

## *Installation and Operator Manual*





## 522A Series

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ComCo Systems, INC. A division of Communications Conveyor Company

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## System Features

The Model 522A is an overhead pressure/vacuum system that utilizes 4.5" tubes and carriers. The carrier travels from the teller unit to the customer unit under vacuum and returns under pressure. The blower unit is located near the customer unit.

- The Model 522A is configured with four major subsystems:

1. **Single-Sided Chute Teller Unit P/N: 200656**
2. **Blower Unit: P/N: 200217-2**
3. **Customer Unit (CU) P/N: 201283-1**
4. **System Controller P/N: 200703**



**Single-Sided Teller  
Chute (STC4500)  
STC-4500-200656**

Doorless operating unit  
which is suspended from the  
ceiling, typically over the  
counter top.



**522 System Controller  
SC-521-200703**  
System Controller



**1 Single Pack  
(Blower)**

**BM-200-200217-2**

Features (Ea. Single Pack):

- 1 High Voltage Control Box
- 1 Blower for pressure
- 1 Blower for vacuum



**Customer Unit (CU)  
CU-522A-201283-1**

Fully automatic door  
operation with tip tube, and  
optional 2 way video unit.

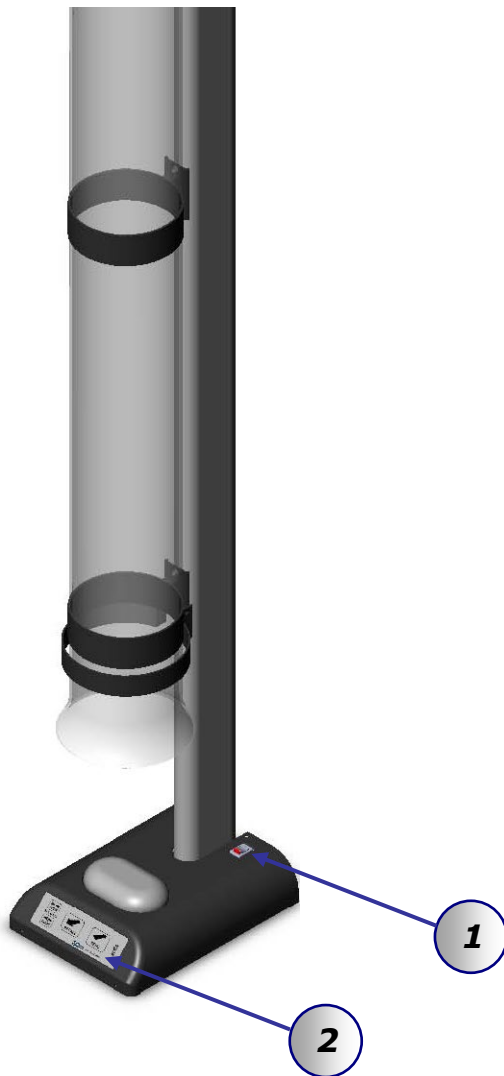
# ***Single-Sided Teller Chute***

**Model: *STC-4500-200656***



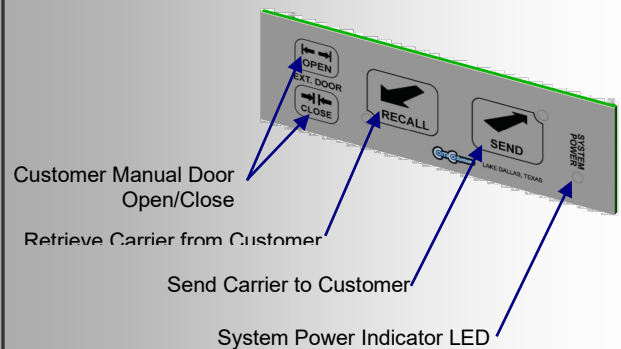
## Single-Sided Teller Chute (STC4500) (P/N: 200656)

The single-sided teller chute utilizes an open door design. Insert the carrier in the open tube and press Send. Carrier dispatches to the customer unit.



