

Syntron® J-50-B Jogger

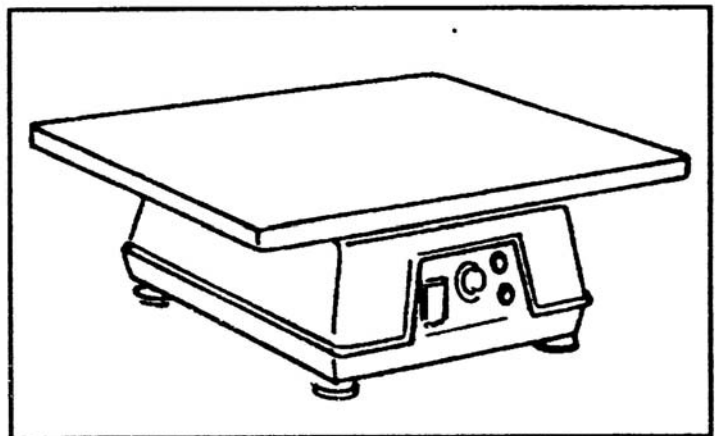
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Thank you for buying your equipment from FMC Technologies, Inc. This manual will help you to understand how your equipment operates and what is required to maintain peak performance. Please read it thoroughly and keep it on file for reference.

Your satisfaction is important to us, so please direct any comments to our Marketing Communications Department.

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INTRODUCTION

The Sytron® Electromagnetic J-50-B Jogger is used to jog and pack paper stock. The vibrating action produced by the magnet assembly is transmitted to the deck through rubber mounts.

The control assembly consists of an OFF/ON switch, a rheostat to control the amplitude of the vibration, a rectifier to convert AC to DC, and a fuse.

INSPECTION

Upon receipt, carefully unpack the jogger and inspect it for any damage that may have occurred during shipment. If damage is found, contact the shipping carrier and FMC Technologies, Inc. immediately.

SAFETY INSTRUCTIONS

! CAUTION: Product safety labels must be highly visible on the equipment. Establish a regular schedule to check visibility. If the safety labels need replaced, contact FMC Technologies, Inc. for an additional supply free of charge.

! WARNING: Do not use the J-50 Jogger for anything other than jogging and aligning paper stock. Contact FMC Corporation before making any additions to the jogger. Unauthorized additions and/or modifications to the jogger may present a safety hazard to the operator and void the warranty.

INSTALLATION

Place the jogger in its operation location and plug it into a self-grounding electrical receptacle. The power supply voltage and frequency requirements are designated on the nameplate.



! WARNING: The jogger weighs over 90 pounds (40.8 kg.); lift it by the base only.



! CAUTION: Before moving or handling the jogger, unplug the cord and wrap it around the holders on the back of the jogger.

OPERATION

To start the jogger, turn the switch to the ON position. To stop the jogger, turn the switch to the OFF position.

To increase amplitude, turn the control knob on the front panel clockwise. To decrease amplitude, turn the control knob counterclockwise.

DISASSEMBLING THE JOGGER

The letters in parentheses correspond to the parts list and illustration on pages 9, 10, and 11.



! WARNING: Unplug the electrical cord before disassembling the jogger. Coil and secure the cord to the jogger before moving it.

If the jogger is equipped with a flat deck, it is not necessary to remove the deck. If it is equipped with a tilted deck, it is necessary to remove the deck and deck adaptor (B). Place the jogger drive assembly in an upside-down position. If the jogger is equipped with a tilted deck, supports are required to keep the jogger balanced while it is upside-down. Refer to Figure 1.

Remove the six hex nuts and lockwashers (Y). Remove two rubber feet (AA) from opposite corners and replace them with 1/4-20 eyebolts. Use an appropriate lifting device and the eyebolts to lift the base assembly from the unit.

Do not damage the ground strap assembly (T). For ease of handling, disconnect the ground strap from the base (DD).

