Syntron ® EB-112-A
Vibratory Parts Feeder Drive

SPRING REPLACEMENT ■ PARTS LIST ■ SPECIFICATIONS ■ ■ ■ ■ ■ ■ ■

Thank you for buying your equipment from Homer City Automation. 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.

Date Purchased:_____ Serial No.: _____ Factory Order No.: _____

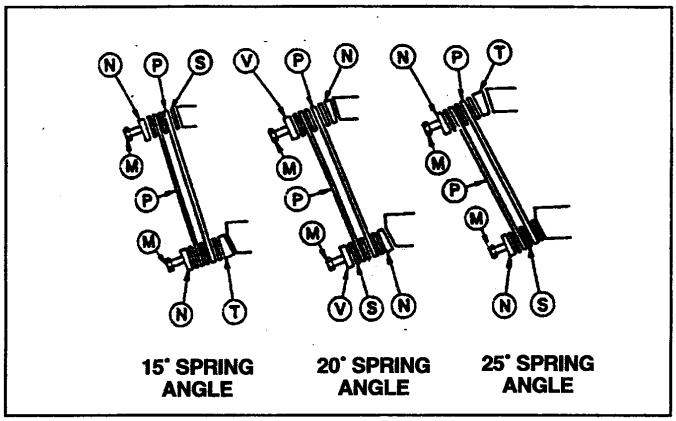
■ SAFETY INFORMATION

WARNING: These instructions and safety precautions must be followed. There is hazard of electrical shock to the operator.

WARNING: The unit must be properly grounded and verified at installation.

NOTE: Local safety codes and regulations must be considered when installing and/or operating this equipment.

■ SPRING REPLACEMENT



WARNING: Disconnect the electrical supply at the safety disconnect switch before performing any maintenance.

NOTE: The EB-112-A Parts Feeder Drive has four spring stacks. Replace or rebuild only one stack at a time. This permits the remaining stacks to support the upper mass (bowl, cross-arm, and armature).

CAUTION: If a defect is found in one spring, carefully examine all of the spring stacks. Always replace springs with new springs of the same size and thickness.

Proper arrangement of the spring stacks is critical to good feeder operation. Before removing a spring stack, match mark each spring stack at the top and bottom so that the original arrangement can be maintained.

To replace or rebuild the spring stacks, perform the following steps: (Refer to the illustration on page 1)