### 1. System Power On/Off Switch

### 2. Control Panel



### Single-Sided Teller Chute (P/N: 200656)

#### Switch Operating Instructions



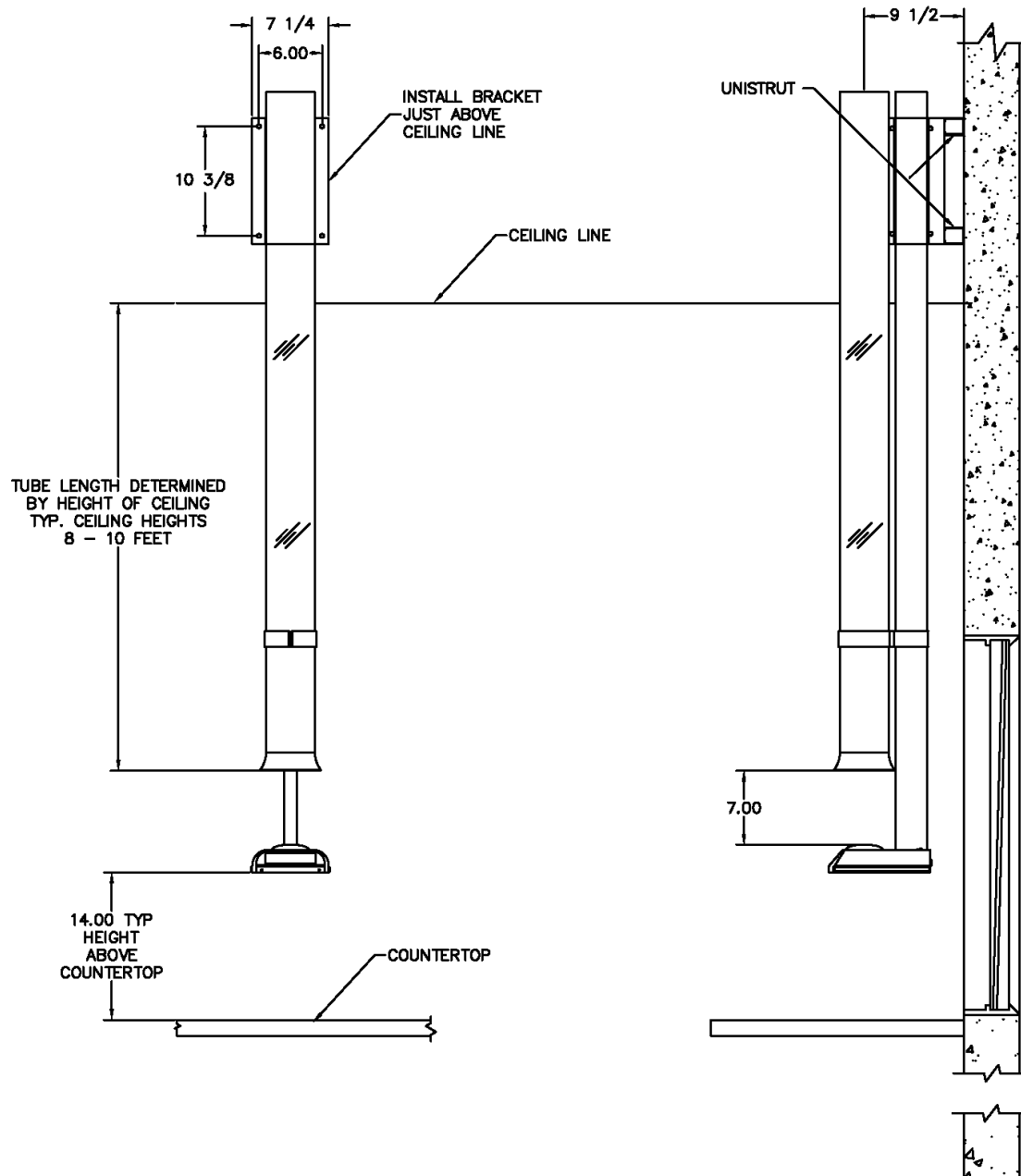
Fig. 1.0

- ON/OFF** Power cycles the complete system (Inside Unit, Outside Unit & Blowers). Power ON the system power light will be present and opens the customer unit door. Power OFF complete system power down and closes the customer unit door.
- DOOR OPEN** Opens the customer unit door.
- DOOR CLOSE** Closes the customer unit door.
- SEND** Sends a carrier to the customer unit.
- RECALL** Recalls a carrier from the customer unit; – (the customer unit door will close when in the Send & Recall mode).

