THE IM-1BARCODE / B MECHANISM
SET UP AND OPERATION MANUAL

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<u>SAFETY CONSIDERATIONS</u>

Unplug the mechanism when servicing – failure to do this could cause serious injury.

<u>UNPACKING</u>

When the mechanism is received, it should be carefully unpacked and checked closely for any possible damage. If a freight company is involved and there is damage, please notify them immediately. They will need to thoroughly inspect the damage and fill out a report. Please **<u>do not</u>** touch the mechanism until this has been done.
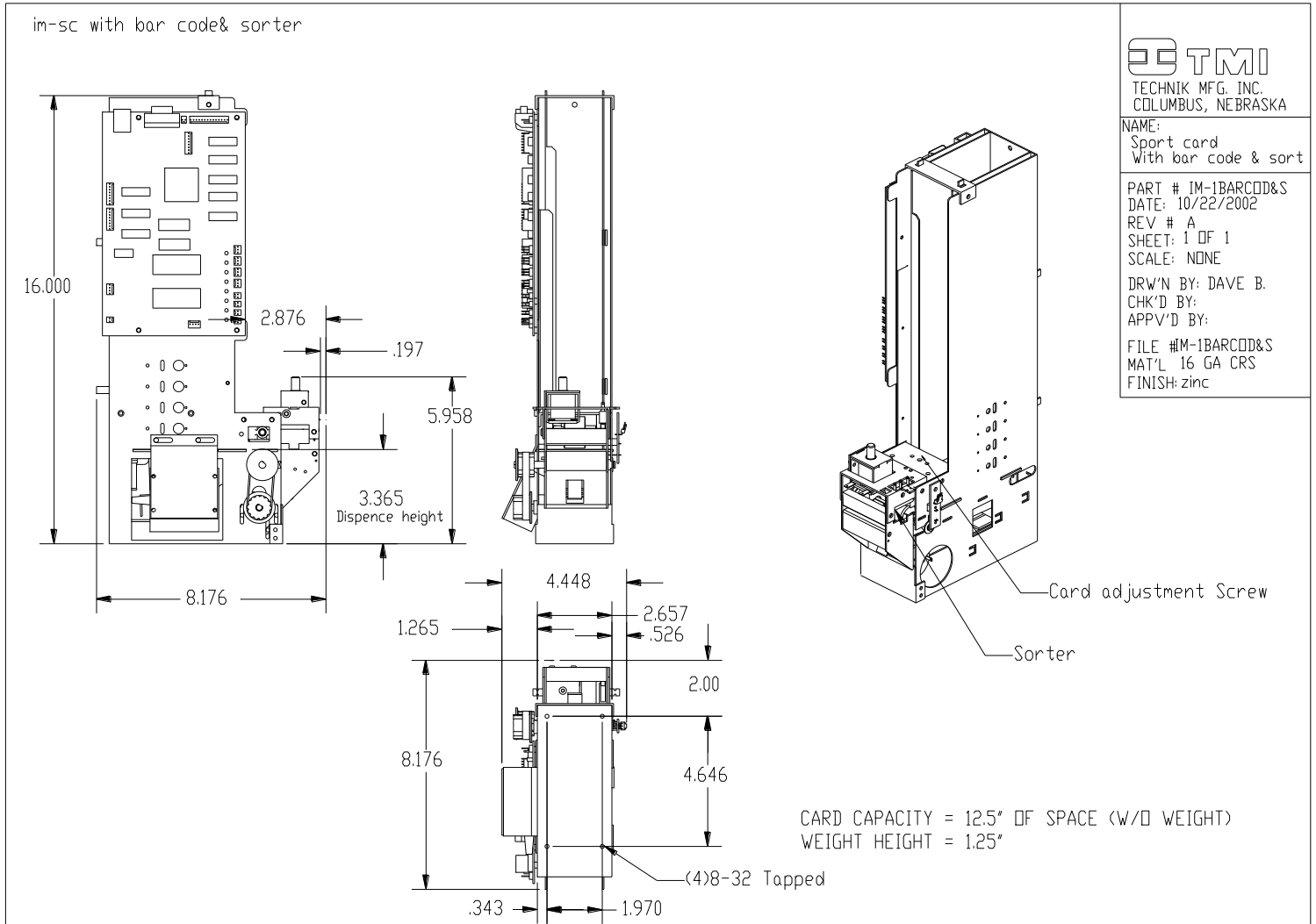
Please remove and save packing materials for later use.

