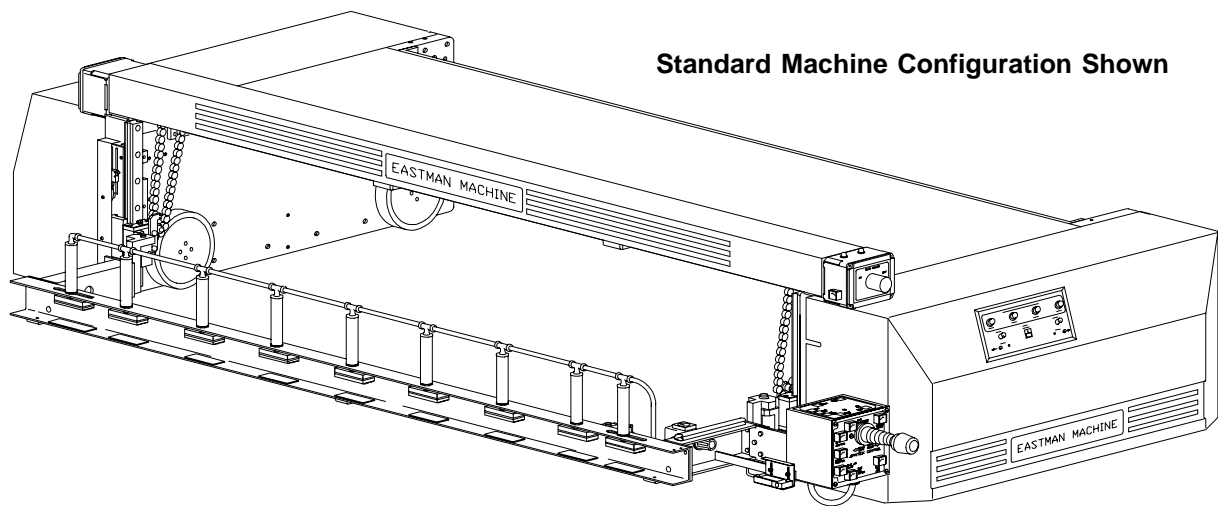


**THE EASTMAN®
Micro Pull-Off
Device**

***Instruction Manual &
Illustrated Parts List***

Please read completely before attempting
to operate your **EASTMAN PULL-OFF DEVICE**



Standard Machine Configuration Shown

⚠ WARNING

This machine is equipped with a very sharp knife. Keep hands, arms, and hair away from the knife area at all times.

Misuse of this machine or failure to follow all safety instructions on this machine and in the instruction manual may result in serious personal injuries.

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IMPORTANT

The purchaser must instruct all operators on the proper use of this equipment. All standard industrial safety measures and equipment should be provided to protect the operator. Operators must be cautioned that improper or careless use of this equipment may cause personal injury. If you do not have qualified operators to instruct new persons, contact your EASTMAN sales representative or EASTMAN factory direct.

Electrical connections and servicing to this equipment should be made by a qualified electrician who is familiar with applicable codes and regulations. Disconnect this equipment from electrical power source before proceeding with any disassembly for adjustment or repair.

Your Eastman Pull-off Device is designed to travel at high speed in both directions and controls the Blue Jay End Cutter, which is designed to raise and lower the track and traverse the Blue Jay Cutter across the table. Equipment should be set up with a minimum 3 foot (1 meter) clear path at front and rear of machine. All personnel should be instructed to wear safety glasses and stand well clear of the Blue Jay when in operation.

The Eastman **Micro PULL-OFF DEVICE** is shipped partially disassembled with all the necessary parts for proper setup and operation. To get the best performance, familiarize yourself with all the functions and adjustments of this equipment. Before any operation can take place, it is important that you carefully read and follow the instructions in this manual in the same sequence in which they are presented.

The following items listed below may be included with your installation kit or purchased at a later date:

MS: Machine Size in inches

PART No.	DESCRIPTION
----------	-------------

9120-785-110	Cable Carrier Kit (110)
9120-785-220	Cable Carrier Kit (220)
MD-02523	Safety Cam Assemblies
9120-786	Chickadee Outlet Option, 110v
9120-822	Chickadee Outlet Option, 220v
CRA-4000-110	Chickadee Flawcutter, 110v
CRA-4000-220	Chickadee Flawcutter, 220v
9120-812	Air Floatation Kit
9120-813	Out of Cloth w/Remote Autostop
11-2824	Remote Autostop Kit
9136-001	Allen Wrench Kit

System Documentation

CR-50-0433	Blue Jay End Cutter EL Lift Manual
CR-50-0434	Micro Pull-Off Device Manual

INSTALLATION

Table Preparation

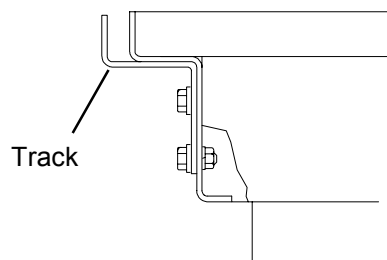
The spreading table required to operate your Blue Jay and Pull-Off Device must be smooth and level. A minimum clearance of 24 inches (61 cm) is required from the table surface to the floor and a minimum 3 feet (1 m) around the machine. If Magna or Z-Track is required, install track at this time.

To Level Table

Use carpenter's level to check spreading table. Be especially careful to make sure table joints mate closely. Adjust table feet as necessary to level table.

Tracking Installation

The **Micro PULL-OFF DEVICE** requires Magna Track, Z-Track or Guide Wheels to guide the machine.



Magna Track or Z-Track Installation

Place track sections along table top, end to end, on the operator's side of the table as they will be mounted. Mount the track as shown. Make sure the joints in track are even and DO NOT align with seams in table. Be sure track is mounted firmly to table.

Blue-Jay End Cutter Installation

Refer to your Blue Jay End Cutter Parts and Instruction Manual (CR-50-0433) for complete Installation Instructions.

The **Micro PULL-OFF DEVICE** weighs approx. 325 lbs. (145 Kg.) uncrated for a 60" machine. Wooden braces are strapped across the underside of its cross channels and the forklift arms should be raised to those braces when machine is lifted.

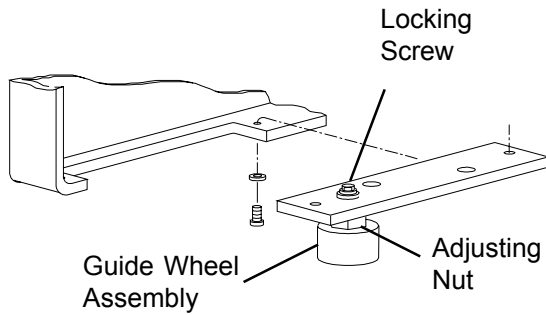
CAUTION

When placing forklift arms under cross channels, use care not to damage tension rods or cover.

Place Machine on Table

When the **Micro PULL-OFF DEVICE** is shipped the Safety Limit Switch Assembly, Cable Carrier Kit and Guide Wheel Assemblies are removed and must be installed upon installation.

Place the **Micro PULL-OFF DEVICE** on table between end markers (marks designating left and right end of spread). Machines equipped with grooved wheels must be placed on the lip of Magna or Z-Track.

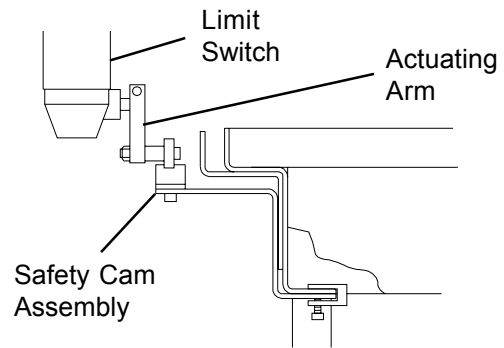


Guide Wheel Installation

Before installation can take place the covers must be removed for access to the mounting holes. Remove the flat head screws on the covers. Carefully remove the covers. Mount the guide wheel assemblies as shown. To Adjust Guide Wheels, Loosen the locking screw and turn the adjusting nut until guide wheel makes contact with table. Do not over tighten. If more adjustment is required, relocate guide wheel in next hole. Tighten locking screw when adjustment is complete.

Safety Cam & Limit Switch installation

The Safety Cams and Limit Switch Assembly should now be installed for safety. Mount the Safety Cams as shown at each end of the spreading area. Loosen the limit switch actuating arm and swing into position. Secure actuating arm. Loosen the limit switch adjustment plate and lower assembly to allow the actuating arm to make contact with safety cam. If actuating arm does not make contact with safety cam replace arm with longer arm provided. Replace covers and secure the flat head screws.



Encoder Track Installation

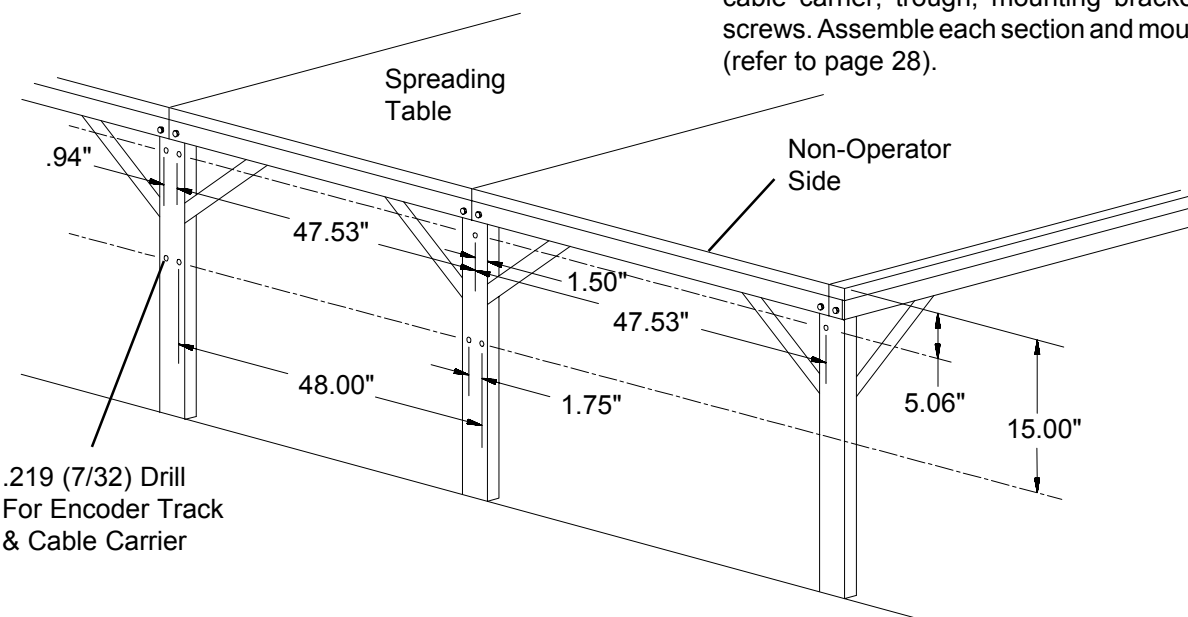
Proper installation of the encoder rail is very important for accurate machine performance. The encoder track must be level along its entire length. Drill (3) 7/32" diameter holes for each 8' section of track, as shown. Mount encoder track to table legs. When ALL sections of track are mounted, the rubber encoder gear belt is then adhered IN ONE PIECE to underside of track. Belt must be undamaged along its entire length. If belt must be spliced, make sure that ribs of belt remain at consistent spacing, otherwise microprocessor will not function properly.

Encoder Assembly Installation

Mount Encoder Assembly on the rear frame as shown on page 23. The encoder gear wheel must roll smoothly along encoder gear belt. Fasten bracket with hardware provided. Adjust tension so gear wheel remains in continuous contact with gear belt as the Pull-off moves.

Cable Carrier Installation

Before the Cable Carrier Kit can be installed the table legs on the non-operator side must be modified. Drill two (2) 7/32 diameter holes in each table leg as shown. Locate the cable carrier, trough, mounting brackets and mounting screws. Assemble each section and mount to the table legs (refer to page 28).



Mount the cable carrier between the two middle trough sections. The Pull-off Device requires 40 - 50 PSI compressed air. Locate the air line fitting on the cable carrier and connect to Blue Jay main tower.

Locate the Control Harness and connect to the bottom of the Blue Jay Control Box.

Once the cable carrier is secured, connect the power plug to the socket on the back frame. Check voltage rating with electrical rating stamped on serial number plate. If compatible, connect cable carrier cord to wall outlet.

Note: Voltage varying more than 10% (11V for 110V machine, 22V for 220V machine) may damage your system's electronics.

After setup is complete and the power and airlines connected to the Pull-off. The Pull-off Device is now ready for operation.

Operation

1. Activate the Blue Jay Main Power by pressing MAIN POWER to the ON Position.
2. Set the PLY COUNTER to the proper number of plies.
3. Activate the pull-off by pulling the MAIN POWER button out (red indicator light indicates main power is on), press the green MAIN DRIVE button to activate power to the Main Drive Motor (The green light will indicate that the machine is now ready for operation).
4. Thread the material between the clamp bar and the Blue Jay chute. Press the Blue Jay Cutter button on the control box to cut a clean edge on the fabric.
5. Press the Auto Lift button indicated on the Blue Jay control box to the ON position.
6. Set the spread length on the Pull-off main control panel. Refer to familiarization section for help.
7. Manually drive pull-off device to docking position.
8. Press the Auto Start/Stop button located on the Pull-off control Panel to begin automatic spreading.

Important

To stop the Pull-off Device at any point during spreading, either:

- Hit Main Power OFF (Red).
- Move the joystick in either direction and release, (only when in automatic mode).
- Press Start/Stop button on main control panel.
- Press the Emergency Stop button

⚠ WARNING: Safety cams should always be checked for proper operation with the Pull-off Device before any automatic spreading takes place.

The Pull-off will move into the 'Docking Position' and grip the fabric. The Blue Jay will unclamp fabric and the Pull-off will pull the material to the right end marker. The Blue Jay cutter will clamp the fabric to the chute, then cut the material, raise and lower to clamp the material in place. The Pull-off will release the material and begin a new cycle.

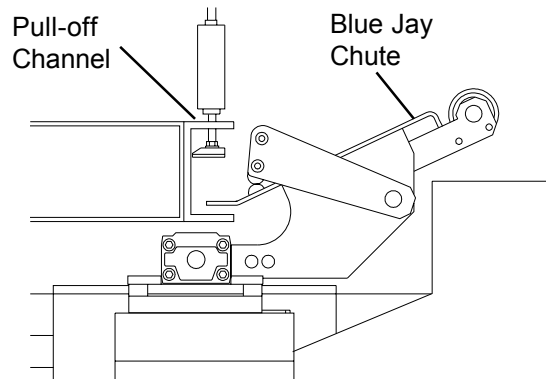
Caution

Improper adjustment can cause personal injury or damage to your machine. Adjustment should be made before automatic spreading and by qualified personnel only.

OPERATING ADJUSTMENTS

Home Sensor Adjustment

Once the Home Sensor Assembly is located on the Front Frame and the sensor target is installed on the Blue Jay, the target can be adjusted. Move the Pull-off to the docking position. Loosen (2) Hex Head Cap Screws which secure the adjusting bracket to the Blue Jay and move the assembly up or down to give a 1/4" gap between home sensor and the target. Secure screws. Loosen the (2) socket cap screws and slide the target until the home sensor light turns on. Secure target in place.