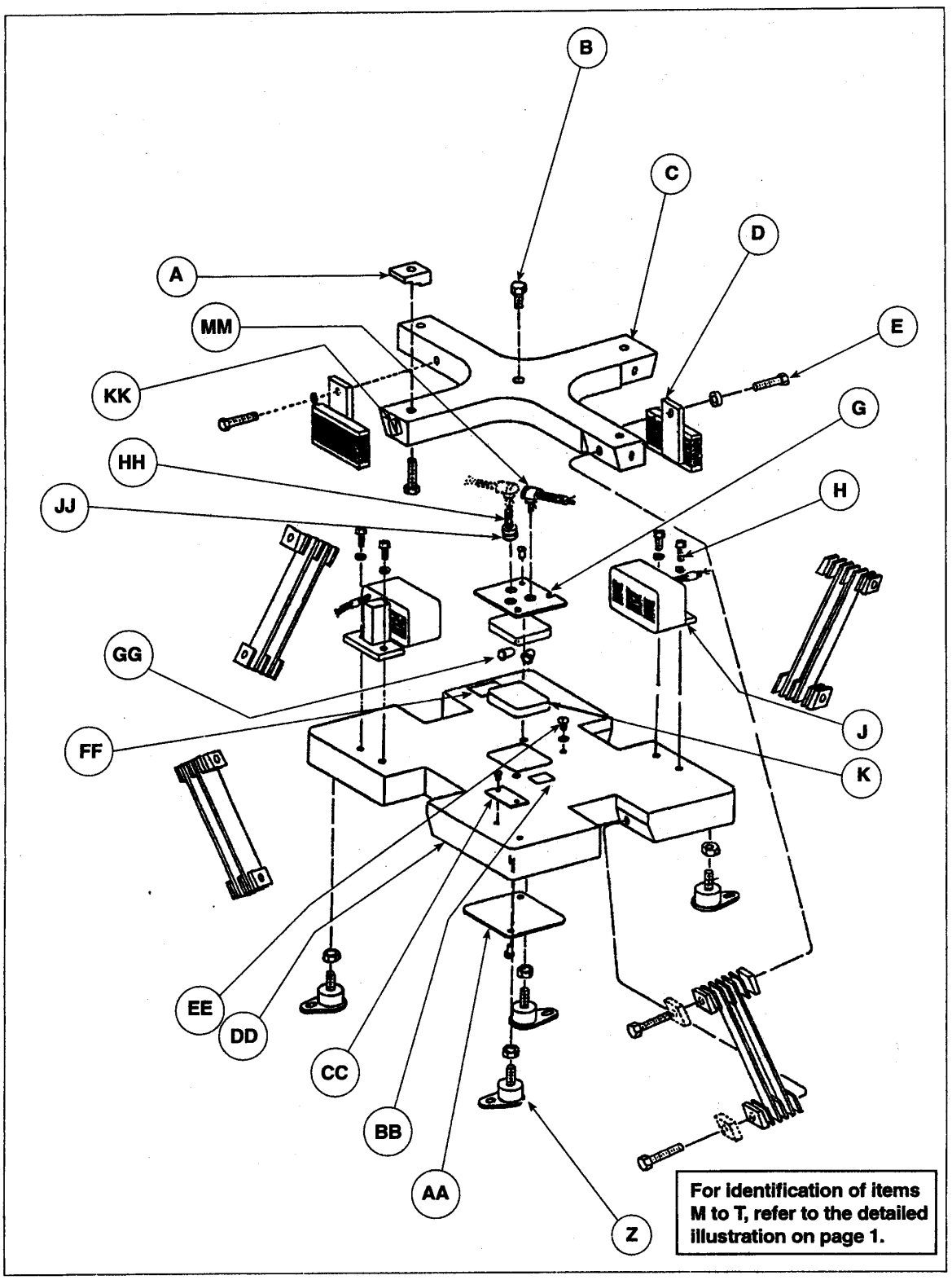
1. Remove the clamp bolts (**M**), clamp blocks (**V**), wedges (**N,T**), spacers (**S**), and leaf springs (**P**).
   NOTE: When removing these items, take special note of their location in the stack arrangement. Some special units may have either more or fewer springs, spacers, and/or shims than are shown in the illustration. To avoid premature spring failure, the thickest springs are assembled first on the stack, and the thinnest last.
2. Examine each leaf spring, one at a time, for defects (breaks, hairline fractures, rust, etc.).
3. When rebuilding a spring stack, each spring (**P**) must be isolated by spring spacers (**S**) at both the top and bottom, on both sides of the spring.
4. When all the springs, spring spacers, clamp blocks, and wedges are in position and aligned, insert and tighten the top and bottom clamp bolts.
   NOTE: Never oil the spring assemblies. If the spring stacks are repainted, be sure that paint is not applied to the area between the spring clamping surfaces.
5. Torque each clamp bolt (**M**) evenly, a little at a time, to the recommended torque of 110 ft lb (149.6 Nm). Used bolts may require a higher torque, not to exceed 125 ft lb (169 Nm).
6. Reconnect the electrical supply, and check and readjust the air gap if necessary (refer to the instructions in the EB-A Service Manual, SM0655). Check the current draw to be sure that it does not exceed the rating listed in the specifications chart below.

The unit is now ready for operation.

■ OPERATING SPECIFICATIONS

<table>
<tr><th colspan="2"></th><th colspan="8">Voltages</th></tr>
<tr><td rowspan="3">RC</td><td rowspan="2">Recommended Static Air Gap</td><td>115/60</td><td>208/60</td><td>230/60</td><td>460/60</td><td>575/60</td><td>110/50</td><td>220/50</td><td>380/50</td></tr>
<tr><td colspan="4">0.07”
(1.78 mm)</td><td colspan="4">0.08”
(2.03 mm)</td></tr>
<tr><td>Current Draw (Amps)</td><td>4.1</td><td>2.3</td><td>2.1</td><td>1.0</td><td>0.80</td><td>3.5</td><td>1.75</td><td>1.0</td></tr>
<tr><td rowspan="3">AC</td><td rowspan="2">Recommended Static Air Gap</td><td colspan="4">0.036”
(0.91 mm)</td><td colspan="4">0.041”
(1.03 mm)</td></tr>
<tr><td>Current Draw (Amps)</td><td>8.0</td><td>4.4</td><td>4.0</td><td>2.0</td><td>1.6</td><td>6.9</td><td>3.5</td><td>2.0</td></tr>
</table>

NOTE: Air gaps are given as a starting point, and should be adjusted as required to obtain optimum performance.


B
C
D
A
MM
E
KK
G
HH
H
JJ
GG
J
FF
K
EE
DD
CC
BB
AA
Z
For identification of items M to T, refer to the detailed illustration on page 1.