<u>STANDARD MACHINE PACKING LIST</u>

<u>QUANTITY</u>	<u>DESCRIPTION</u>
1	IM-1BARCODE/B mechanism
1	Hex driver (care package)
1	Card Weight
1	Card hook
1	Warranty certificate
1	Operation Manual

MECHANISM MOUNTING

The recommend method of mounting the IM-1BARCODE/B mechanism is to use one rail on each side of the mechanism. The mechanism will easily slide into the rail slot and be mounted by four 8-32 screws on the front face of the mechanism. This system makes for easy installation and servicing if necessary. Other mounting options are available upon request.

im-sc with bar code& sorter

TMI
TECHNIK MFG. INC.
COLUMBUS, NEBRASKA
NAME:
 Sport card
 With bar code & sort
PART # IM-1BARCOD&S
DATE: 10/22/2002
REV # A
SHEET: 1 OF 1
SCALE: NONE
DRW'N BY: DAVE B.
CHK'D BY:
APPV'D BY:
FILE #IM-1BARCOD&S
MAT'L 16 GA CRS
FINISH: zinc

16.000
2.876
.197
5.958
3.365
Dispence height
8.176

4.448
2.657
.526
1.265
2.00
8.176
4.646
.343
1.970
(4)8-32 Tapped

Card adjustment Screw
Sorter

CARD CAPACITY = 12.5" OF SPACE (W/O WEIGHT)
WEIGHT HEIGHT = 1.25"
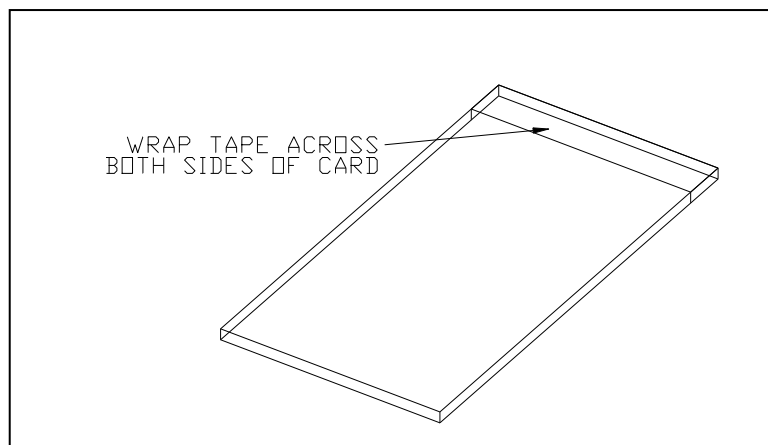
LOADING / UNLOADING CARDS

You are now ready to start loading your cards. The cards must be loaded such that the barcode is facing down and positioned to the left (when facing the mechanism). The card orientation is critical for operation of this mechanism. Once the cards are in place, place a weight on top of the stack. The weight should be in so that the word "FRONT" is facing you, right side up.

For unloading cards, a card hook is provided that allows for easy removal of the bottom-most cards.

CARD THICKNESS ADJUSTMENT PROCEDURE

20 TO 30 MIL CARD ADJUSTMENT

1. Using the hex driver (supplied in the care package), turn the adjustment screw on the dispensing mechanism counter-clockwise until a card will not pass the adjustment mechanism.

2. Place a "test card", tape first, in the bottom of the column you wish to adjust. To make a "test card" place (2) pieces of clear tape or (1) piece of electrical tape as shown below.

WRAP TAPE ACROSS
BOTH SIDES OF CARD

TEST CARD

3. Place the card weight on top of the card.

BEFORE GOING ANY FURTHER, READ THE INSTRUCTIONS BELOW!!!

4. Place the hex head wrench into the adjustment screw.
5. Try to dispense a card and turn the adjustment screw clockwise until a card is dispensed. It may take a few tries before a card is dispensed.
6. Once a card is dispensed, the column is properly adjusted.

10 MIL CARD ADJUSTMENT

1. Follow the procedure described above (20 to 30 MIL CARD ADJUSTMENT) except use a standard 10 mil card (without the tape) for testing.

MECHANISM COMMUNICATION SPECIFICATIONS

The IM-1BARCODE/B mechanism includes the following features as standard:

1. fully functional control board
2. barcode reader
3. card dispenser
4. necessary harnesses

The controller contains firmware to allow a host computer to control the card dispenser by issuing commands through a standard RS-232C serial interface. The communications format for the serial interface is 9600 Baud, 8 bits, no parity, one stop bit. Each message is terminated with a CRC of the message followed by the new-line character. Communication from the controller to the host will be in the form of a fixed format status message. The status message will be sent immediately upon receipt of a command from the host, or whenever a state change occurs on the controller (command completion, reset, and unexpected condition). Call the service number on the front of this manual for any questions.

REGULAR MAINTENANCE

Mechanism Lubrication should not be necessary. Improper lubrication can result in machine malfunction.