Docking Position

Elevator (Align) Sensor Adjustment

The Pull-off Device Elevator Sensor Adjustment is preset and factory tested. However, if adjustment is necessary, proceed as follows: locate the Elevator Sensor mounted on the extension bracket of the Pull-off Attachment and the reflective target on the Blue Jay Track. To make the initial adjustment, loosen the sensor adjusting bracket and move up or down. The Air Cylinder Support Channel should be in relative docking position with the Blue Jay. Manually raise and lower the elevator to check for proper positioning. See the illustration for Docking Position.

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Bumper Adjustment

The bumpers are located on the Blue Jay clamp brackets. Adjust the bumpers to line up with the Pull-off frames. Adjust the bumpers in or out to allow for proper docking position. See the illustration for Docking Position.

Gripper Pressure Adjustments

The Gripper pressure is set by a regulator which is mounted to the Pull-off attachment. The minimum pressure required to clamp the material is 40 PSI. The pressure may be increased for heavier fabrics or larger rolls.

Elevator Speed Adjustments

The Pull-off Device manual elevator speeds are preset and factory tested. The Automatic Elevator UP/DOWN speeds are controlled by potentiometers (pots) located on the side of the Joystick Control Box. All speed adjustments are increased by clockwise rotation and decreased by counter-clockwise rotation of potentiometers.

Service and Maintenance

Daily

- Blow off entire machine and Cable Carrier using low pressure compressed air (required twice a day depending on material).
- Check safety cams for proper location.

Weekly

- Check for unusual wear and determine why.

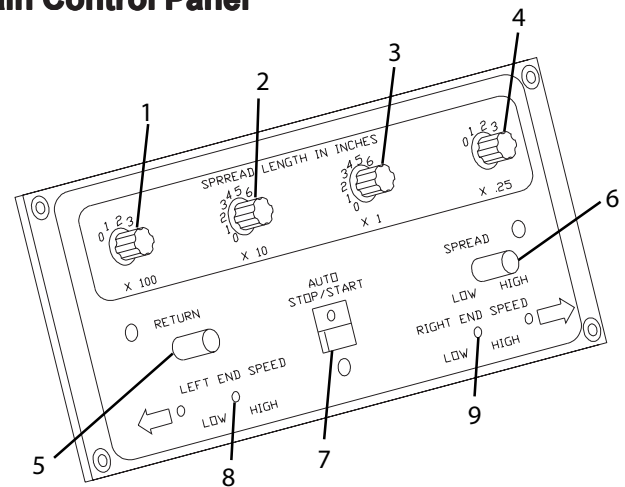
Bi-Monthly

- Check all chains, tighten and lubricate.
- Inspect all wheels, remove all lint, etc.
- Check entire machine for loose nuts and bolts.
- Check table and track for loose or damaged parts.

Monthly

- Inspect Cable Carrier loose nuts, bolts or worn parts.
- Check oil level in gear reducer; fill if necessary.

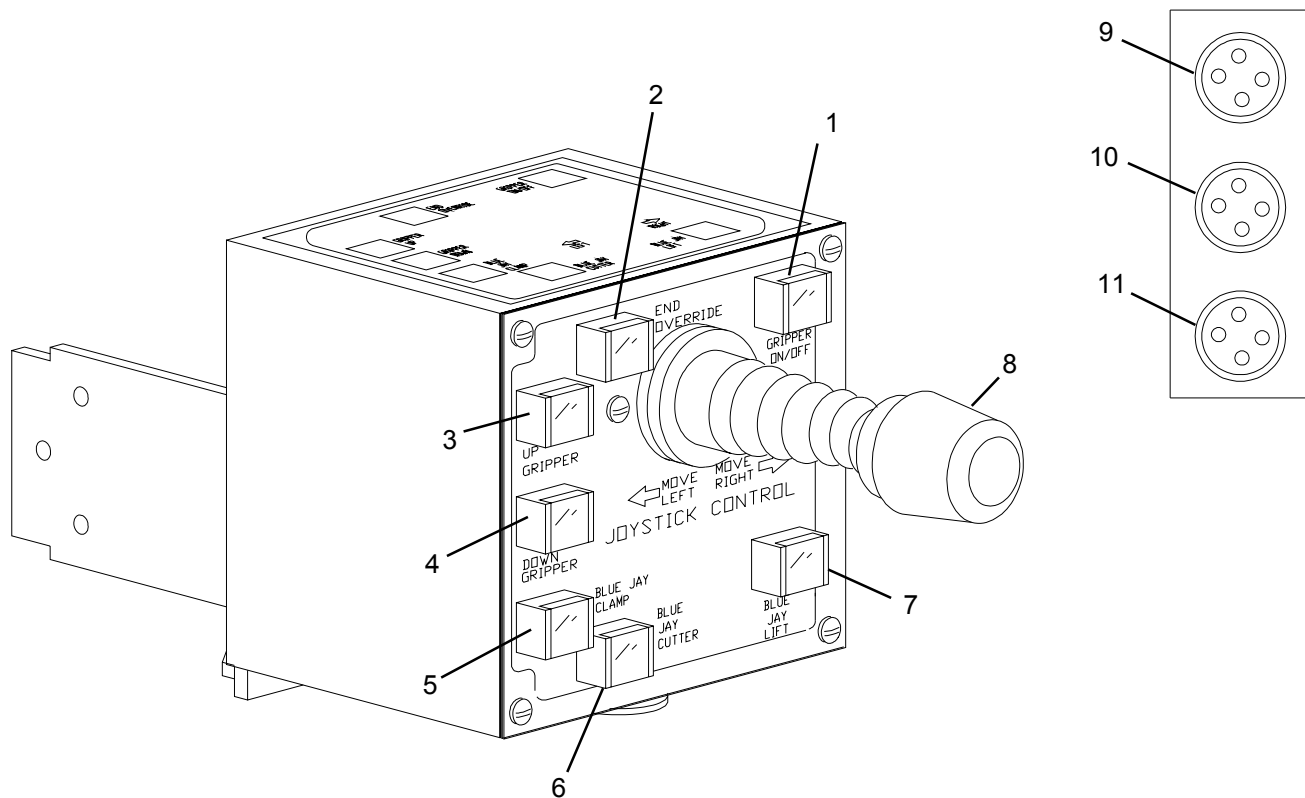
FAMILIARIZATION Main Control Panel



1. **X 100**- Turn dial to set 0 to 300 inches of spread.
X 100- Turn dial to set 0 to 900 cm of spread (Metric).
2. **X 10**- Turn dial to set 0 to 90 inches of spread.
X 10- Turn dial to set 0 to 90 cm of spread (Metric).
3. **X 1**- Turn dial to set 0 to 9 inches of spread.
X 1- Turn dial to set 0 to 9 cm of spread (Metric).
4. **X .25**- Turn dial to set 0 to 3/4 inches of spread.
X .5- Turn dial to set 0 to 1/2 cm of spread (Metric).
5. **Return**- Controls return speed when in automatic mode.
6. **Spread**- Controls spread speed when in automatic mode.
7. **Auto Start/Stop**- Start the Auto cycle. In the Auto cycle, the machine travels down the table to where the Blue Jay End Cutter is located. The Pull-off attachment on the Pull-off Device then lowers to meet with the chute on the End Cutter, where gripper pads grip the edge of the fabric. The Blue Jay unclamps the fabric. The machine begins spreading, pulling the fabric down the table. The End Cutter knife cuts it, raises and clamps the fabric to the table.
8. **Left End Speed**- Controls the Left end speed when in slow down mode (factory set).
9. **Right End Speed**- Controls the Right end speed when in slow down mode (factory set).

FAMILIARIZATION

Joystick Control Box



1. **Gripper On/Off**- allows the gripper to open and close.
2. **End Override**- Press to move the Pull-off past the end markers.
3. **Up Gripper**- Raises Pull-off Attachment.
4. **Down Gripper**- Lowers Pull-off Attachment.
5. **Blue Jay Clamp**- Press to clamp fabric between Blue Jay chute and clamp bar. Press again to release.
6. **Blue Jay Cutter**- Press to start cut of fabric. Enables knife to begin travel across the track.
7. **Blue Jay Lift**- Press to raise track.
CAUTION: Do not use when in docking position.
8. **Joystick Control**- Move to set machine direction. Move to drive machine in manual mode. Move to stop machine when in automatic mode.

9. **Home Sensor Outlet**- electrical connection.*

10. **Elevator Sensor Outlet**- electrical connection.*

11. **Clamp Valve Outlet**- electrical connection.*

* (To main wiring harness)

Automatic Adjustments Potentiometers

12. **Auto Elevator Down**- Controls speed of down movement of elevator when in Automatic mode.(Not Shown)

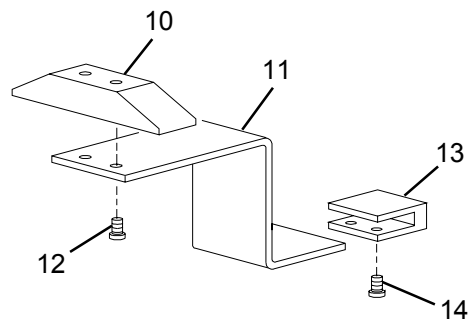
13. **Auto Elevator Up**- Controls speed of up movement of elevator when in Automatic mode.(Not Shown)

NOTE: When the machine is being operated in Manual mode, the joystick is used. The elevator will not align automatically, the gripper up/down buttons must be used.

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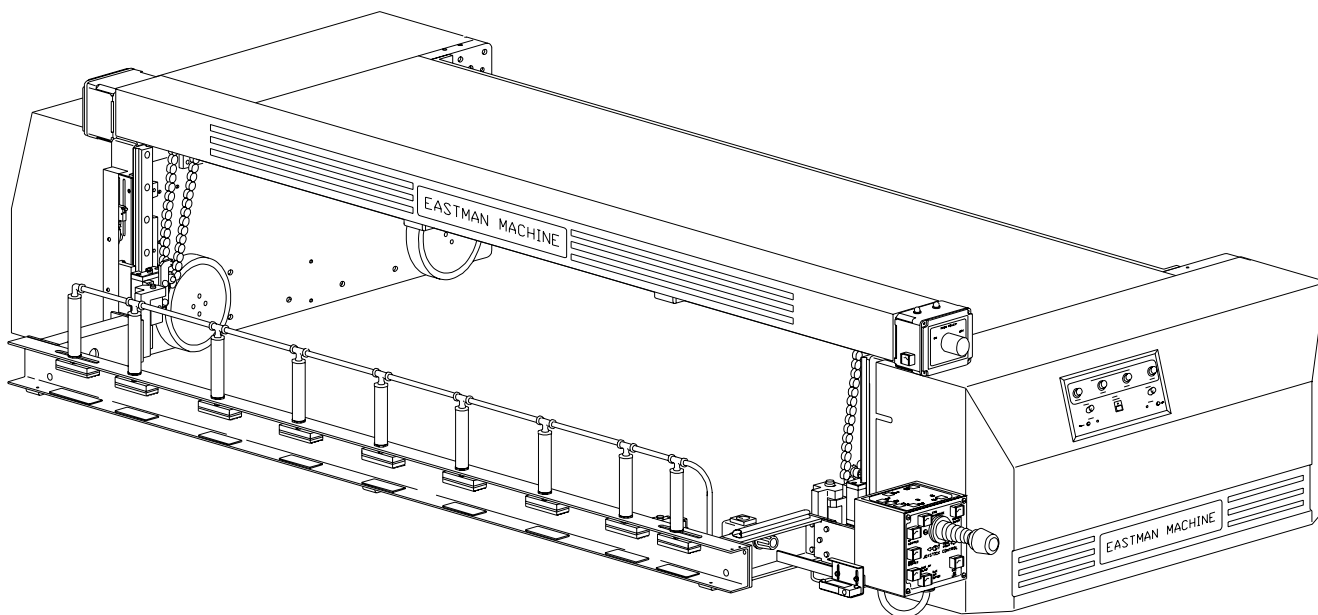
Pictorial Index

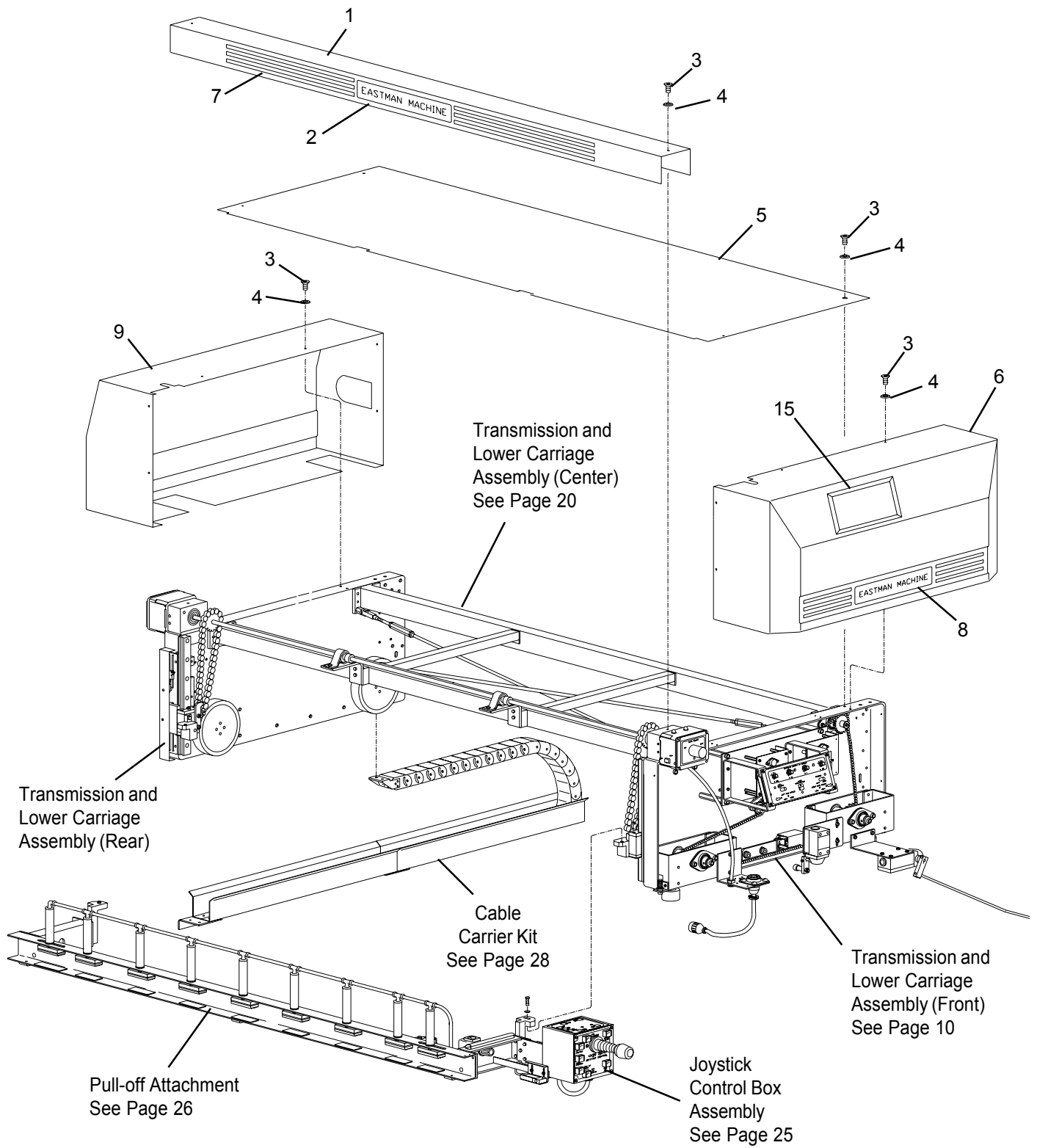
ITEM	PART NO.	DESCRIPTION	QTY.
1	P-30463-MS	Cover, Elevator Support Frame	1
2	9124-052	Decal, Top Cover	1
3	332-99-6	Screw, Flat Head #10-24 x 3/8	18
4	409-99	Washer, Finishing #10	18
5	P-40244-MS	Cover, Top	1
6	P-40264	Cover, Operator	1
	P-40264-1	Cover, Operator Mirror Image	1
7	9124-114	Decal, Stripes	6
8	9124-051	Decal, Side Cover	2
9	P-40265	Cover, Non-Operator	1
	P-40265-1	Cover, Non-Operator Mirror Image	1
10	MD-12943	Cam	2
11	MD-21526	Mounting Bracket, Cam	2
12	335-99-6	Screw, Socket Head #10-24 x 3/8	4
13	MD-12944	Clamp Bracket, Cam	2
14	344-99-4	Setscrew #10-24 x 1/4	4
15	P-21702	Molding	1