## Single-Sided Teller Chute (P/N: 200656)

### Dimensional & Electrical Specifications

Item	Measurements	Value
Unit (TU-101-200656)	Nominal Voltage Current (max)	24 VDC 1 amps



Installation of this unit must be done with only the assemblies supplied in STC2000 field service installation kit (P/N: 200745). See Appendix **B**.





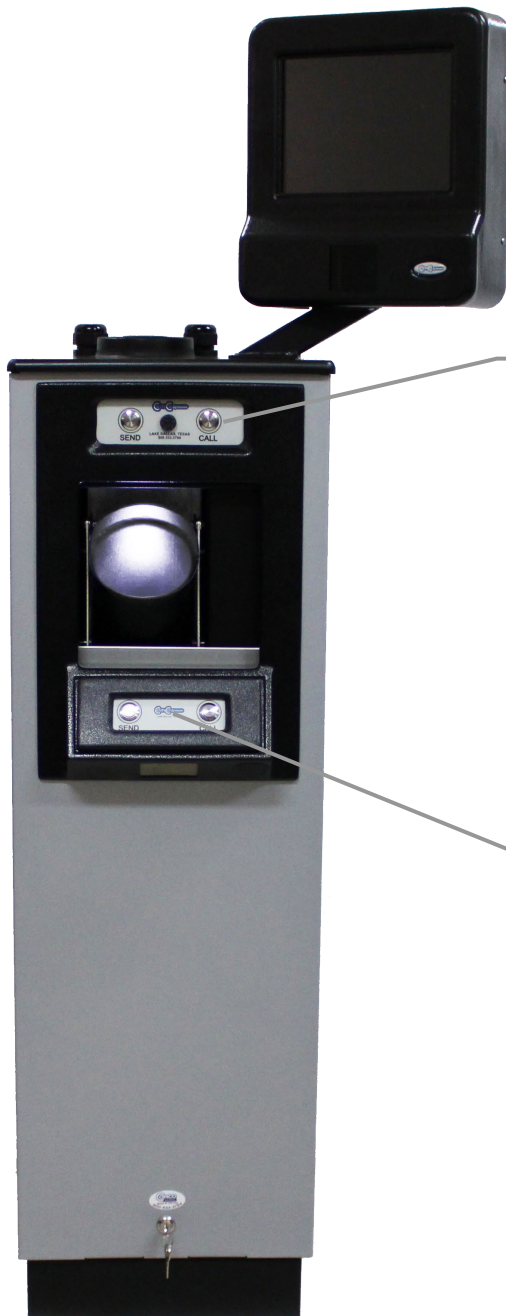
# ***Customer Unit***

Model: ***CU-522A-201283-1***

Customer Unit (P/N: 201283-1)  
Machine & Switch Operating Instructions

**SEND** Sends carrier to Teller Unit.  
(NOTE: DO NOT INSERT LOOSE ITEMS DIRECTLY INTO UNIT)

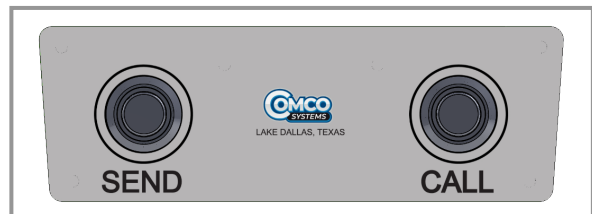
**CALL** Generates an audible tune at the Teller Center when depressed.