PARTS LIST – EB 112-A PARTS FEEDER

Item	Description	Quantity	Part No.
A	♦ Bowl Clamp	4	B-184013
	♦ Cap Screw, Hex Hd, Gr 8 (3/8" – 16 x 2")	4	H0322109
B	♦ Cap Screw, Hex Hd, Gr 8 (1/2" – 13 x 2-1/2")	1	H0304509
C	Crossarm (CW)]	1	D-215400-2
	Crossarm (CCW)]	Only	D-215400-3
D	Armature Assembly (CW)]	2	B-215416-A
	Armature Assembly (CCW)]	Only	B-215465-A
E	Cap Screw, Hex Hd, Gr 8 (1/2" – 13 x 1")	2	H0323809
	Plain Washer (1/2")	2	H0117312
G	Top Cable Plate	1	A-183984
	Self-Tapping Screw, Hex Hd (#10 – 32 x 1")	2	H0418413
H	Cap Screw, Hex Hd, Gr 5 (3/8" – 16 x 3/4")	4	H0310009
	Plain Washer, Hvy, Hardened (3/8" I.D. x 7/8" O.D. x 1/8" Tk.)	4	H0119367
J	• Magnet Assembly (115V/60 Hz) }	]	D-215497-K
	• Magnet Assembly (208V/60 Hz) }	]	D-215497-L
	• Magnet Assembly (230V/60 Hz) }	]	D-215497-M
	• Magnet Assembly (460V/60 Hz) }	]	D-215497-N
	• Magnet Assembly (575V/60 Hz) } RC	]	D-215497-P
	• Magnet Assembly (110V/50 Hz) }	]	D-215497-Q
	• Magnet Assembly (220V/50 Hz) }	]	D-215497-R
	• Magnet Assembly (380V/50 Hz) }	] 2	D-215497-S
	• Magnet Assembly (115V/60 Hz) }	] Only	D-215497-B
	• Magnet Assembly (208V/60 Hz) }	]	D-215497-C
	• Magnet Assembly (230V/60 Hz) }	]	D-215497-D
	• Magnet Assembly (460V/60 Hz) } AC	]	D-215497-E
	• Magnet Assembly (575V/60 Hz) }	]	D-215497-F
	• Magnet Assembly (110V/50 Hz) }	]	D-215497-G
	• Magnet Assembly (220V/50 Hz) }	]	D-215497-H
	• Magnet Assembly (380V/50 Hz) }	]	D-215497-J
K	Insulator	2	B-184668
M	▲ Cap Screw, Hex Hd, Gr 8 (1/2" – 13 x 1-1/2")]		H0320809
	▲ Cap Screw, Hex Hd, Gr 8 (1/2" – 13 x 2")	]	H0303509
	▲ Cap Screw, Hex Hd, Gr 8 (1/2" – 13 x 2-1/4")]		H0321709
N	▲ Wedge (5°)	] As	A-182647-C
P	▲ Spring (3/32" Tk.)	] Req'd	B-182548-C
	▲ Spring (1/8" Tk.)	]	B-182548-H
	▲ Spring (3/16" Tk.)	]	B-182548-G
	▲ Spring (1/4" Tk.)	]	B-182548-D
	▲ Spring (5/16" Tk.)	]	B-182548-F
	▲ Spring (3/8" Tk.)	]	B-182548-B
S	▲ Spacer	]	A-182648-C
V	▲ Clamp Block	8	A-182649-C
T	▲ Wedge (10°)	As Req'd	A-203878-1
Z	Isolator and Locator Foot	4	B-215361-B
	Hex Jam Nut (1/2" – 13)	4	H0104004

PARTS LIST – EB 112-A PARTS FEEDER (Cont'd)

Item	Description	Quantity	Part No.
AA	Bottom Cable Plate	1	A-183985-001
	Self-Tapping Screw, Hex Hd (#10 – 32 x 1/2")	2	H0418413
BB	■ Warning Label	1	A-125694
CC	■ Nameplate	1	B-221146
DD	Base (CW)	] 1	D-215408-2
	Base (CCW)	] Only	D-215408-3
EE	Rd Hd Screw, Slotted, Br (#10 – 32 x 1/2")	1	H0203402
	Plain Washer, Br (#10)	1	H0116205
FF	■ Torque Label	1	A-183986
GG	Connector	2	0202X040
HH	Cable Assembly	1	B-183983-B
JJ	Strain Relief Bushing	1	0230X012
KK	■ Stroke Gauge	1	A-58462
MM	Strain Relief Bushing, Right Angle	2	0230X013

▲ Specify the spring stack angle.
♦ Specify the bowl type.
• Supply nameplate information.
■ Do not remove or paint over safety labels. If safety labels need replaced, contact Homer City Automation for an additional supply free of charge.

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