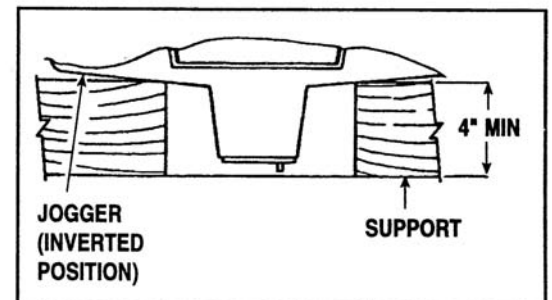


FIGURE 1: SUPPORTING JOGGER w/TILTED DECK IN INVERTED POSITION

REPLACING THE RUBBER MOUNTS

NOTE: FMC recommends replacing all six rubber mounts rather than only a portion of them.

1. Disassemble the jogger according to the procedure outlined above. Remove the spacers(P, Q) from the six studs (R, S).
2. Remove the six rubber mounts (K, M) and the studs (j) from the cover (A).
3. Insert the studs (J) into the new mounts (K, M) and install the mounts into the top cover (A). Use a high-strength sealant (N).
4. Insert the studs (R, S) and spacers (P,Q) into the mounts (K, M). Use a high strength sealant (N).
5. After the spacers (P, Q), studs (R, S), and new mounts (K, M) are correctly positioned and installed, reassemble the jogger.

NOTE: On 60-Hz units, place four mounts (K) at the corners and two mounts (M) in the center. On 50-Hz units, place four mounts (M) at the corners and two mounts (K) in the center. Spacer (Q) and stud (S) should be used with mount (M). Spacer (Q) and stud (S) should be used with mount (M). Spacer (P) and stud (R) should be used with mount (K).

REPLACING THE MAGNET ASSEMBLY

1. Disassemble the jogger according to the disassembly procedure described on page 2.
2. With the base in an upright position, disconnect the magnet leads at the terminal block.
3. Lift the base and remove the two hex nuts and lockwashers (Z) which secure the magnet assembly (FF) to the base (DD).
4. Install the new magnet assembly, arranging the spring washers (U) as shown in Figure 2.
5. Secure the magnet assembly (FF) to the base (DD) with the hex nuts and lockwashers (Z).
6. Connect the magnet leads to the terminal block at the control panel (EE).
7. Reassemble the jogger.

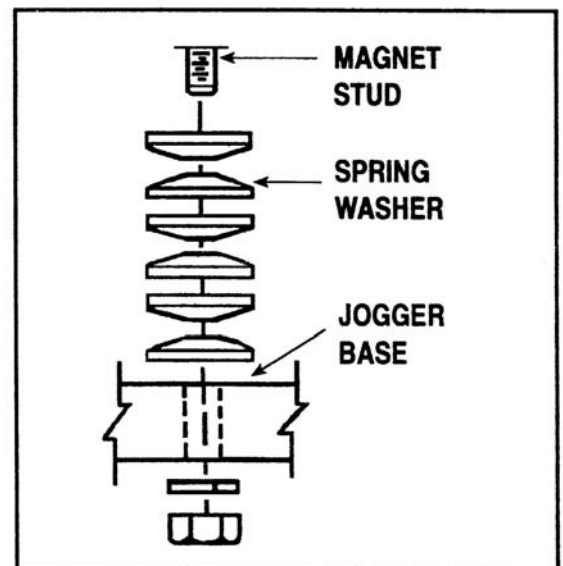


FIGURE 2: SPRING WASHER ARRANGEMENT

REASSEMBLING THE JOGGER

1. Place the cover (A) (or cover and deck in the case of joggers with flat decks) upside down. Refer to Figure 1. Ensure that the spacers (Q, P) are arranged on the studs (R, S) as explained in the directions for replacing rubber mounts on page 2.
2. Use the eyebolts and lifting device to suspend the base (DD) and magnet assembly (FF) over the cover (A).
3. Align the studs (R,S) and connect the lower base assembly to the spacers (P, Q).
4. Replace the six hex nuts and lockwashers (Y) on the six studs (R, S).
5. Remove the eyebolts and replace each of with a rubber foot (AA).
6. With the jogger in an upright position, replace the deck adaptor (B) and deck (if it was removed), using the lockwasher and cap screw (C).

NOTE: After reassembling the jogger, the air gap must be adjusted. Refer to the instructions on page 4.

ADJUSTING THE AIR GAP

The air gap is the space that exists between the armature (G) and the magnet assembly (FF). Proper adjustment of the air gap is critical to good jogger performance.



CAUTION: If the unit makes a loud striking noise while operating, immediately shut off the power.