Emergency
Stop Cam
MD-02523

MS- Machine Size
A/R- As Required





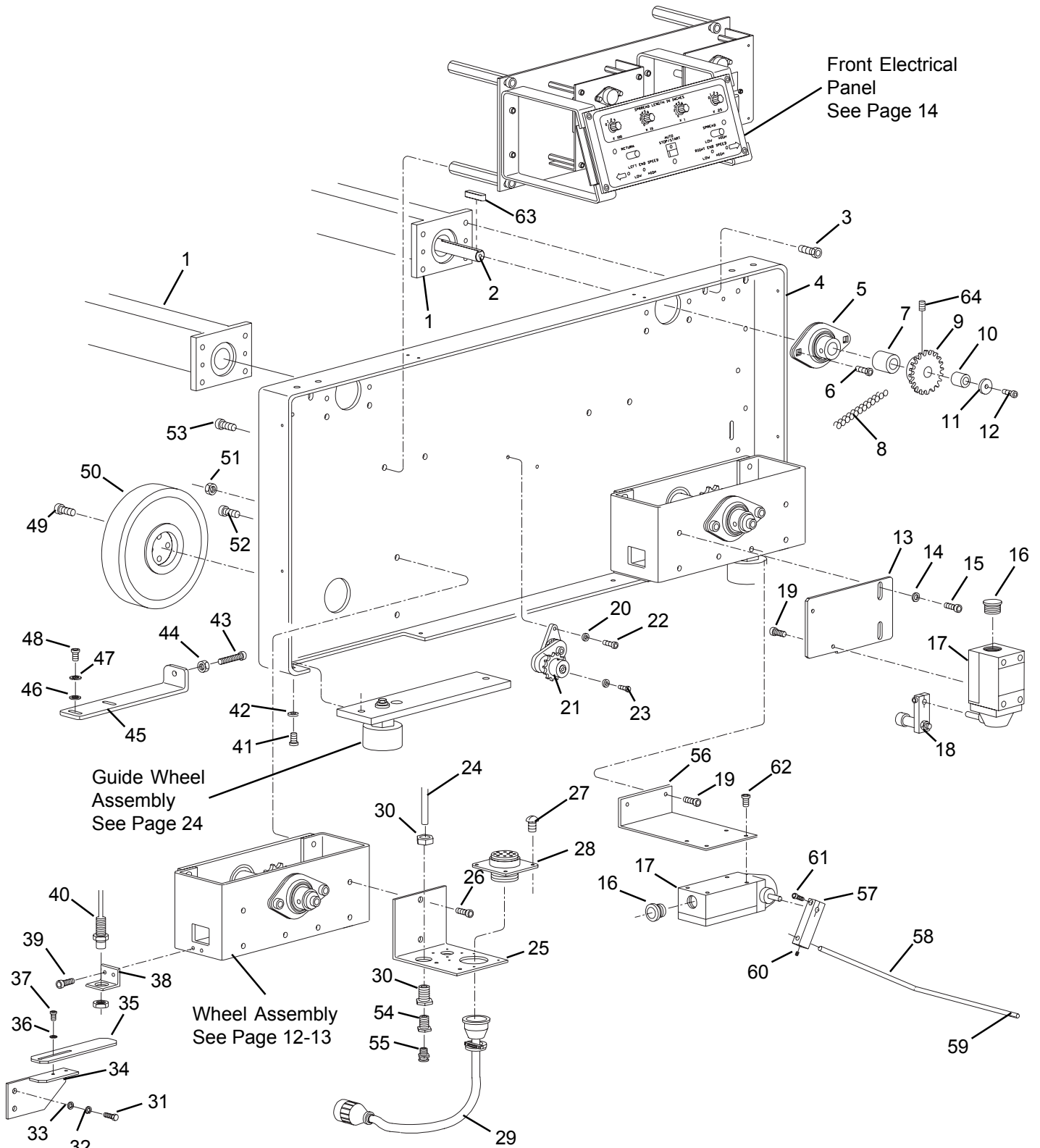
Transmission & Lower Carriage Assembly

Front

ITEM	PART NO.	DESCRIPTION	QTY.
1	MD-40232-MS	Support, Cross Channel	2
2	MD-21541-MS	Shaft, Main Drive	1
3	335-34-12	Screw, Skt. Head 1/4-20x3/4	8
4	MD-40262	Frame, Main, Front	1
5	9031-011	Bearing, Flange .625-B	1
6	335-36-12	Screw, Skt. Head 5/16-18x3/4	2
7	SY-10319	Spacer	1
8	9141-081-001	Chain Assembly, Main Drive	1
9	9009-0242	Sprocket, 3/8-P 20-T .625B	1
10	TPL-48	Spacer	1
11	AD-12336	Washer	1
12	335-34-8	Screw, Skt. Hd. 1/4-20 x 1/2	1
13	MD-21527	Plate, Safety Limit Switch	1
14	410-36	Washer, Flat 5/16	2
15	335-36-10	Screw, Skt. Hd. 5/16-18 x 5/8	2
16	131-003	Strain Relief	2
17	11-3987	Limit Switch, SPDT	2
18	CHT-02224	Actuator Arm, Long	1
	CHT-02223	Actuator Arm, Short	1
19	335-102-8	Screw, Skt. Hd. #10-32 x 1/2	4
20	402-34	Washer, Flat 1/4	2
21	MD-02482	Chain Tensioner	1
22	335-34-8	Screw, Socket Hd. 1/4-20x1/2	1
23	331-34-8	Screw, Hex Hd. 1/4-20 x 1/2	1
24	100-10-3	3/8" Air Tubing	A/R
25	MD-21431	Mounting Bracket	1
26	335-36-10	Screw, Skt. Hd. 5/16-18 x 5/8	2
27	320-86-4	Screw, Binding Hd. #6-32x1/4	4
28	11-4704	Connector, 37 Pin Flanged	1
29	11-2835	Control Box Cable	1
30	100-17-5	Bulk Hd. Union, 3/8" Tubing	1
31	331-38-12	Screw, Hex Hd. 3/8-16 x 3/4	2
32	402-38	Washer, Lock 3/8	2

ITEM	PART NO.	DESCRIPTION	QTY.
33	410-38	Washer, Flat 3/8	2
34	MD-21523	Target Adjust Bracket	1
	MD-21523-1	Target Adjust Bracket, Mirror	1
35	MD-12940	Target, Home Sensor	1
36	410-010	Washer, Flat #10	2
37	335-102-10	Screw, Socket Hd.#10-32x5/8	2
38	MD-12936	Home Sensor Bracket	1
39	335-93-6	Screw, Socket Hd. #8-32x3/8	2
40	11-184-2	Home Sensor	1
41	335-34-8	Screw, Socket Hd.1/4-20x1/2	4
42	402-34	Washer, Lock 1/4	4
43	E-274	Bumper Stop	2
44	205-38	Nut, Hex 3/8-16	2
45	MD-21524	Bumper Bracket	2
46	410-34	Washer, Flat 1/4	4
47	402-34	Washer, Lock 1/4	4
48	331-34-88	Screw, Hex Hd. 1/4-20 x 1/2	4
49	335-36-14	Screw, Skt. Hd. 5/16-18x7/8	8
50	MD-30461	Wheel	2
51	206-36	Nut, Hex 5/16-18	2
52	335-36-10	Screw, Skt. Hd. 5/16-18 x 5/8	8
53	335-36-10	Screw, Skt. Hd. 5/16-18 x 5/8	4
54	100-12-2	Reducer, 3/8 x 1/8	1
55	100-11-1	Male Fitting, 1/4 Tube, 1/8 npt	1
56	MD-21623	Stop Wand Bracket	1
57	MD-13073	Stop Wand Arm	1
58	MD-13074	Stop Wand	1
59	9094-006	Vinyl End	1
60	342-93-8	Setscrew, #8-32 x 1/2	1
61	335-102-6	Socket Hd. #10-32 x 3/8	1
62	335-99-6	Socket Hd. #10-24 x 3/8	2
63	603-6-6-12	Key,Sq.3/16 X 3/16 X 3/4	1
64	344-34-8	Scrw.Skt.Set 1/4-20X1/2	1

A/R-As Required
MS-Machine Size



No-Track Wheel Assembly

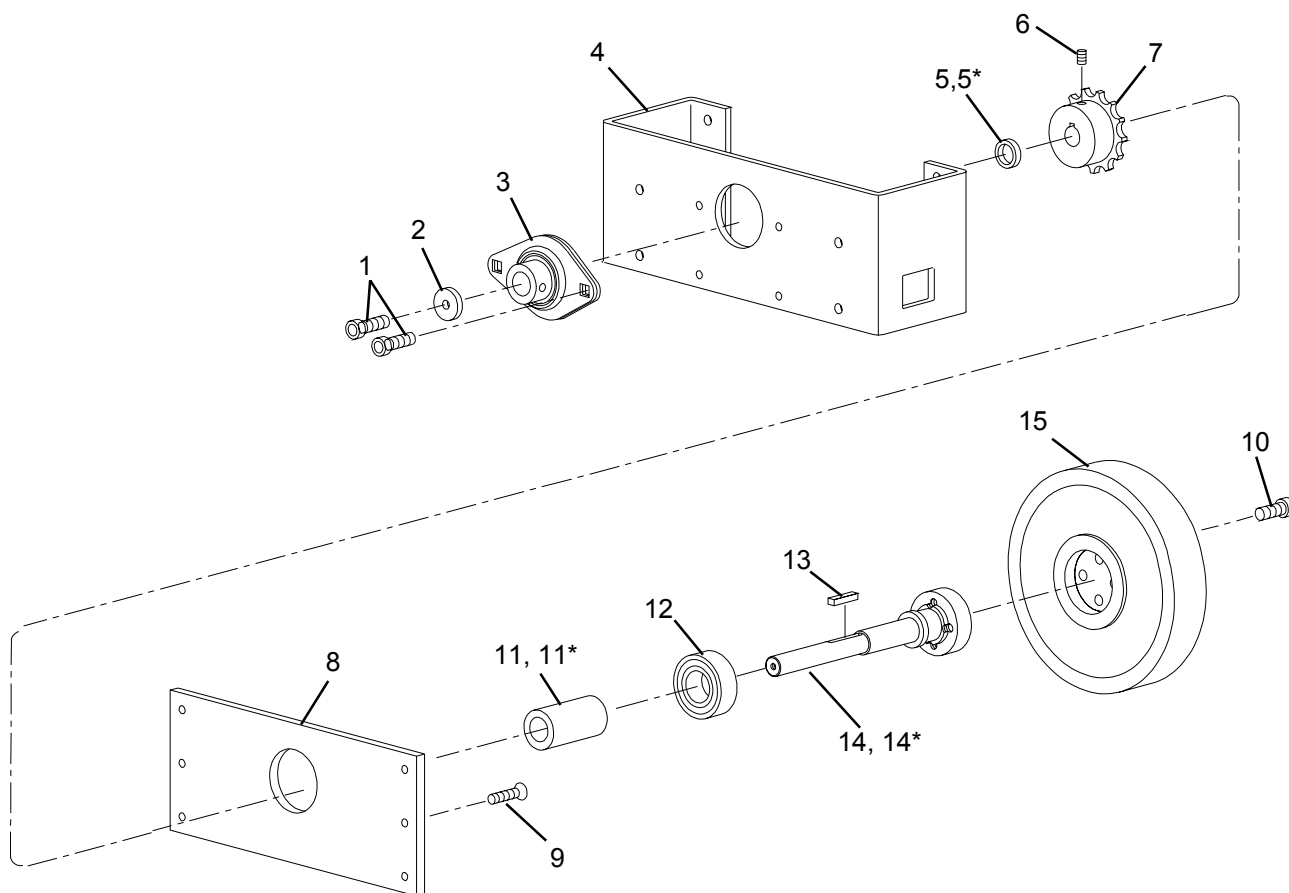
MD-03211 (Operator Side)

MD-03276 (Non-Operator Side)

ITEM	PART NO.	DESCRIPTION	QTY.
1	335-34-8	Screw, Socket Head 1/4-20 x 1/2	3
2	AD-12336	Retainer, Shaft	1
3	9031-011	Bearing, Flangette 5/8-B	1
4	MD-30460	Bracket, Wheel	1
5	MD-12756	Spacer .875 x .64 x .153 Long	1
5*	MD-13281	Spacer, .875 x .64 x .81 Long	1
6	344-34-8	Setscrew, Hex 1/4-20 x 1/2	2
7	9009-0242	Sprocket 20-T 3/8-P 5/8-B	1
8	MD-21425	Plate, Support, Wheel Bracket	1
9	332-34-6	Screw, Flat Head 1/4-20 x 3/8	2
10	335-36-14	Screw, Socket Head 5/16-18 x 7/8	4

ITEM	PART NO.	DESCRIPTION	QTY.
11	MD-12755	Spacer 1.25 x .765 x 1.685 Long	1
11*	MD-13280	Spacer, .875 x .64 x 1" Long	1
12	9026-0004	Bearing 1 x 2 x 1/2	1
13	9063-103	Key, Flat	1
14	MD-21426	Shaft, Track Wheel, Operator Side	1
14*	MD-21426	Shaft, Track Wheel	1
15	MD-30461	Wheel, Polyurethane	1

* Indicates MD-03276 Assembly Only.



Item numbers are for reference only.
Please Specify PART NUMBER when
ordering replacement parts.

Please Specify machine voltage and
complete serial number when ordering
replacement parts.