IM-1BARCODE/B CONTROL BOARD

IM-1BARCODE/B CONTROL WIRING DIAGRAM

REVISION HISTORY:
(B) CHANGED CONNECTOR STYLE AT POWER CONNECTION (KEC 9-10-05)

HARD RESET SWITCH
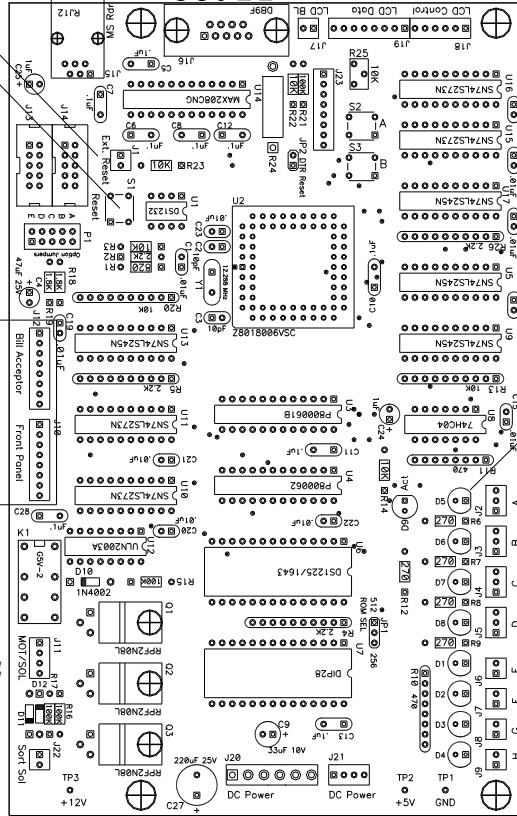HARD RESET BUTTON

TO CARD READ DEVICE

COMMUNICATION CONNECTION 9-PIN (DB9) BOARD HAS MALE CONNECT

Bill Acceptor (J12):
BA PULSE
GROUND
COIN PULSE
GROUND
BA ENABLE
+5 VDC
BA ERROR
+12 VDC

Front Panel (J10):
GROUND
SWITCH 0
SWITCH 1
LAMP 0
LAMP 1
OPEN
OPEN
+12 VDC

Bill Acceptor:
BA PULSE
GROUND
COIN PULSE
GROUND
BA ENABLE
+5 VDC
BA ERROR
+12 VDC

Front Panel:
GROUND
SWITCH 0
SWITCH 1
LAMP 0
LAMP 1
OPEN
OPEN
+12 VDC

TO MOTOR — BLACK / RED
TO CARD VEND SOLENOID — YELLOW / YELLOW

TO SORT SOLENOID — BLUE / BLUE

LED DESCRIPTION:
D1 - CARDS SOLD OUT SWITCH
D2 - CARD GATE SWITCH
D3 - OPEN
D4 - OPEN
D5 - CARD DISPENSE SENSOR
D6 - CARD READ SENSOR
D7 - CARD STAGED SENSOR
D8 - CARD LEVEL SENSOR (IF USED)
D9 - ERROR CODE LED

CARD DISPENSE SENSOR (FS1) — BROWN / GREEN / BLUE

CARDS SOLD OUT SWITCH (SOS) — ORANGE / ORANGE

CARD GATE SWITCH (VGS) — GREEN / GREEN

OPEN / OPEN
OPEN / OPEN

TYPE #5

TO POWER SUPPLY — OPEN / BLACK / BLACK / RED / GRN / YELLOW

Title Block

NAME: IM−1XXXB CONTROL BOARD WIRING DIA.
PART # 110−022
DATE: 10/22/2002
REV # A
SHEET: 1 OF
SCALE: NONE
DRW'N BY: KEC
CHK'D BY:
APPV'D BY:
FILE #
MAT'L
FINISH:

TMI
TECHNIK MFG. INC.
COLUMBUS, NEBRASKA

STANDARD CONNECTOR DESCRIPTION

ID #	MFG	PN	DESCRIPTION
1	MOLEX	22-01-3027	2-CIR .100"
2	MOLEX	22-01-3037	3-CIR .100"
3	MOLEX	22-01-3047	4-CIR .100"
4	MOLEX	22-01-3067	6-CIR .100"
5	MOLEX	09-50-3061	6-CIR .156"
6	MOLEX	08-50-0113	.100" TERMINAL
7	MOLEX	08-52-0072-C	.156" TERMINAL

TECHNIK MFG., INC.
1005 17TH STREET
COLUMBUS, NE 68601
1-800-795-8251

SERVICE LOG SHEET

MECH SERIAL NUMBER _____DATE INSTALLED _____
MACH MODEL TYPE _____INSTALLED BY _____
BUSINESS LOCATION TYPE _____
BUSINESS ADDRESS _____
CITY/STATE/ZIP _____

DATE	**SERVICE PERFORMED**	**SERVICED BY**

MECHANISM LOG SHEET

DATE	MACHINE ROW	CARD VALUE	TOTAL CARDS	TOTAL CASH
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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_____	_____	_____	_____	_____
_____	_____	_____	_____	_____