If the air gap is adjusted so that the armature and magnet are too close. The faces of these items will contact each other during jogger operation. This is called striking. A striking condition may cause severe mechanical damage.



CAUTION: Never open the air gap more than necessary. An excessive air gap draws more current and reduces the power of the electromagnet, resulting in poor performance.

If the air gap is adjusted so that armature and magnet are too far apart, the current draw will be excessive. A high-current condition may result in coil burn-out, failure of control components, or reduced performance.

To adjust the air gap, perform the following steps;

1. Turn off power to the unit.
2. Elevate the jogger in order to access the adjusting nuts (Z) on the bottom of the jogger. (See Figure 3.)
3. Loosen the two adjusting nuts (z) so that they are both flush with base plate, with no tension on them.
4. Tighten each nut one full turn.
5. Turn on unit with control on 0%.
6. Begin turning up the control until the unit strikes. When the unit strikes, tighten each nut (equally) about a quarter turn. Continue turning up the control and tightening the nuts until the control is set on 100% without striking.

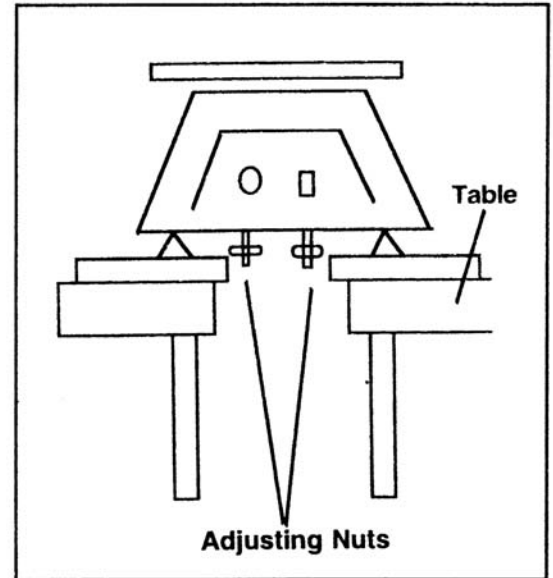


FIGURE 3: ADJUSTING THE AIR GAP

Use an AC ammeter to check the current draw of the unit. Turning the hex nuts (Z) in a clockwise direction will increase the current and turning them in a counterclockwise direction will decrease the current. The current rating must not exceed 4 amps for a 115V unit or 2 amps for a 230V unit.

When using an analog tong meter to read the current of the unit, the meter reading must always be multiplied by a value of 1.7. Due to the waveform characteristics of the jogger when operating, the meter does not reveal the same current as that designated on the nameplate. Therefore, the 1.7 multiplier must be used. When using a true RMS meter, the current is as indicated. All current readings must be taken at the control.

MAINTENANCE

⚠️ WARNING: Unplug the electrical cord before performing any maintenance on the jogger. Coil and secure the cord to the jogger before moving it.

The J-50 Jogger requires minimal maintenance. It must be kept clean, and the external hardware must be kept tight.

TROUBLESHOOTING

PROBLEM	CAUSE	CORRECTION
Unit does not Operate	Blown fuse Defective rheostat Shorted wiring, loose connection, no power to the unit	Replace* Replace* Repair
Drive assembly operates; Jogger will not vibrate	Defective rectifier Defective rubber mounts Unit in contact with rigid object Or adjacent surface	Replace* Replace* Isolate unit
Excessive noise	Armature and magnet Assemblies making contact	Adjust air gap

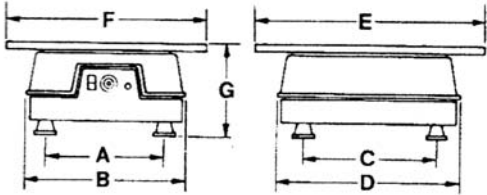
* Replace only with parts supplied or recommended by FMC Technologies.

SPECIFICATIONS

J-50 with Flat Deck

The J-50 with flat deck, featuring a hardwood maple deck, will jog paper stocks in sizes up to 17 x 22 inches and loads weighing up to 50 pounds. Stocks must be operator-held during jogging.