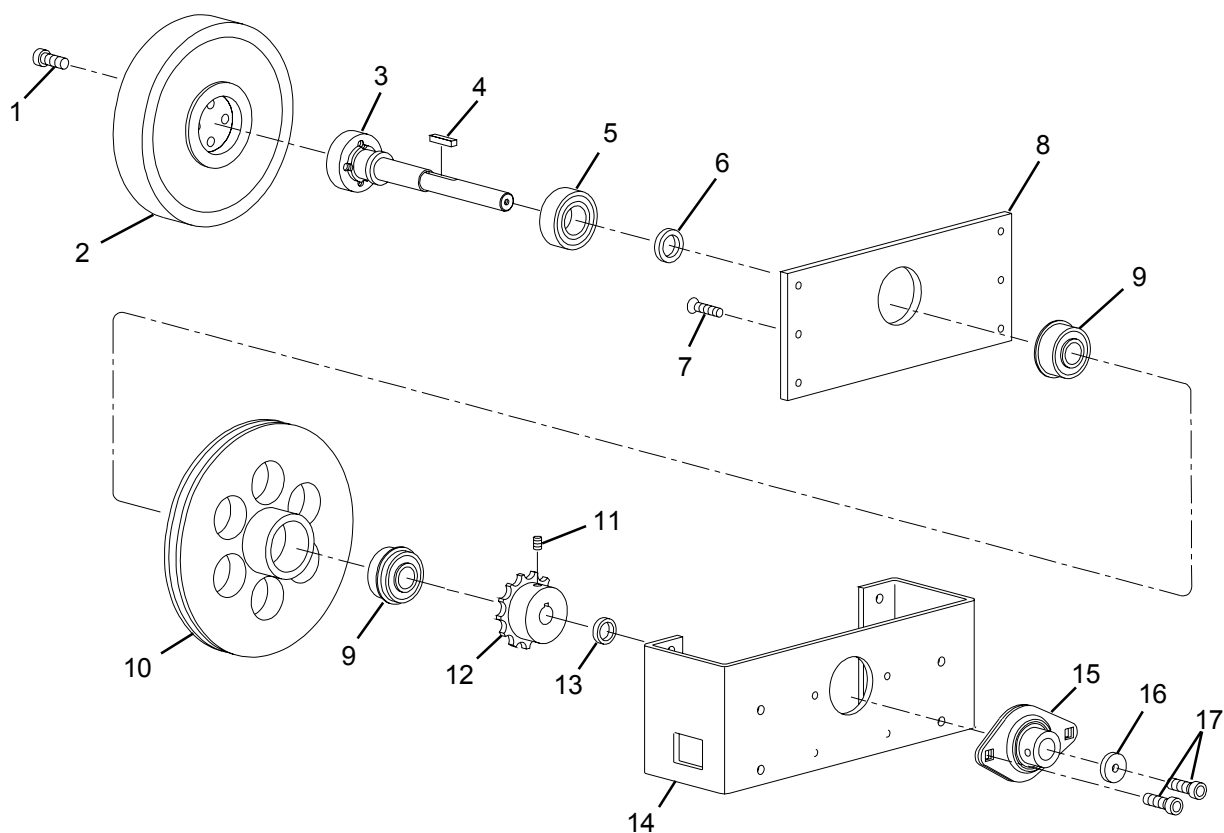
Z-Track Wheel Assembly

Front

MD-03210

ITEM	PART NO.	DESCRIPTION	QTY.
1	335-36-14	Screw, Socket Head 5/16-18 x 7/8	4
2	MD-30461	Wheel, Polyurethane	1
3	MD-21426	Shaft, Track Wheel	1
4	9063-103	Key, Flat	1
5	9026-0004	Bearing 1 x 2 x 1/2	1
6	MD-12758	Spacer .765 x 1.125 x .154	1
7	332-34-6	Screw, Flat Head 1/4-20 x 3/8	2
8	MD-21425	Plate, Support, Wheel Bracket	1
9	9026-0002	Bearing 3/4 x 1 3/4 x 3/4	2

ITEM	PART NO.	DESCRIPTION	QTY.
10	MD-30458	Wheel, Track	1
11	344-34-8	Setscrew, Hex 1/4-20 x 1/2	2
12	9009-0242	Sprocket 20-T 3/8-P 5/8-B	1
13	MD-12756	Spacer .875 x .64 x .153	1
14	MD-30460	Bracket, Wheel	1
15	9031-011	Bearing, Flange 5/8-B	1
16	AD-12336	Retainer, Shaft	1
17	335-34-6	Screw, Socket Head 1/4-20 x 3/8	3



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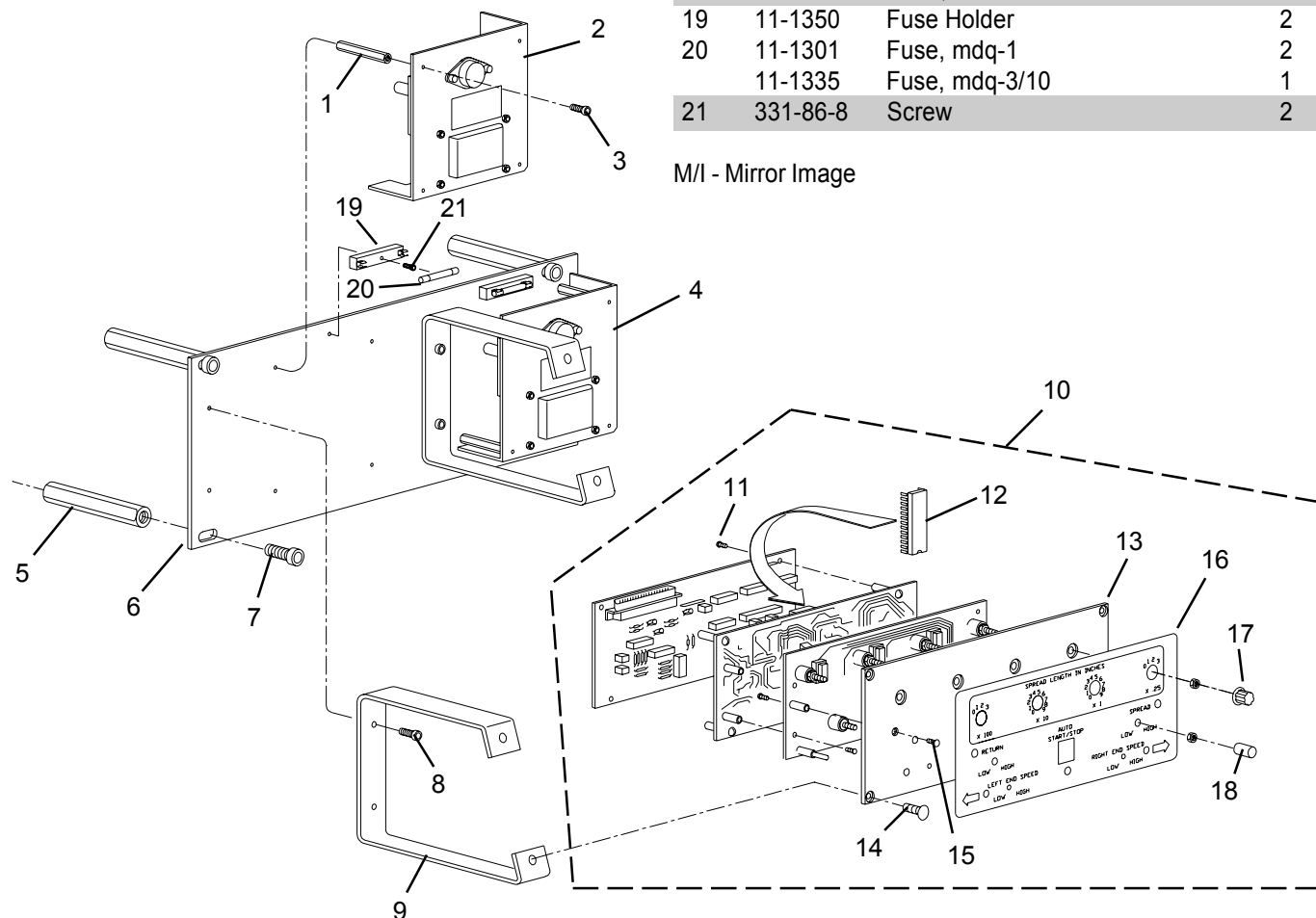
Front Electrical Panel

Optional Spreading Programs
available, contact your Eastman
Sales Representative.

ITEM	PART NO.	DESCRIPTION	QTY.
1	11-1963	Standoff #8-32 x 1.62	8
2	11-0236-1	Power Supply, 5 Volt	1
3	335-93-8	Screw, Socket Head #8-32 x 1/2	8
4	11-0237-1	Power Supply, 24 Volt	1
5	AD-12311	Standoff, 3.25 Long	4
6	MD-30494	Plate, Elec. Components	1
7	335-36-10	Screw, Socket Head 5/16-18 x 5/8	4
8	335-102-8	Screw, Socket Head #10-32 x 1/2	4
9	MD-30495	Bracket, Control Panel Mount	2
10	11-0254-IN	Control Panel Assembly, Inches	1
	11-0254-IN-MI	Control Panel Assembly, Inches M/I	1
	11-0254-CM	Control Panel Assembly, Metric	1
	11-0254-CM-MI	Control Panel Assembly, Metric M/I	1
	11-0255-IN	Control Panel Assembly, 600 Inches	1
	11-0255-IN-MI	Control Panel Assembly, 600" M/I	1

ITEM	PART NO.	DESCRIPTION	QTY.
11	313-86-4	Screw, Rd. Hd. #6-32 x 1/4	12
12	11-2445-1T	Program Chip, Inches	1
	11-2445-3T	Program Chip, Inches/Mirror Image	1
	11-2445-2T	Program Chip, Metric	1
	11-2445-4T	Program Chip, Metric/Mirror Image	1
13	MD-30493	Plate, Control Panel	1
14	332-102-8	Screw, Socket Flat Hd. #10-32 x 1/2	4
15	335-102-8	Screw, Socket Flat Hd. #6-32 x 1/4	3
16	9124-090	Decal, Control Panel, Inches	1
	9124-090-1	Decal, Control Panel, Inches/MI	1
	9124-090-2	Decal, Control Panel, 600 Inches	1
	9124-090-3	Decal, Control Panel, 600 Inches/MI	1
	9124-091	Decal, Control Panel, Metric	1
	9124-091-1	Decal, Control Panel, Metric/MI	1
17	9079-009	Knob, Large	4
18	9079-012	Knob, Small	2
19	11-1350	Fuse Holder	2
20	11-1301	Fuse, mdq-1	2
	11-1335	Fuse, mdq-3/10	1
21	331-86-8	Screw	2

M/I - Mirror Image

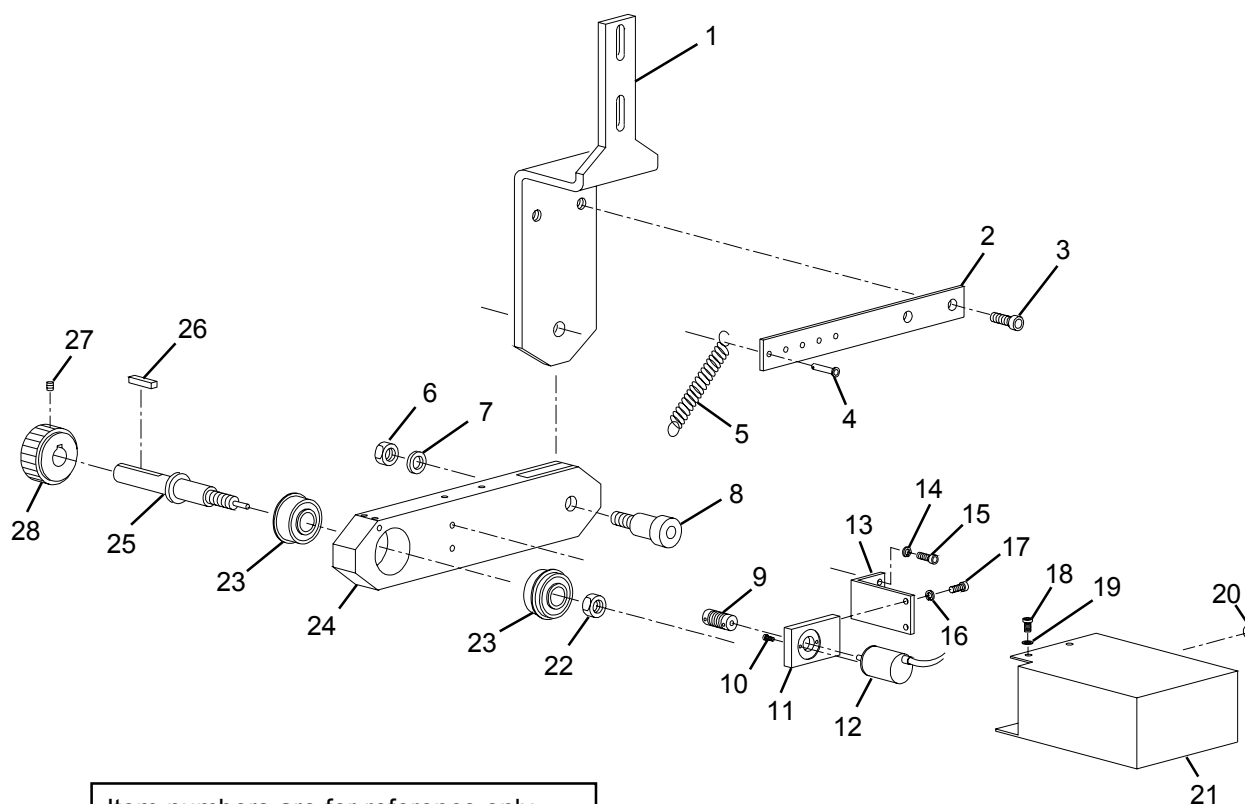


Encoder Assembly

MD-04581

ITEM	PART NO.	DESCRIPTION	QTY.
1	MD-30561	Supoert Bracket	1
2	MD-13189	Spring Bracket	1
3	335-36-6	Screw, Socket Hd. 5/16-18 x 3/8	2
4	521-6-12	Clevis Pin	1
5	CHT-411	Spring	1
6	211-38	Nut, Elastic Hex 3/8-16	1
7	410-38	Washer, Flat 3/8	1
8	355-42-12	Screw, Hex Shoulder 1/2 x 3/4	1
9	AD-12392-1	Coupling, Encoder	1
10	341-3-8	Screw, Flat Hd. M-3 x 8mm	2
11	MD-21695	Encoder Block	1
12	11-0252-1	Encoder with Plug	1
13	MD-13188	Bracket, Mount	1
14	402-080	Washer, Lock #8	2
15	335-93-6	Screw, Socket Hd. #8-32 x 3/8	2
16	402-080	Washer, Lock #8	2

ITEM	PART NO.	DESCRIPTION	QTY.
17	335-93-6	Screw, Socket Hd. #8-32 x 3/8	2
18	335-93-6	Screw, Socket Hd. #8-32 x 3/8	2
19	402-080	Washer, Lock #8	2
20	9015-0006	Grommet	1
21	MD-30560	Encoder Cover	1
22	211-44	Nut, Elastic Hex 1/2-20	1
23	9026-0003	Bearing	2
24	MD-30559	Encoder Arm Pick-up	1
25	MD-21694	Encoder Shaft	1
26	602-6-6-10	Key	1
27	344-34-6	Setscrew 1/4-20 x 3/8	1
28	9097-014	Pulley, Grooved	1



Item numbers are for reference only.
Please Specify PART NUMBER when
ordering replacement parts.