Upper Switch Panel (P/N: 201350)



Lower Switch Panel (P/N: 201328)



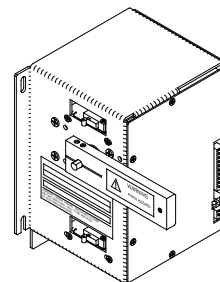
### Customer Unit (P/N: 201283-1) *Dimensional & Electrical Specifications*

Item	Measurements	Value
Customer Video Module (CV-200-200903-10)	Nominal Voltage Current (max)	12 VDC 3.5 amps
Door Motor Module (DM-100-200367)	Nominal Voltage Current (max)	120 VAC, 60Hz 1 amps



## Customer Unit Door Motor Module (P/N: 200367) Line Voltage Installation

Installation of this unit must be done with only the assemblies supplied in 522A series field service wiring kit (P/N: 200438). See Appendix B.



### **WARNING: SHOCK HAZARD**

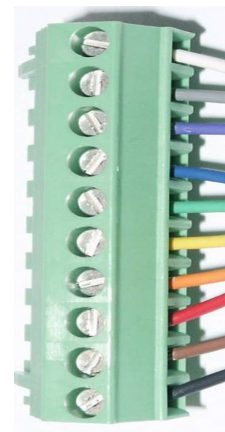
Disconnect AC Power before Servicing Unit!

\*AC Service Disconnect for Unit is located at the readily accessible branch circuit protection\* All Line Power must be in compliance with the NEC 2005  
Only by Authorized/Qualified Personnel.



### **Class 2 Field Wire**

White  
Grey  
Purple  
Blue  
Green  
Yellow  
Orange  
Red  
Brown  
Black



Wire Colors

### **SHOCK HAZARD**

Disconnect AC Power before Servicing Unit  
\*AC Service Disconnect for Unit is located at the readily accessible branch circuit protection \*

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Disconnect AC Power before Servicing Unit  
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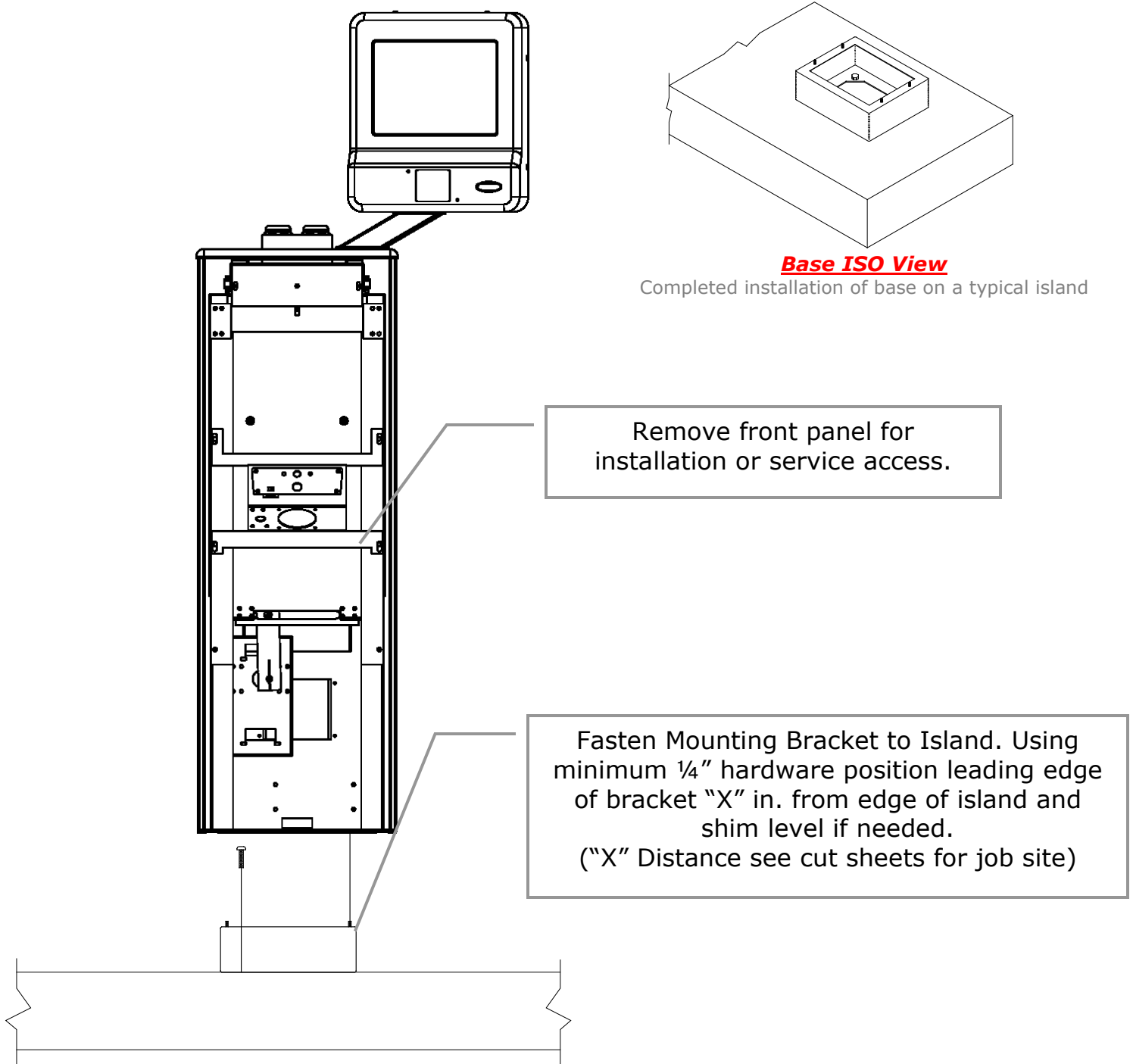
### **Plug Rating 15A 250V Field Wiring**