InputWatts (115, 60 Hz)	40.0
Input Amps (115V, 60 Hz)	4.0
Input Amps (240v, 50 Hz)	2.4
Net Weight	90lb (41 kg)

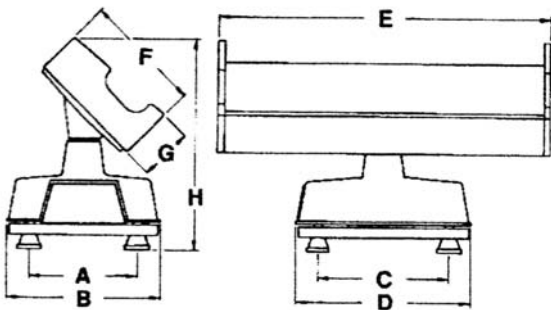


14 x 20 Deck							
	A	B	C	D	E	F	G
Inches	9-5/8	13-5/8	11-5/8	15-5/8	14	20	7-1/2
mm	244	346	295	397	356	508	190
17 x 22 Deck							
	A	B	C	D	E	F	G
Inches	9-5/8	13-5/8	11-5/8	15-5/8	17	22	7-3/8
mm	244	346	295	397	432	559	187

J-50 with Single Tray Tilt Rack

The J-50 with single tray tilt rack, featuring a tray rack with rubber strips for reduced noise, is designed to align checks and/or mail within a plastic or cardboard transit tray.

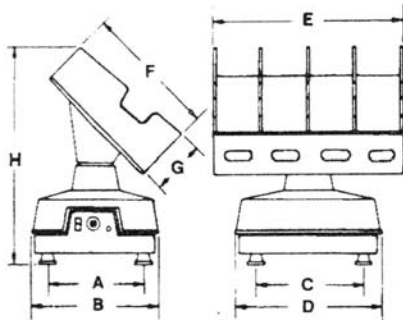
Input Watts (115, 60 Hz)	40.0
Input Amps (115V, 60 Hz)	4.0
Input Amps (240v, 50 Hz)	2.4
Net Weight(either rack)	97 lb (44 kg)



	A	B	C	D	E	F	G	H
Inches	9-5/8	13-5/8	11-5/8	15-5/8	29-3/4	10-11/16	4-3/4	18-1/2
mm	244	346	295	397	756	271	121	470

J-50 with 4 or 6 Pocket Tilt Rack

The J-50 with 4 or 6 pocket tilt rack, featuring a hardwood maple rack mounted at a 45° angle, will align checks, tab cards, time and payroll cards. Can also be used to increase the capacity of sorters, readers and other data processing machines. Each pocket is 4-3/8 (111.13 mm) inches wide.

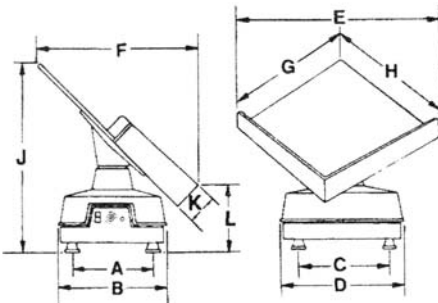


Input Watts (115, 60 Hz)	40.0
Input Amps (115V, 60 Hz)	4.0
Input Amps (240v, 50 Hz)	2.4
Net Weight(4-bin)	92lb(42 kg)
Net Weight(6-bin)	97lb(44 kg)

4-Pocket Rack								
	A	B	C	D	E	F	G	H
Inches	9-5/8	13-5/8	11-5/8	15-5/8	20	10-1/2	4-3/4	18-1/2
mm	244	346	295	397	508	267	121	470
6-Pocket Rack								
	A	B	C	D	E	F	G	H
Inches	9-5/8	13-5/8	11-5/8	15-5/8	29-3/4	10-11/16	4-3/4	18-1/2
mm	244	346	295	397	756	271	121	470