Eastmanmachine
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Elevator Assembly

Front

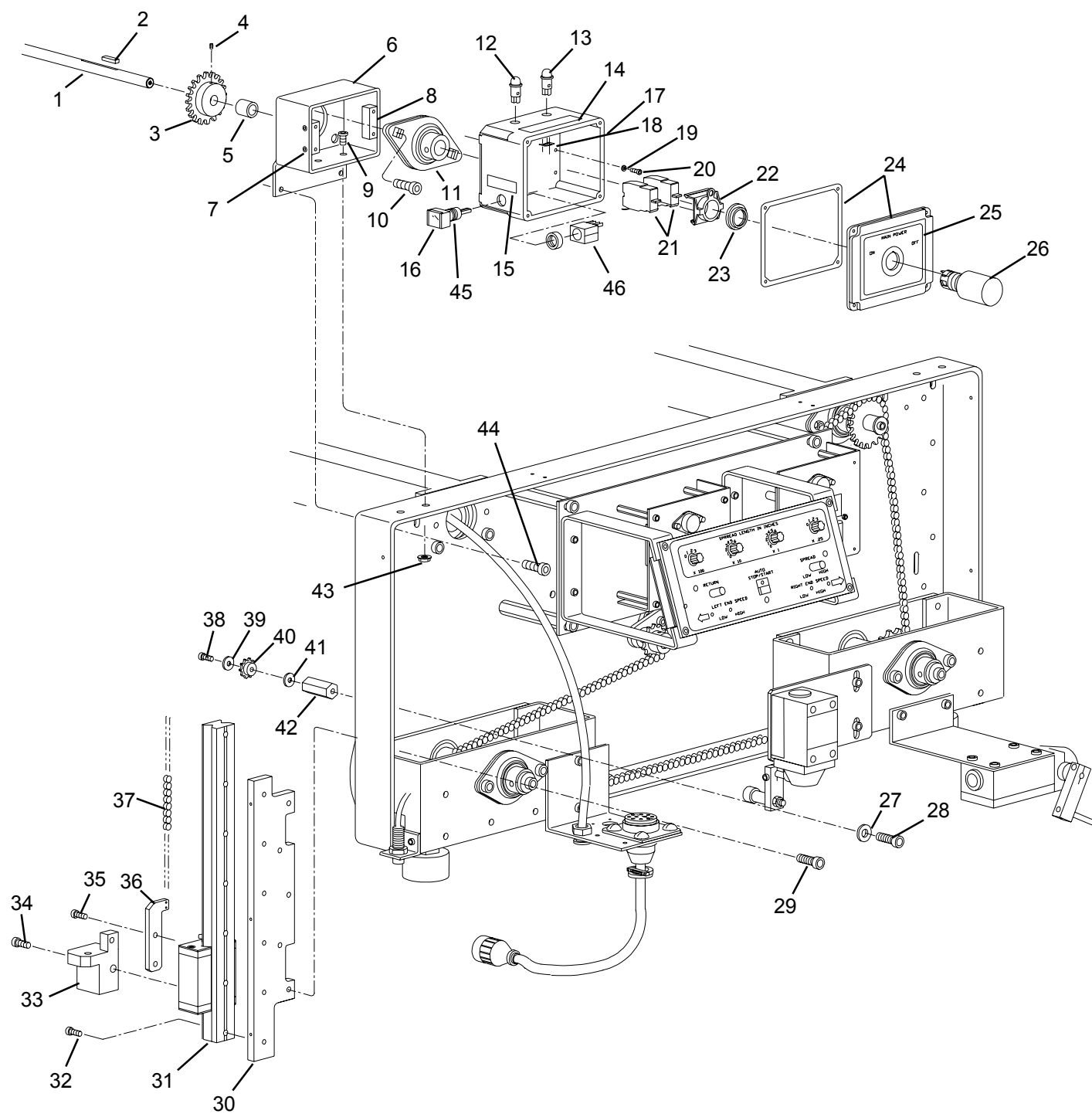
ITEM	PART NO.	DESCRIPTION	QTY.
1	P-21412-MS	Shaft, Elevator Drive	1
2	603-4-4-8	Key .125 Square x .50	2
3	TL-237-3	Sprocket, w/ Key 18-T 1/4-P 1/2-B	2
4	344-102-4	Setscrew #10-32 x 1/4	2
5	P-12762-2	Spacer .51 x .75 x .55 long	1
6	P-30459	Elevator Support	1
7	332-99-8	Screw, Socket Head #10-24 x 1/2	4
8	P-21433	Tab, Mounting, Main Power Box	2
9	335-36-10	Screw, Socket Head 5/16-18 x 5/8	2
10	335-34-6	Screw, Socket Head 1/4-20 x 3/8	2
11	9031-010	Bearing, Flange .5-B	2
12	11-1252	Lamp, Neon 110-125V	1
13	11-1266	Lamp, 28V Green	1
14	9124-079	Decal, Power Indicators	1
15	9124-080	Decal, Main Drive	1
16	11-4195	Switch Lense, Green	1
17	MD-30464	Box, Main Power, Operator Side	1
18	11-1252-2	Nut, Speed, for Lamp #11-1252	2
19	402-010	Washer, Lock #10	4
20	335-99-8	Screw, Socket Head #10-24 x 1/2	4
21	11-4143	Block, Contact	2
22	11-4138	Adaptor, Mounting	1
23	11-4139	Pushbutton, Emergency Stop	1

ITEM	PART NO.	DESCRIPTION	QTY.
24	MD-30464	Box, Main Power, Operator Side	1
25	9124-077	Decal, Main Power, On-Off	1
26	11-4139	Pushbutton, Emergency Stop	1
27	410-34	Washer, Flat 1/4"	1
28	335-34-8	Screw, Socket Head 1/4-20 x 1/2	1
29	335-34-8	Screw, Socket Head 1/4-20 x 1/2	5
30	MD-30457	Plate, Support, Elevator Blocks	1
31	MD-02483	Bearing, Linear Motion	1
32	341-6-16	Screw, Socket Head M-6 x 16	7
33	MD-30440	Lift Block, Elevator, Back Frame	1
34	341-6-16	Screw, Socket Head M-6 x 16	2
35	341-6-10	Screw, Socket Head M-6 x 10	2
36	MD-12769	Arm, Elevator Chain Support	1
37	9140-050-002	Chain, Elevator	1
38	335-99-8	Screw, Socket Head #10-24 x 1/2	1
39	9001-0002	Washer, Nylon 1/4 x 1/2 x .062	1
40	CHT-229	Sprocket 10-T 1/4-P 1/4-B	1
41	9001-0001	Washer, Nylon 1/4 x 1/2 x .032	1
42	MD-12759	Stand-Off, Idler Sprocket	1
43	203-36	Nut, Fin. 5/16-18	2
44	335-36-6	Screw, Socket Head 5/16-16 x 3/8	2
45	11-4190	Switch Acuator, Mom.	1
46	11-4192	Contact Block, SPDT	1

MS- Machine Size

Item numbers are for reference only.
Please Specify PART NUMBER when
ordering replacement parts.

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complete serial number when ordering
replacement parts.



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Elevator Assembly

Rear

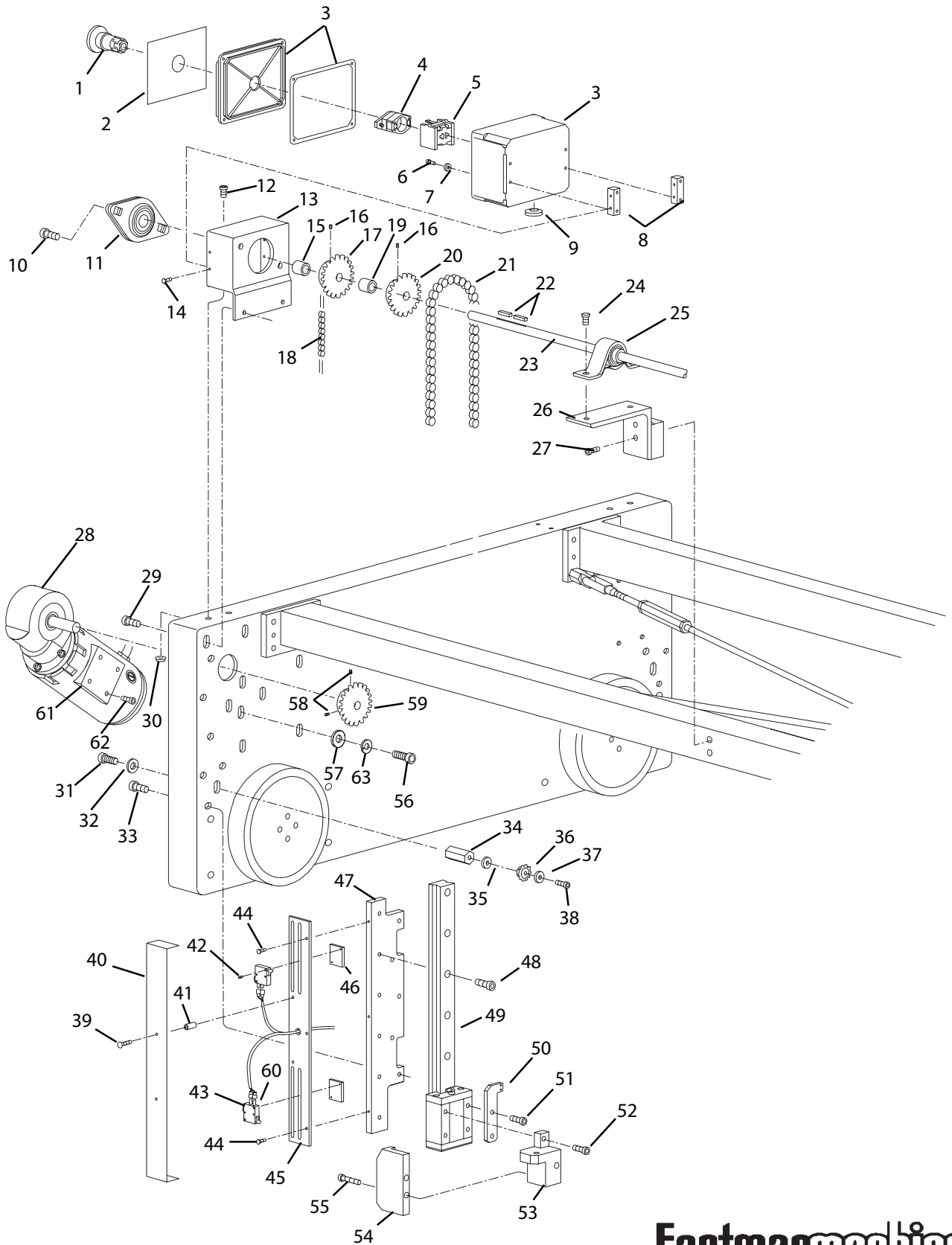
ITEM	PART NO.	DESCRIPTION	QTY.
1	11-4050	Switch Ring	1
	11-4056	Switch Actuator, Momentary	1
	11-4062	Button, Stop, Red	1
2	9124-078	Decal, Emergency Stop	1
3	MD-30465	Emergency Stop Box	1
4	11-4057	Switch Mount	1
5	11-4060	Block, Contact	1
6	335-99-10	Screw, Skt. Hd. #10-24x5/8	4
7	402-010	Washer, Lock #10	4
8	P-21433	Tab, Mtg, Main Power Box	2
9	9015-0003	Grommet, Rubber	1
10	335-34-8	Scrw, Skt. Hd. 1/4-20 x 1/2	2
11	9031-010	Bearing, Flange 1/2-B	1
12	335-36-10	Scrw, Skt. Hd. 5/16-18x5/8	2
13	P-30459	Frame, Elevator Support	1
14	332-99-8	Scrw, Flat Hd. #10-24x1/2	4
15	P-12762-3	Spacer, 1.25 Long	1
16	344-102-4	Setscrew 10-32 x 1/4	2
17	TL-237-3	Sprocket 18-T 1/4-P 1/2-B	1
18	9140-050-002	Chain, Elevator To Motor	1
19	P-12762-2	Spacer, .55 Long	1
20	TL-237-3	Sprocket 18-T 1/4-P 1/2-B	1
21	9140-025-001	Chain Assembly, Elevator	1
22	603-4-4-8	Key, 1/8 Square	2
23	P-21412-MS	Shaft, Elevator Drive	1
24	335-36-6	Screw, Skt. Hd. 5/16-18x3/8	4
25	P-12775	Block, Pillow 1/2-B	2
26	P-30443	Bracket, Pillow Block	2
27	335-34-20	Screw, Skt. Hd. 1/4-20x1 1/4	4
28	11-1242-1	Elevator Motor	1
29	335-36-6	Scrw, Skt. Hd. 5/16-18 x 3/8	2

ITEM	PART NO.	DESCRIPTION	QTY.
30	216-36	Nut, Flange 5/16-18	2
31	335-34-8	Scrw, Skt. Hd. 1/4-20x1/2	1
32	410-34	Washer, Flat 1/4	1
33	335-34-8	Scrw, Skt. Hd. 1/4-20 x 1/2	5
34	MD-12759	Standoff	1
35	9001-0001	Washer, Nylon 1/32 Thick	1
36	CHT-229	Sprocket 10-T 1/4-P 1/4-B	1
37	9001-0002	Washer, Nylon 1/4x1/2x.062	1
38	355-34-10	Shoulder Screw 1/4 x 5/8 Lg	1
39	333-99-16	Screw, Btn. Hd. 10-24 x 1	2
40	MD-21435	Cover, Switch, Elevator Std.	1
	MD-21435-1	Cover, Switch, Elevator M/I	1
41	WCH-11151	Spacer, Switch Roller	2
42	313-81-12	Screw, Round Hd. #4-40x3/4	4
43	11-1195	Switch, Limit	2
44	332-86-4	Screw, Flat Head #6-32 x 1/4	3
45	MD-21427	Plate, Mounting, Limit Switch	1
46	MD-12781	Nut Plate, Switch	2
47	MD-30457	Plate, Support, Elevator Blk	1
48	341-6-16	Scrw, Skt. Hd. M-6 x 16	7
49	MD-02483	Bearing, Linear Motion	1
50	MD-12769	Arm, Chain Support	1
51	341-6-16	Scrw, Skt. Hd. M-6 x 16	2
52	341-6-16	Scrw, Skt. Hd. M-6 x 16	2
53	MD-30439	Block, Lift, Elevator	1
54	MD-12780	Cam, Switch, Elevator	1
55	335-93-12	Scrw, Skt. Hd. #10-32 x 3/4	2
56	335-34-8	Scrw, Skt. Hd. 1/4-20 x 1/2	4
57	410-34	Washer, Flat 1/4	4
58	344-34-8	Setscrew, 1/4-20 x 1/2	2
59	TL-237-3	Sprocket 18-T 1/4-P 1/2-B	1
60	MD-13193	Spacer	2
61	P-30635	Bracket, Mounting Motor	1
	P-30635-1	Bracket, Mounting Motor M/I	1
62	332-102-8	Scrw, Flat Hd. #10-32x1/2	4
63	402-34	Washer, Lock 1/4"	1