L - Black  
GND - Green  
N - White

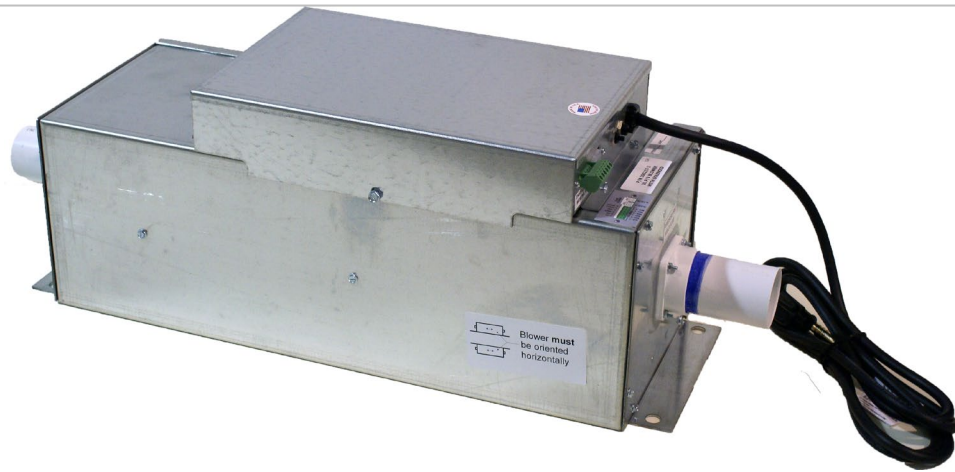
**Serviceable FUSE Location  
Rating: 1A 250VAC Fuse  
UL Listed Only**

### Customer Unit (P/N: 201283-1) Mounting & Access



# ***Single Pack Blower***

Model: ***BM-200-200217-2 Blower***





### Single Pack Blower Module (P/N: 200217-2)

#### Line Voltage Installation

For Installation of this unit refer to construction site plans or cut sheet for locating the unit. If the blower is installed in a closed canopy, the exhaust port must be vented to outside air to prevent overheating. Refer to field service wiring kit (P/N: 200438) for all control and 115 VAC plugs.