J-50 with Tilt Rack

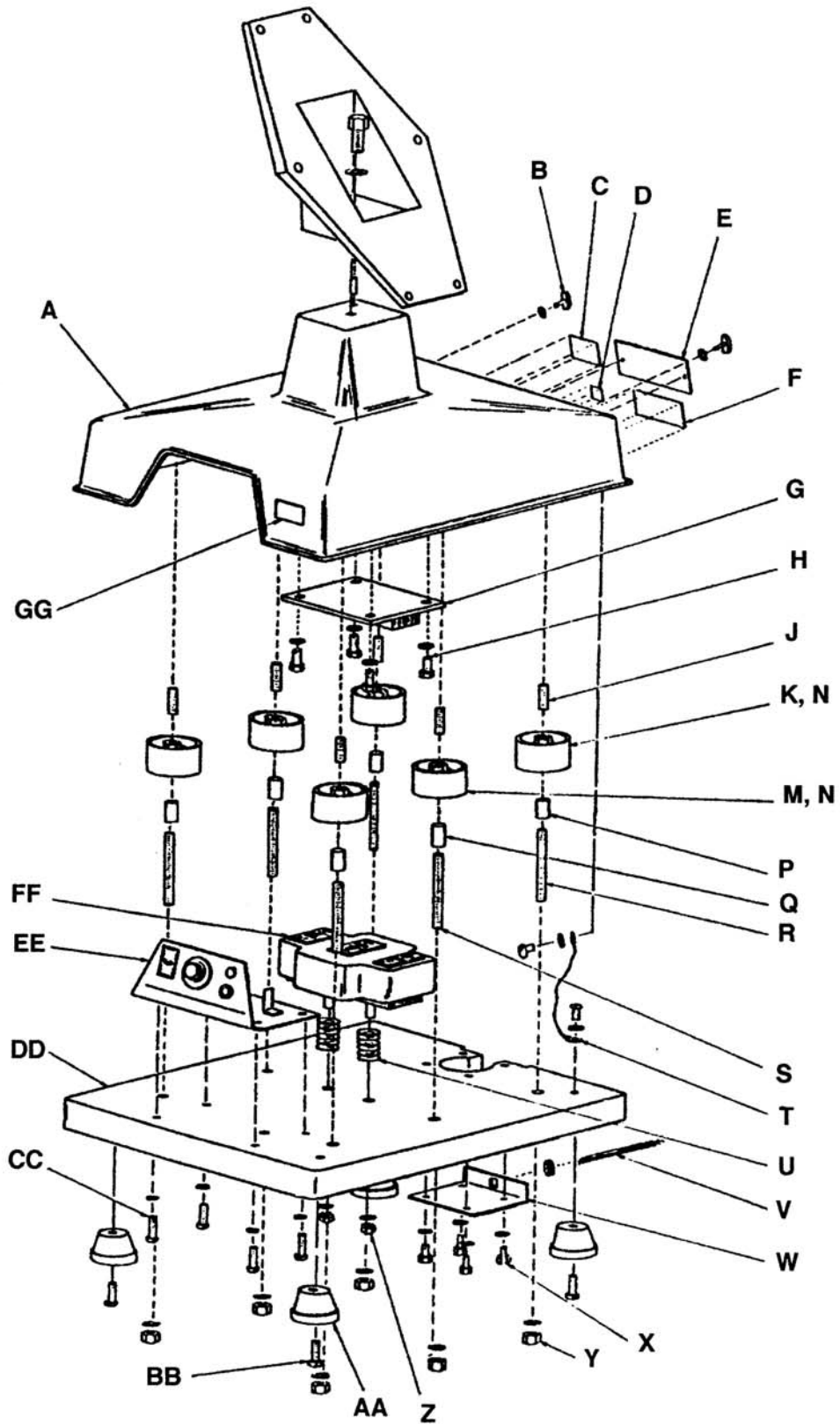
The J-50 with tilt rack, featuring a tilted hardwood maple rack and double action, aligns loads of stock weighing up to 15 pounds.



Input Watts (115, 60 Hz)	40.0
Input Amps (115V, 60 Hz)	4.0
Input Amps (240v, 50 Hz)	2.4
Net Weight(either rack)	9 lb (43 kg)

14 x 20 Rack											
	A	B	C	D	E	F	G	H	J	K	L
Inches	9-5/8	13-5/8	11-5/8	15-5/8	25-3/16	21-1/4	14-13/16	20-13/16	23	4-13/16	8-1/8
mm	244	346	295	397	640	540	376	529	584	122	206
17 x 22 Rack											
	A	B	C	D	E	F	G	H	J	K	L
Inches	9-5/8	13-5/8	11-5/8	15-5/8	28-1/2	23-15/16	17-7/8	22-7/8	24-3/8	4-7/8	6-3/4
mm	244	346	295	397	724	608	454	581	619	124	171