MS-Machine Size

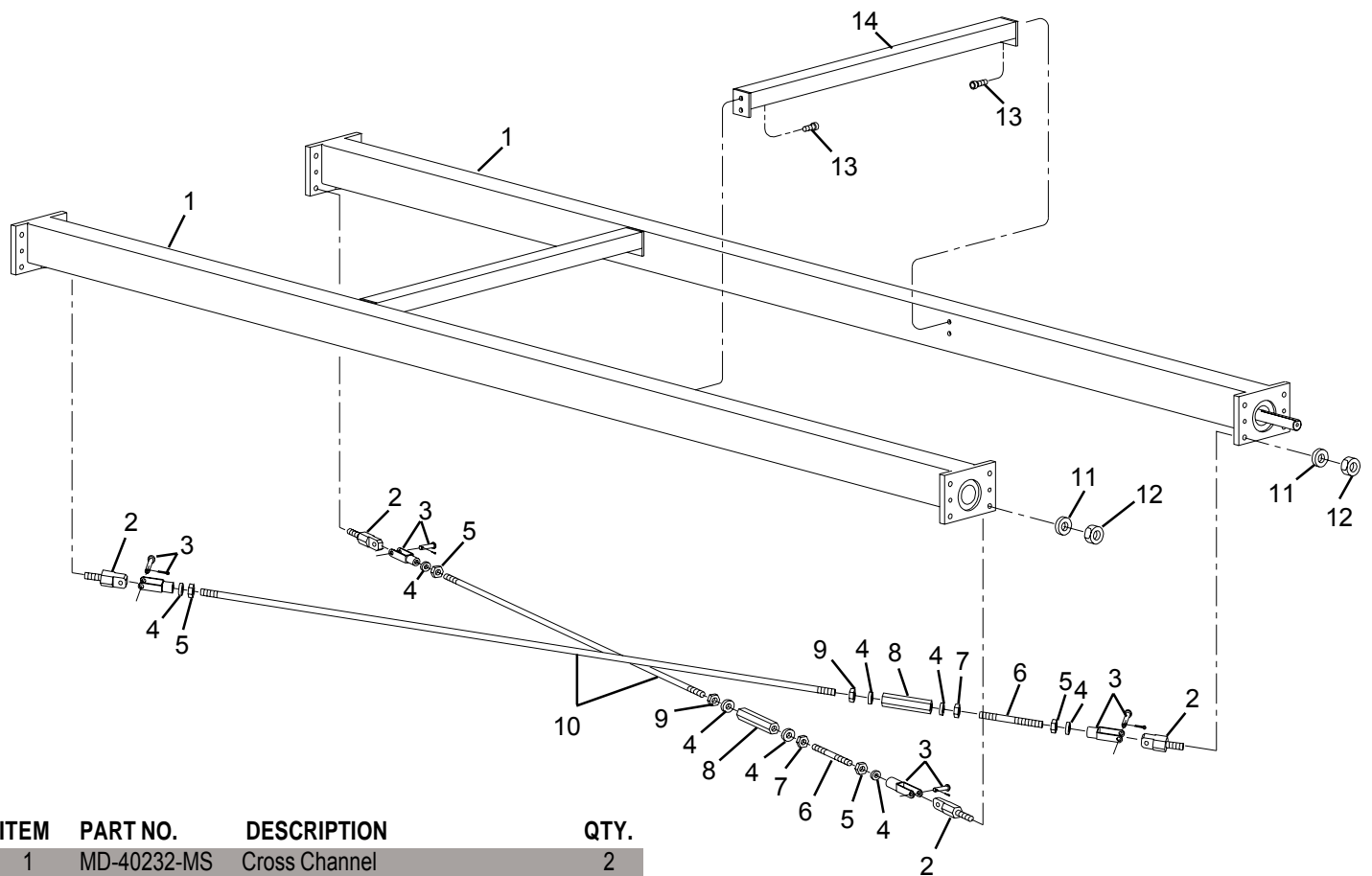
Item numbers are for reference only.
Please Specify PART NUMBER when
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Please Specify machine voltage and
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replacement parts.



Eastmanmachine
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Transmission & Lower Carriage Assembly Center



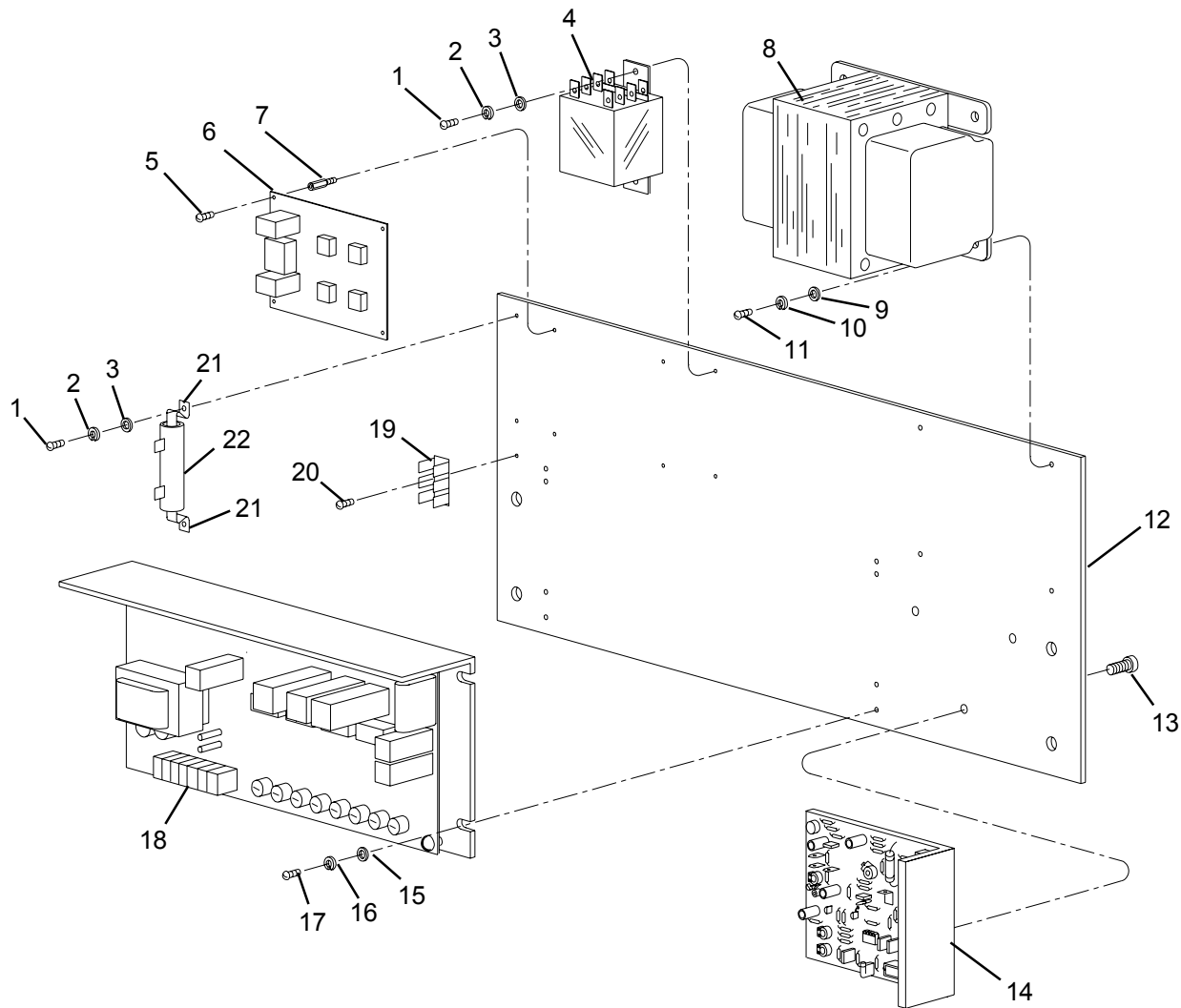
ITEM	PART NO.	DESCRIPTION	QTY.
1	MD-40232-MS	Cross Channel	2
2	MD-12723	Stud, Tie Rod Anchor	4
3	MD-12776	Yoke End, Tie Rod	4
4	402-34	Washer, Lock 1/4	8
5	205-35	Nut, Heavy Hex 1/4-28	4
6	MD-12772	Tie Rod, Short	2
7	203-34-2	Nut, Finished Hex 1/4-20 L.H.	2
8	MD-12774	Turnbuckle, Tie Rod	2
9	205-34	Nut, Heavy Hex 1/4-20	2
10	MD-12773-MS	Tie Rod, Long	2
11	410-36	Washer, Flat 5/16	4
12	216-36	Nut, Flange Lock Hex 5/16-18	4
13	335-34-6	Screw, Skt. Hd. 1/4-20 x 3/8	4
14	MD-21436	Support Bracket	2

MS- Machine Size

L.H.- Left Hand Thread

Back Electronic Assembly

11-2846-110 (110 volt) 11-2846-220 (220 volt)



ITEM	PART NO.	DESCRIPTION	QTY.
1	313-86-6	Screw, Rd. Hd. #6-32 x 3/8	4
2	410-060	Washer, Flat #6	4
3	402-060	Washer, Lock #6	4
4	11-1014	Relay, 24vdc, dpdt	1
5	313-86-6	Screw, 6-32 x 3/8	4
6	11-0277	Elevator Control Board	1
7	11-1938	Hex Spacer	4
8	11-1625-1	Transformer, (220 Volt Only)	1
9	410-080	Washer, Flat #8	4
10	402-080	Washer, Lock #8	4
11	318-93-8	Screw, Pan Hd. #8-32 x 1/2	4
12	MD-30496	Plate, Electrical Mount	1
13	335-102-4	Screw, Skt. Hd. #10-32 x 1/4	3

ITEM	PART NO.	DESCRIPTION	QTY.
14	11-176-2	Speed Control, 110vac	1
15	402-080	Washer, Lock #8	4
16	410-080	Washer, Flat #8	4
17	318-93-8	Screw, Pan Hd. #8-32 x 1/2	4
18	11-0241	Speed Control, 90vdc	1
19	11-919	Tab, Grounding	1
20	313-86-6	Screw, Rd. Hd. #6-32 x 3/8	1
21	11-1935	Bracket, Resistor Mount	2
22	11-1803	Resistor	1

Eastmanmachine
COMPANY

Transmission & Lower Carriage Assembly

Rear

ITEM	PART NO.	DESCRIPTION	QTY.
1	335-34-8	Screw, Skt. Head 1/4-20x1/2	1
2	AD-12366	Washer, Special	1
3	CHTW-12804-1	Spacer	1
4	9141-020-001	Chain Assy, Motor to Dr. Shaft	1
5	9009-0403	Sprocket, Dbl 3/8-P 20-T .62-B	1
6	9141-081-011	Chain Assy, Drive Shaft to Whl	1
7	SY-10319	Spacer	1
8	335-36-10	Screw, Skt. Hd. 5/16-18 x 5/8	26
9	9031-011	Bearing, Flange .625-B	1
10	MD-40263	Frame, Main, Back	1
11	MD-21541-MS	Shaft, Main Drive	1
12	MD-40232-MS	Cross Channel	2
13	9002-008	Washer	10
14	402-36	Washer, Lock 5/16	10
15	MD-30461	Wheel	2
16	402-34	Washer, Lock 1/4	2
17	335-34-8	Screw, Skt. Hd. 1/4-20 x 1/2	1
18	CHTW-12721	Base, Chain idler	1
19	331-34-8	Screw, Hex Head 1/4-20 x 1/2	1
20	DY-325	Needle Bearing	1
21	CHT-175	Sprocket with Bearing	1
22	CHTW-12720	Shaft, Chain Idler	1
23	335-34-8	Screw, Skt. Hd. 1/4-20 x 1/2	4
24	402-34	Washer, Lock 1/4	4
25	320-86-4	Screw, Binding Hd. #6-32 x 1/44	
26	11-4734	Connector, Flange, 8 Pin	1
27	100-17-2	Bulk Head Fitting 3/8" Tube	1
28	MD-30563	Bracket, Airline Inlet, STD.	1
	MD-30563-1	Bracket, Airline Inlet, M/I.	1
29	335-36-10	Screw, Skt. Hd. 5/16-18 x 5/8	2
30	100-10-3	3/8" Air Tubing	A/R

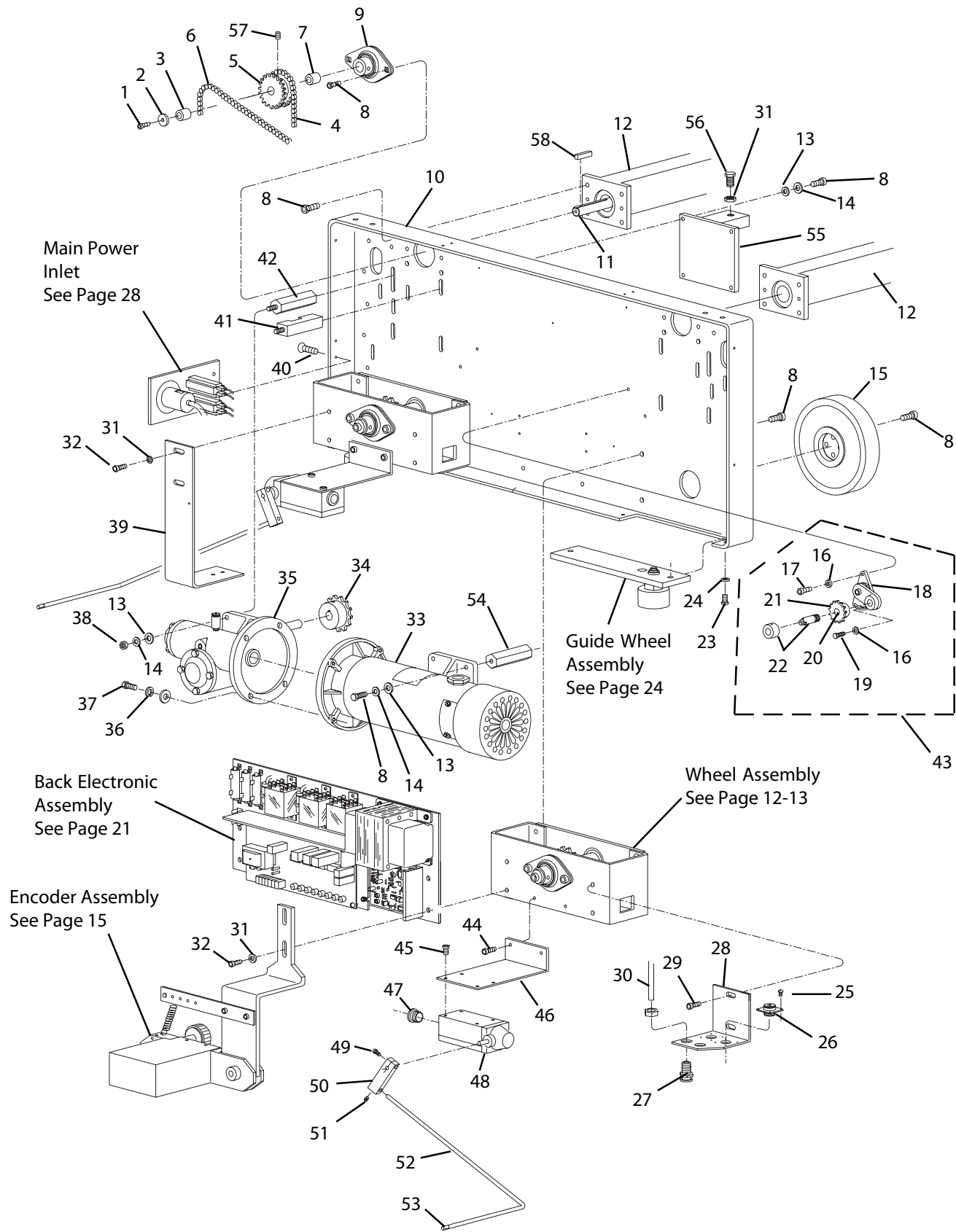
ITEM	PART NO.	DESCRIPTION	QTY.
31	402-36	Washer, Lock 5/16	2
32	335-36-10	Screw, Socket Head 5/16 x 5/86	
33	11-1224L	Motor, Drive 3/4 HP, 90 VDC	1
34	9009-0243	Sprocket, 14T 3/8P 5/8B	1
35	9061-003	Reducer, Drive Motor, M/I.	1
	9061-003-S	Reducer, Drive Motor, STD.	1
36	402-38	Washer, Lock 3/8	4
37	331-38-16	Screw, Hex Head 3/8-16 x 1"	5
38	203-36	Nut, 5/16-18	4
39	MD-30498	Top Bracket, Cable Carrier	1
40	332-34-6	Screw, Flat Head 1/4-20 x 3/8	2
41	MD-12770	Spacer, Reducer	1
42	MD-12777	Standoff, Reducer	3
43	MD-02482	Chain Tensioner Assembly	1
44	335-102-8	Screw, Socket Hd. #10-32 x 1/24	
45	335-99-6	Socket Hd. #10-24 x 3/8	4
46	MD-21623	Stop Wand Bracket	2
47	131-003	Strain Relief	2
48	11-3987	Limit Switch, SPDT	2
49	335-36-12	Screw, Skt. Hd. 5/16-18 x 3/4	2
50	MD-13073	Stop Wand Arm	2
51	342-93-8	Setscrew, #8-32 x 1/2	2
52	MD-13074	Stop Wand	2
53	9094-006	Vinyl End	2
54	MD-13279	Motor Standoff	2
55	MD-30583	Chain Tension Plate	1
56	331-36-24	Hex Bolt, 5/16-18 x 1 1/2	1
57	344-34-8	Screw, Skt. Set 1/4-20x1/2"	1
58	603-6-6-12	Key, Sq. 3/16 x 3/16 x 3/4	1

MS - Machine Size

A/R - As Required

Item numbers are for reference only.
Please Specify PART NUMBER when
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Please Specify machine voltage and
complete serial number when ordering
replacement parts.



