
130	20900069	ADJUSTING SPRING	4
131	20900045	INDICATOR	1
132	S0111200M	HEX NUT	2
133	S0030580M	BUTTON-HEAD CAP SCREW	4
134	C5151100	THRUST BEARING	2
135	21600075	INDICATOR BASE	1
136	S0030109	BUTTON-HEAD CAP SCREW	1
137	S0210325	FLAT WASHER	1
138	S0210401	FLAT WASHER	33
139	S0400520	KEY	1
140	C1106003	BEARING 6003	2
141	S0210622	FLAT WASHER	1
142a	C5151105	THRUST BEARING	2
143	C1106202	BEARING 6202	8
144	S0050305	SET SCREW	2
145	S0230401	SPRING WASHER	3
146	S0010412M	CAP SCREW	3
147	22200091	SANDING BELT	1
148	10101007	BEARING FRAME	1
149	21600069	BEVEL GEAR (SMALL)	1
150	21600070	BEVEL GEAR (LARGE)	1
151	80100005	SPINNING WHEEL	1
152	S0050306n	SET SCREW	4
153	21600095	BRUSH	1
154	22200049	MOTOR FIXED PLATE	1
155	21600021	INDICATOR PAD	1
156	21600072	ARCH BUSH	1
157	21600079	FIXED FRAME (LEFT)	1
158	21600080	FIXED FRAME (RIGHT)	1
159	22200081	EXTENSION TABLE	1
160	21600082	SUPPORTING ROD	4
161	22200083	LOCKING KNOB	1
162	21600084	FLAT HANDLE	1
163	21600087	ADJUSTMENT BLOCK	2
164	S0030445	BUTTON-HEAD CAP SCREW	2
165	22200089	ADJUSTING ROD	1
166	21600090	ADJUSTMENT FIXED PAD	2
169	21600093	SANDING BELT FIXED PAD	2

PART NO.	REFENCE NO.	DESCRIPTION	QTY
170	J2160005	LABEL	1
171	J2160001	LABEL	1
174	J2160004	WARNING LABEL	1
175	J2090002	LABEL	2
176	J20706002	LABEL	1
178	J2090007	LABEL	1
179	J2090010	LABEL	1
180	V0017460C	BELT	2
181	22200098	FRONT EXTENSION TABLE	1
182	I2160001	MANUAL	1
183	12100038	KNOB	2
184	J2160009	LABEL	1
185	12100039	SHAFT	2
186	21600103	LOCKING ROD	1
189	S100PG13	STRAIN FIXED HEAD	4
190	S1017W-2	STRAIN RELIEF	1
191	S1006P-4	STRAIN RELIEF	1
192	S0310312	SPRING PIN	2
193	L2090002A	ELECTRIC WIRE	2
195	S0110503	NYLON NUT	1
196	S0010516M	CAP SCREW	4
197	S0210100	FLAT WASHER	4
198	22200099	PULLEY GUARD	1
199	21600100	BOLT BUSH	1
201	12100040	RUBBER	2
202	S0210405	FLAT WASHER	2
203	S0120400M	NYLON NUT	2
204	12700013	BRACKET SHAFT	1
205	20900098	WAVE FILTER	1
206	21600110	OBLONG IRON	1
208	S0010301	CAP SCREW	2
210	S0210405a	FLAT WASHER	3
211	21600115	LIMITED SWITCH FIXED PAD	2
212	21600116	FIXED PLATE (LEFT)	1
213	21600117	FIXED PLATE (RIGHT)	1
214	21600118	SPRING	2
215	S0040330M	FLAT HEAD SCREW	2
216	S0120300M	HEX NUT	2
217	WLS051A3	LIMITED SWITCH	2
218	S0010501	CAP SCREW	2
219	S0030215	BUTTON-HEAD CAP SCREW	4
220	S0310312	SPRING PIN	2
233	LV1030501	LIMITED SWITCH CORD A	1
234	LV1030301	LIMITED SWITCH CORD B	1
236	21600125	MOTOR FIXED PLATE	1
237	W1230002	LIMITED SWITCH	3
238	21600124	LIMITED SWITCH FIXED PAD	1
239	22200100	STAND	2
240	MH025001	REDUCTION SPEED MOTOR	1
241	21600135	SHAFT	1
242	21600126	SWING FIXED PAD	1
243	21600127	LIMITED SWITCH POSITION PLATE (RIGHT)	1

PART NO.	REFENCE NO.	DESCRIPTION	QTY
244	21600128	LIMITED SWITCH POSITION PLATE (LEFT)	1
245	21800112	BEARING FIXED PAD	1
246	21600129	LIMITED SWITCH FIXED PLATE (RIGHT)	1
247	21600130	OBLONG IRON	1
248	21600131	CONNECTING SHAFT	1
249	21600132	MOTOR COVER	1
250	WL001121	LIMITED SWITCH	1
251	WL001001	LIMITED SWITCH	1
252	LV1020301	LIMITED SWITCH CORD C	1
253	LV1020201	LIMITED SWITCH CORD D	1
254	S100PG11	STRAIN FIXED HEAD	6
255	S100PG09	STRAIN FIXED HEAD	5
256	WB173108	CONTROL BOX	1
257	22300047	TERMINAL TRACK	1
258	LV1023301	CORD	1
259	RL2204PA-B	RELAY BASE	1
260	RL2204PA-A	RELAY	1
261	LV1020201	FIXED SCREW	2
262	C1106801	BEARING 6801	1
263	S0520010	C RING	2
264	S0021070M	CAP SCREW	1
265	S0231000M	SPRING WASHER	1
266	S0211025	FLAT WASHER	1
267	S0111000M	HEX NUT	1
268	S0010425M	CAP SCREW	4
269	21800111	BEARING FIXED PLATE	2
270	S0120600M	HEX NUT	2
271	21600134	CONNECTING PAD	2
272	S0010510M	CAP SCREW	10
273	S0110800M	HEX NUT	1
274	S0040082M	CAP SCREW	2
275	S0530021	C RING	1
276	S0010816M	CAP SCREW	2
277	S0230800M	SPRING WASHER	2
279	S0070412	TAPPING SCREW	6
280	S0030315M	BUTTON-HEAD CAP SCREW	4
281	L0000018E	MOTOR CORD	1
282	L0000018E	SWITCH TERMINAL CONNECTING WIRE	1
283	LV1021501	LIMITED SWITCH CORD	1
284	LV1023502	LIMITED SWITCH CORD	1