PARTS ILLUSTRATION DIAGRAM



PARTS LIST

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>PART NO.</u>
A	* Top Cover	1	D-138925-A
	*Dowel Pin	1	0210X020
	^ Top Cover (Flat Deck Only)	1	D-138924-A
	* Adaptor Deck 45°	1	D-149118-A
	* Hex Hd Cap Screw (1/2" – 13 X 1-1/4")	1	H0315201
	* Lockwasher (1/2")	1	H0113601
B	Cable Tie Cleat	2	0118X025
	Hex Hd Cap Screw (1/4"-20 x 1/2")	2	H0300801
	Lockwasher, Ext. Tooth (1/4")	2	H0114904
C	~ Label (Disc. Power)	1	A-125694
D	~ Label (UL)	1	A133985-A
E	~ Nameplate	1	A-62244
	Drive Screw, Pk Ty U (#2-1/4")	2	H0430600
F	~ Warning Label	1	A-209620
G	Armature Assembly	1	A-133943
H	Hex Hd Cap Screw (5/16"-18 x 3/4")	4	H0306801
	Lockwasher (5/16")	4	H0113001
J	Stud	6	A-92886
K	Mount (1-1/2" H x 2" Dia.)		0207X031
M	* Mount 1-3/4" H x 2" Dia.		0207X032
N	Sealant		0185X006
P	Spacer (1-7/32" Lg.)		A-138922-C
Q	* Spacer (31/32" Lg.)		A-138922-D
R	Stud (3-3/4" Lg.)		A-133945-B
S	* Stud (3" Lg.)		A-133945-C
T	Ground Strap Assembly	1	A-170833-A
	Rd. Hd. Mach. Screw (#10-32 x 1/4"), Br	1	H0202902
	Lockwasher, Ext. Tooth (1/4")	1	H0114904
U	Spring Washer	12	0013X123
V	Cable Assembly (115V)	1	A-164471-A
	Cable Assembly (230V)	1	A-164472-A
	Stain Relief	1	0230X006
W	Cover Plate	1	B-202683-1
X	Hex Hd. Cap Screw (1/4-20 x 1/2")	4	H0300801
	Lockwasher (1/4")	4	H0112801
Y	Hex Nut (1/2" x 13)	6	H0104001
	Lockwasher (1/2")	6	H0113601
Z	Lock Nut ESNA (5/16"-18)	2	H2100915
	Lockwasher (5/16")	2	H0113001
AA	Rubber Foot	4	A-23450
BB	Truss Hd. Mach. Screw (1/4"-20 x 1")	4	H0212801
CC	Rd. Hd. Mach> Screw (#8 –32 x 1-1/4")	4	H0202401
	Lockwasher, Zn. Pl. (#8)	4	H0112209
DD	Base Plate	1	C-202687-1

<u>ITEM</u>	<u>DESCRIPTION</u>	<u>QTY</u>	<u>PART NO.</u>
EE	Control Assembly (115V) }	(1 Only)	D-170874-B
	Control Assembly (230V) }		D-170874-C
	Control Base	1	C-170887-1
	~ Decal	1	B-154286
	Switch	1	0051X477
	Rheostat	1	0052X211
	Hole Plug (115V)	1	0188X009
	Fuseholder (2 Req'd. for 230V)	1	0038X257
	Fuse (115V)	1	0174X025
	Fuse (230V)	2	0174X023
	Rectifier Assembly (115V)	1	A-149009-A
	Rectifier Assembly (230V)	1	A-149009-B
	Terminal Block	1	0173X022
	Rd. Hd. Mach.Screw Br. (#10-32 x 1/4")	1	H0202902
	FF	Magnet Assembly (115V/60 Hz) }	(1 Only)
Magnet Assembly (115V/50 Hz) }		B-170880-B	
Magnet Assembly (230V/60 Hz) !		B-170880-C	
Magnet Assembly (230V/50 Hz) }		B-170880-D	
GG	~ Label (fuse Warning)	1	A-128494

^ Not Shown

* Tilt Deck Units Only

~ Do not remove or paint over safety labels. If labels need replaced, contact FMC Technologies for an additional supply free of charge.

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