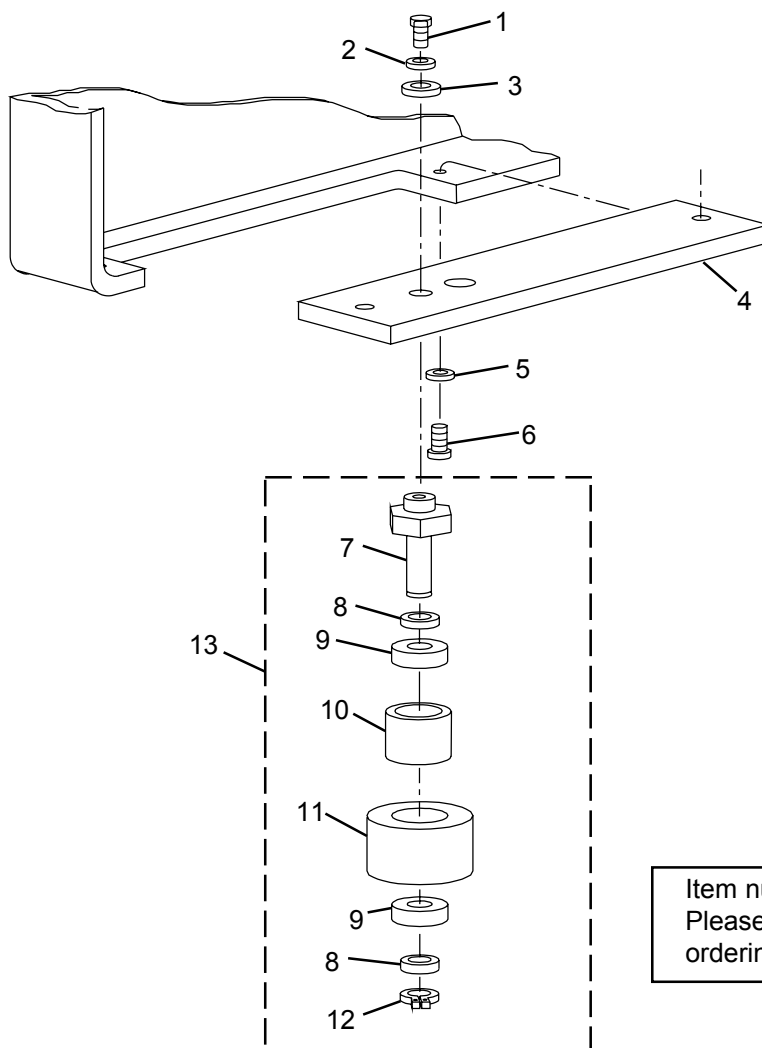
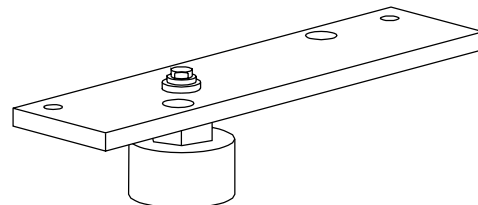
Guide Wheel Assembly

MD-02502-1

MD-02502-2 Optional 6" Extension

GuideWheel Assemblies are required on all machines to provide safe operation of the Pull-Off Device.

ITEM	PART NO.	DESCRIPTION	QTY.
1	331-36-10	Screw, Hex Head 5/16-18 x 5/8	1
2	402-36	Washer, Lock 5/16	1
3	9002-008	Washer, Flat .328 x 1 x .0897	1
4	MD-21450	Plate, Guide Wheel Support	1
5	402-34	Washer, Flat 1/4	2
6	335-34-8	Screw, Socket Head 1/4-20 x 1/2	2
7	CHTW-21448	Shaft, Eccentric Guide Wheel	1
8	9002-026	Washer .73 x .511 x .059	1
9	E-10-A	Bearing, Ball .5 x .125 x .312	2
10	TPL-12120	Spacer	1
11	TPL-12102	Wheel, Guide	1
12	654-32	Ring, Retaining, External .47 x .05	1
13	CHTW-02492	Guide Wheel Assembly	1



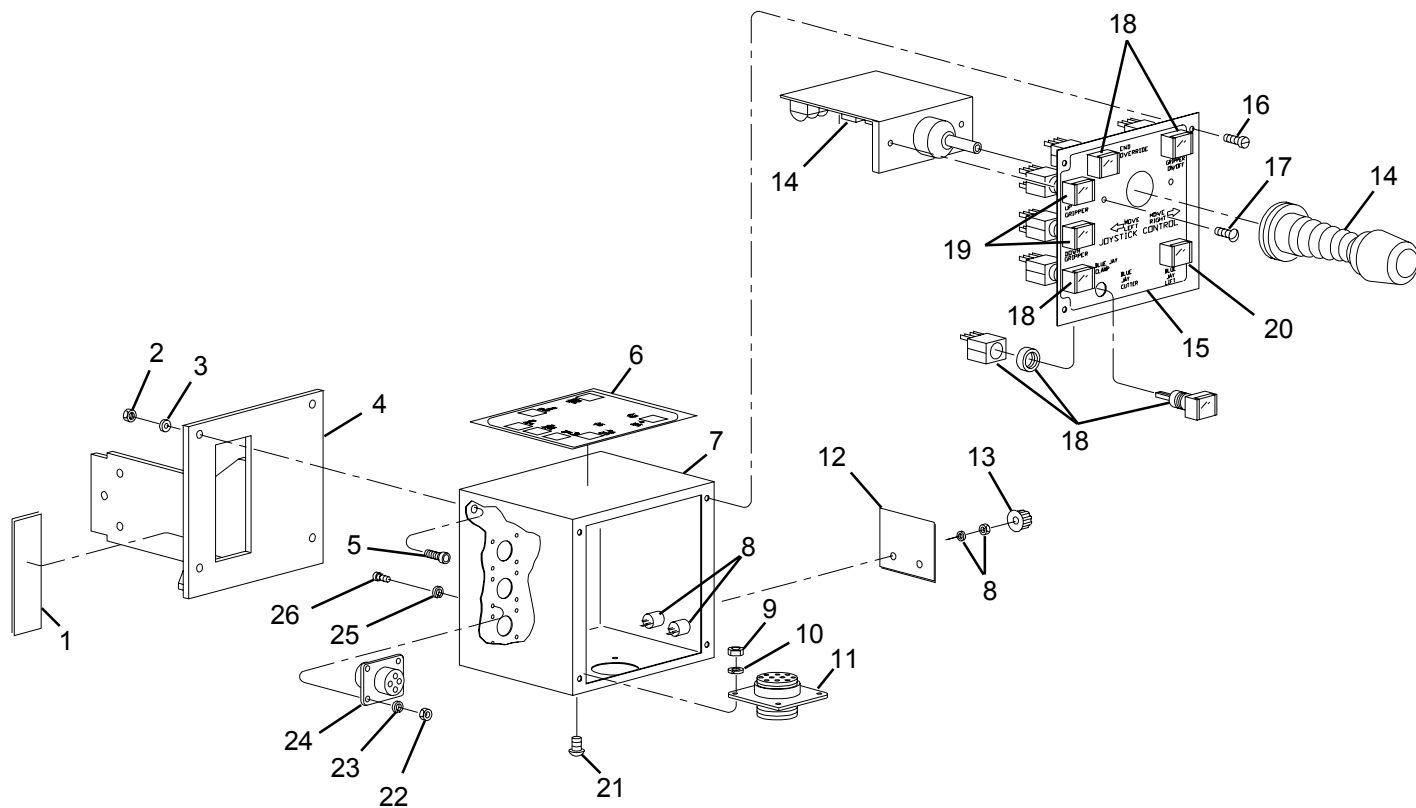
Item numbers are for reference only.
Please Specify PART NUMBER when
ordering replacement parts.

11-2830-2

Optional Spreading Programs
available, contact your Eastman
Sales Representative.

ITEM	PART NO.	DESCRIPTION	QTY.
1	9124-096	Decal, Electrical Outlets	1
2	211-34	Nut, Elastic 1/4-20	4
3	410-34	Washer, Flat 1/4	4
4	MD-40233	Bracket, Control Box	1
5	335-34-8	Screw, Skt. Hd. Cap 1/4-20 x 1/2	4
6	9124-103	Decal, Control Box Top	1
7	P-40347	Box, Joystick Control	1
8	11-1829	Potentiometer, 5K	2
9	202-86	Nut, Hex #6-32	4
10	402-060	Washer, Lock #6	4
11	11-4730	Plug, 37 Pin Connector	1
12	9124-093	Decal, Potentiometer	1
13	11-1012-3	Knob	2
14	11-169	Joystick Assembly	1
15	9124-122	Decal, Joystick	1
16	320-99-6	Screw, Binding Head #10-24 x 3/8	4
17	320-99-8	Screw, Binding Head #10-24 x 1/2	2

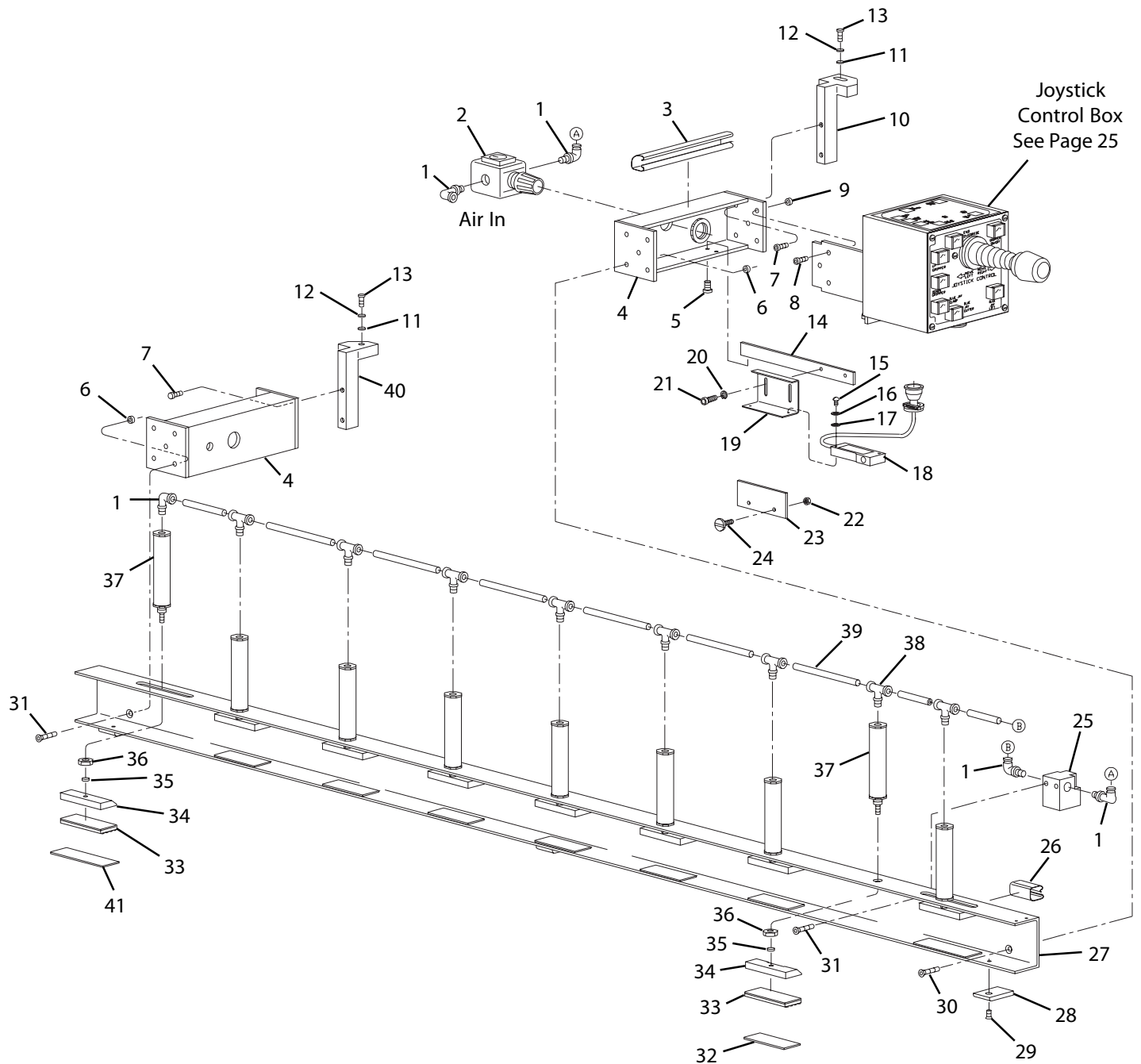
ITEM	PART NO.	DESCRIPTION	QTY.
18	11-4190	Switch Actuator, Momentary	4
	11-4192	Switch Contact Block, SPDT	4
	11-4194	Lense Cap, White	4
19	11-4190	Switch Actuator, Momentary	2
	11-4193	Switch Contact Block, DPDT	2
	11-4195	Lense Cap, Green	2
20	11-4191	Switch Actuator, Maintain	2
	11-4192	Switch Contact Block, SPDT	2
	11-4194	Lense Cap, White	2
21	313-86-6	Screw, Rd Head #6-32 x 5/8	4
22	202-81	Nut, Hex #4-40	12
23	402-040	Washer, Lock #4	12
24	11-4737	Plug, 4 Pin	3
25	410-040	Washer, Flat #4	12
26	313-81-6	Screw, Rd. Head, #4-40 x 3/8	12



Eastmanmachine COMPANY

Pull-off Attachment

P-04481-MS



ITEM	PART NO.	DESCRIPTION	QTY.
1	100-13-7	Elbow, Swivel, Male	5
2	100-18-17	Regulator, with Gage	1
3	11-1962	Duct, Shield 6"	1
4	P-30444	Bracket, Extention	2
5	335-102-6	Screw, Skt. Hd. #10-32 x 3/8	2
6	216-34	Nut, Flange Lock Hex 1/4-20	4
7	335-34-12	Screw, Skt. Hd. 1/4-20 x 3/4	4
8	335-34-12	Screw, Skt. Hd. 1/4-20 x 3/4	3
9	216-34	Nut, Flange Lock Hex 1/4-20	3
10	P-30442	Connection, Pull-off to Mach.	1
11	410-36	Washer, Flat 5/16	2
12	402-36	Washer, Lock 5/16	2
13	CHT-221	Screw	2
14	P-12904	Bracket, Sensor Mount	1
	P-12904-1	Bracket, Sensor Mount, M/I	1
15	313-81-12	Screw, Rd. Head #4-40 x 3/4	2
16	402-040	Washer, Lock #4	2
17	410-040	Washer, Flat #4	2
18	11-167-6	Sensor, Elevator	1
19	P-21492	Bracket, Sensor Adjusting	1
20	410-010	Washer, Flat #10	2
21	335-102-6	Screw, Skt. Hd. #10-32 x 3/8	2
22	211-34	Nut, Elastic 1/4-20	2

ITEM	PART NO.	DESCRIPTION	QTY.
23	P-12905	Reflector, Sensor	1
24	BC-12699	Stud Plate	2
25	100-18-18	Clamp Valve 24 DC 1/8 NPT	1
26	11-1962-1	Duct, Shield 1 1/8"	1
27	P-40231-MS	Channel, Air Cylinder Support	1
28	CHT-1140	Bumper, Catcher, Nylon	3
29	332-99-8	Screw, Flat Hd. #10-24 x 1/2	3
30	332-34-12	Screw, Flat Hd. 1/4-20 x 3/4	4
31	332-93-8	Screw, Flat Head #8-32 x 1/2	2
32	P-12925	Notch Pad, Short	A/R
33	9068-004	Tape, Pad Grip	A/R
34	P-12783	Pad, Gripper	A/R
35	203-35	Nut, Fin. Hex 1/4-28	A/R
36	206-44	Nut, Jam Hex 1/2-20	A/R
37	100-20-2	Cylinder, 3/4 x 2	A/R
38	100-14-4	Swivel, Tee, Male 1/8 x 1/4	A/R
39	100-10-6	Tubing, Polyurethane 1/4	A/R
40	P-30441	Connection, Pull-off to Mach.	1
41	P-12925-1	Notch Pad, Long	2

MS- Machine Size

A/R- As Required

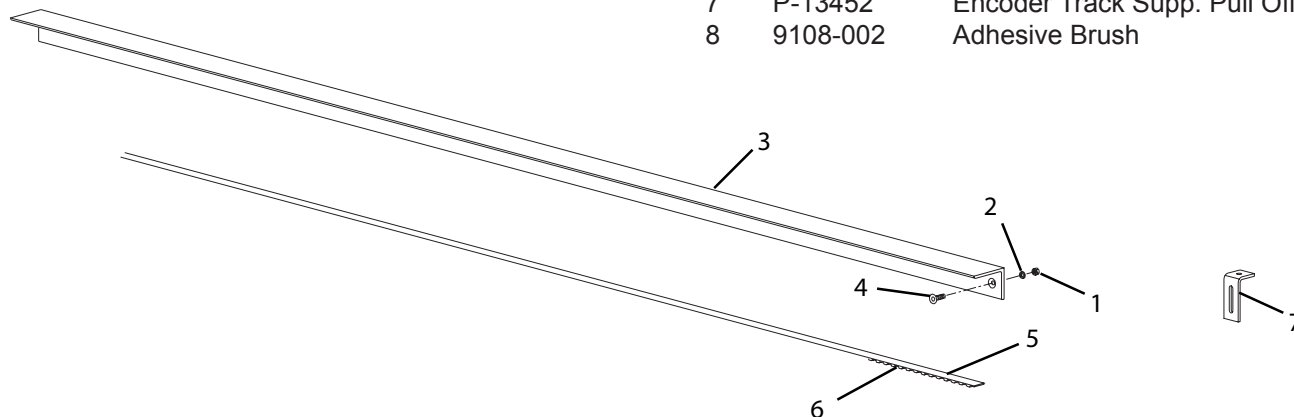
M/I- Mirror Image Machine

Encoder Track Kit

9120-701-1 (32ft.)

9120-701-2 (50ft.) Optional

ITEM	PART NO.	DESCRIPTION	QTY.
1	203-99	Nut, Hex #10	15
2	410-010	Washer, Flat #10	15
3	SY-11707	4 ft. Encoder Track	1
	SY-11706	8 ft. Encoder Track	4
4	332-99-10	Screw, Flat Hd. #10-24 x 5/8	15
5	9093-002	Adhesive, 5 oz.	1
6	9013-006	Encoder Belt	A/R
7	P-13452	Encoder Track Supp. Pull Off	1
8	9108-002	Adhesive Brush	1



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Cable Carrier Kit

9120-785-110 (110 volt) 32 ft.

9120-785-220 (220 volt) 32 ft.

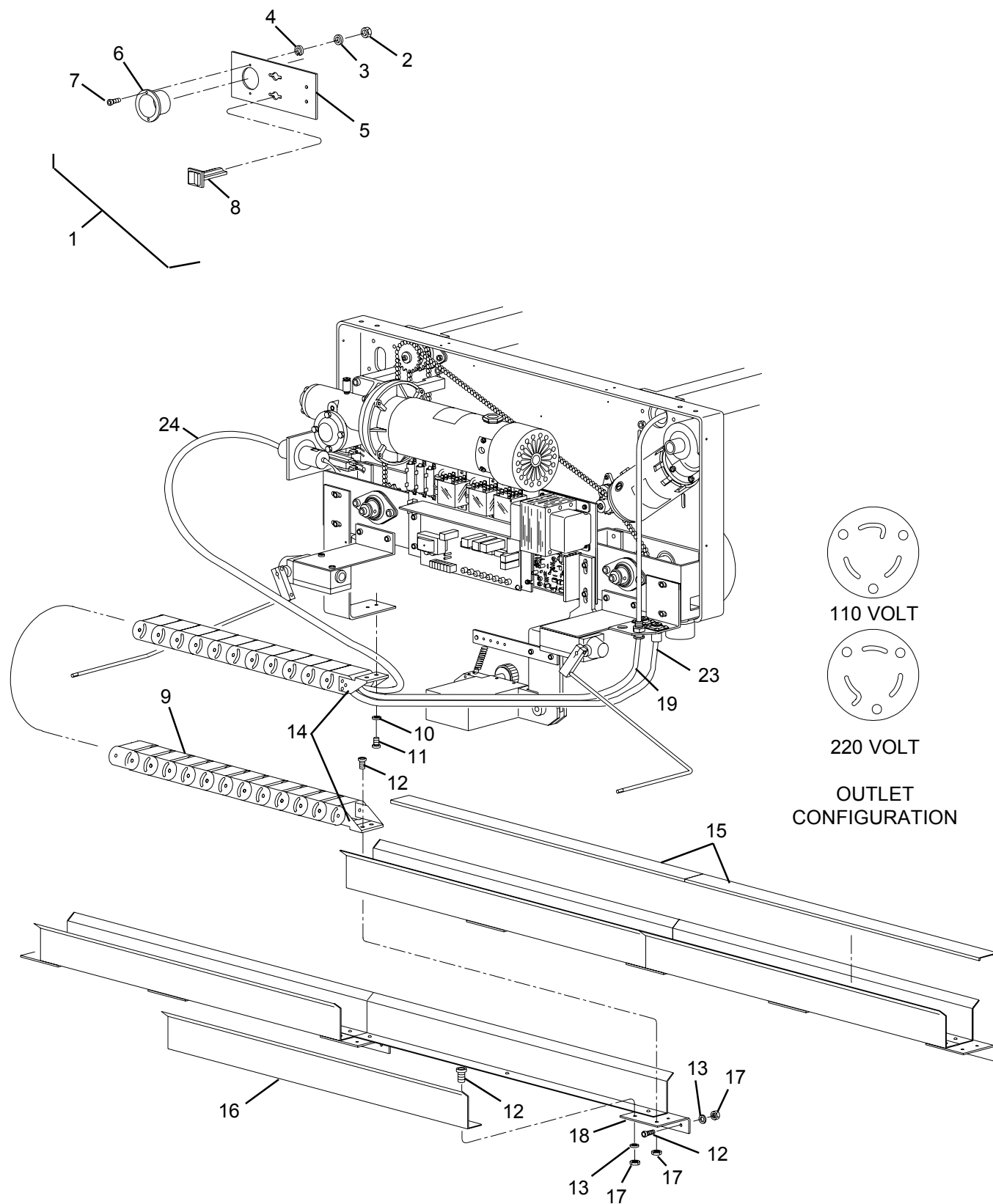
9120-798-110 (110 volt) 50 ft.

9120-798-220 (220 volt) 50 ft.

ITEM	PART NO.	DESCRIPTION	QTY.
1	11-2833-110	Main Power Inlet, 110 V, Pull-off	1
	11-2833-220	Main Power Inlet 220 V, Pull-off	1
2	203-86	Nut, Finished Hex #6-32	2
3	402-060	Washer, Lock #6	2
4	410-060	Washer, Flat #6	2
5	AD-21297	Panel, Main Power, Back Frame	1
6	11-4748	Inlet, Twist Lock, 15 amp 125 Volt	1
	11-1786	Inlet, Twist Lock, 15 amp 250 Volt	1
7	313-86-6	Screw, Rd Hd #6-32 x 3/8	2
8	11-1333-8	Circuit Breaker 8 Amp (110 Volt)	2
	11-1333-15	Circuit Breaker 15 Amp (220 Volt)	2
9	MD-12946	Cable Carrier	20
10	402-34	Washer, Lock 1/4	2
11	333-34-8	Screw, Button Hd. 1/4-20 x 1/2	2
12	333-102-10	Screw, Socket Hd #10-32 x 5/8	44
13	410-010	Washer, Flat #10	44
14	MD-12947	Connectors, Cable Carrier, 1 Set	1
15	9095-002	Cover, Gray	2
16	MD-21529	Support Trough	8
17	216-102	Nut, Flange #10-32	44
18	MD-21528	Bracket, Tought Mount	9
19	100-10-3	3/8" Air Line	42
20	100-11-3	Male Connector	1
21	100-13-6	Swivel Elbow	1
22	100-19-13	Coupling	1
23	11-2849	Control Harness	1
24	821	Power Cable, 110 Volt	1
	821	Power Cable, 220 Volt	1

Item numbers are for reference only.
Please Specify PART NUMBER when
ordering replacement parts.

Please Specify machine voltage and
complete serial number when ordering
replacement parts.



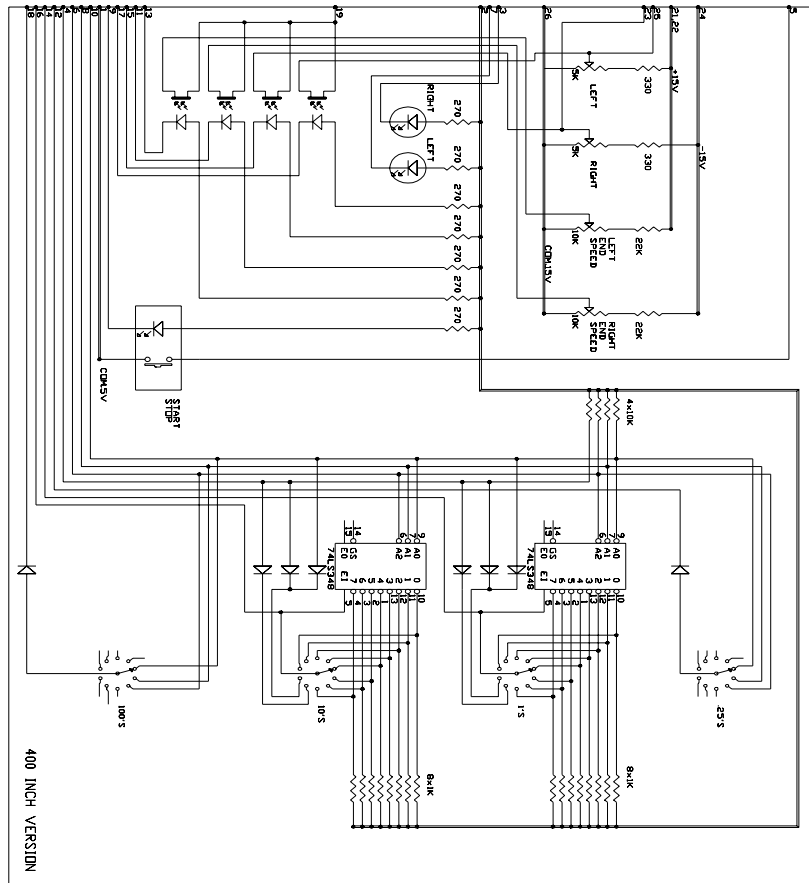
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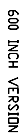
COMPLETE SCHEMATIC 11-2894

Wiring & Schematic Diagram
Blue Print No. (11-2885-1)

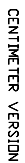
CPU BOARD DIAGRAM
SEE 11-2896



Wiring & Schematic Diagram
Blue Print No. (11-2895 Shee 1)



Wiring & Schematic Diagram
Blue Print No. (11-2895 Sheet 2)



Wiring & Schematic Diagram
Blue Print No. (11-2895 Sheet 3)



MACHINE WIRING



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TECHNICAL DATA EASTMAN® Micro Pull-Off Device

Micro Pull-Off

Maximum Machine Speed* 85 yards/min. (78 m/min.)
 Maximum Length of Pull 32 ft. (975 cm)
 End Accuracy* +/- 1/4" (+/- 6 mm)
 Machine Weight Approx. 325 lbs. (145 kg)

Blue Jay End Cutter & Micro Pull-Off

Operating Voltage 110V/220V; 50/60 cycles
 110V/220V; 50/60 HZ
 Power Requirement 110V/15A
 220V/8A
 Minimum Operating Pressure 50 PSI
 Volume of Air Service 15 SCFM

* Relative to the type and quality of fabric, spreading speed, spreading mode, track guidance, roll weight, etc.

Working Width	Table Width	Overall Machine Width
60" (1530 mm)	66" (1680 mm)	85" (2159 mm)
66" (1680 mm)	72" (1830 mm)	91" (2311 mm)
72" (1830 mm)	78" (1980 mm)	97" (2463 mm)
78" (1980 mm)	84" (2130 mm)	103" (2616 mm)

* For all other sizes consult factory

Limited Warranty. Eastman warrants to the buyer that the *MICRO PULL-OFF* shall be free from defects in materials or workmanship for a period of 90 days commencing on the date of invoice. Any goods or parts claimed by the buyer to be defective must be returned to Eastman, freight charges prepaid, within the 90-day warranty period. If Eastman determines that the goods or parts are defective in materials or workmanship, Eastman's sole obligation under this warranty shall be, at Eastman's sole option, to repair or replace the defective goods or parts or to provide the buyer a credit equal to the portion of the purchase price allocable to the defective goods or parts. This warranty shall not apply if defects are caused by product misuse or neglect, if the machine has been altered or modified by the buyer, or if other than genuine Eastman parts are used in the machine. THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THIS PURCHASE. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Limitation of Liability. Eastman's liability to the buyer, and the buyer's remedies from Eastman, whether in contract, negligence, tort, under any warranty or otherwise, shall be limited to the remedies provided in the foregoing Limited Warranty. In no event shall Eastman have any responsibility or liability to the buyer for (a) any special, indirect, incidental, or consequential damages, including, but not limited to, loss of use, revenue, or profit, even if Eastman has been advised of the possibility of such damages, or (b) any claim against the buyer by any third party. The price stated for the product sold is a consideration for limiting Eastman's liability.

**Eastman Machine
COMPANY**

779 Washington St., Buffalo, N.Y. 14203-1396 U.S.A. • (716)856-2200 • Fax (716)856-1140 or (716)856-2068

Manufacturers of Eastman Cloth Cutting and Cloth Spreading Machines

Website: WWW.EastmanCuts.com