#### **WARNING: SHOCK HAZARD**

Disconnect AC Power before Servicing Unit Only to be serviced by Qualified Personnel

**\*AC Service Disconnect for Unit is located at the Main Junction Breaker Box\***

#### **NOTE:**

*There must be a 115VAC @ 20A dedicated circuit within 3.0 ft of the unit. All Line Power must be done in compliance with the NEC (National Electrical Code) by authorized/qualified personnel.*

**2-115 VAC 10A  
Resettable Fuse**

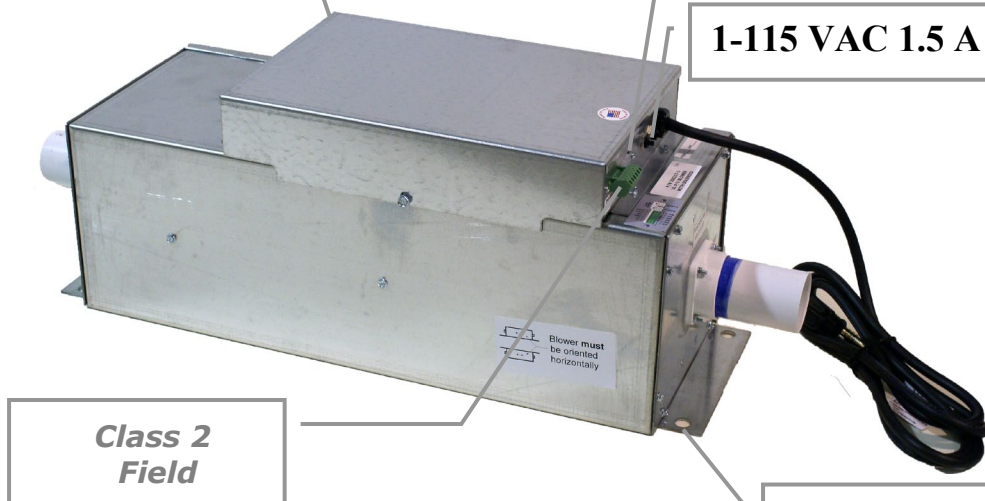
#### **SHOCK HAZARD**

Disconnect AC Power before Servicing Unit

**\*AC Service Disconnect for Unit is  
Located at the Main Junction Breaker Box\***

**1-115 VAC 0.5 A Resettable Fuse**

**1-115 VAC 1.5 A Resettable Fuse**



**Class 2  
Field**

**Use 1/4" minimum hardware to  
mount unit in place. For  
mounting location see cut  
sheets for job site.**

# **522 System Controller**

**Model: SC-521-200703**





### 4 1/2" Carrier (P/N: 602033)

Carriers must be closed fully before they are inserted into either the teller unit or the customer unit. Carriers that are not fully closed may fail to leave the sending unit, may become lodged within the transmission tubing, or possibly lose their contents during transmission.

If coins are to be sent, it is recommended that they be rolled and placed in a pouch or bag. Loads that can shift during transmission may cause malfunction or damage to the carrier or system.

Carriers are not to exceed a gross weight of 3.5 lbs.

The contents of the carrier must be fully within the carrier and not caught between edges. Multiple transmissions should be used if a load is too large to fit within the single carrier.



## Theory of Operation

### Powering the System

The rocker switch at the back of the teller chute controls power to the system. The red LED on the switch panel indicates “power on.”

***NOTE:** The power switch does **not** switch off 120VAC service to any component. It is only used to deactivate the system. Some components may remain energized and/or active when the system is “off.”*

#### Power ON

1. Teller switches power on
2. Power indicator illuminates
3. Customer Unit door opens and presents tip tube with carrier
4. System is now in ready state

#### Power OFF

1. Teller switches power off
2. Power indicator extinguishes
3. Customer Unit door closes
4. System is now off

***NOTE:** The power switch may be used to recover from unusual system conditions simply by switching it off and on – this will reset the system.*

### Send cycle

1. Teller inserts carrier into teller chute
2. Send cycle begins
3. Vacuum blower activates
4. Carrier is propelled from Teller Unit into transmission tubing, towards Customer Unit
5. Carrier passes Port Bend over Customer Unit
6. Carrier decelerates due to pressure in front of carrier
7. Carrier arrives at Customer Unit, cycle timer times out
8. Vacuum blower deactivates
9. Customer Unit door opens and presents carrier
10. Send cycle ends; System is now in ready state

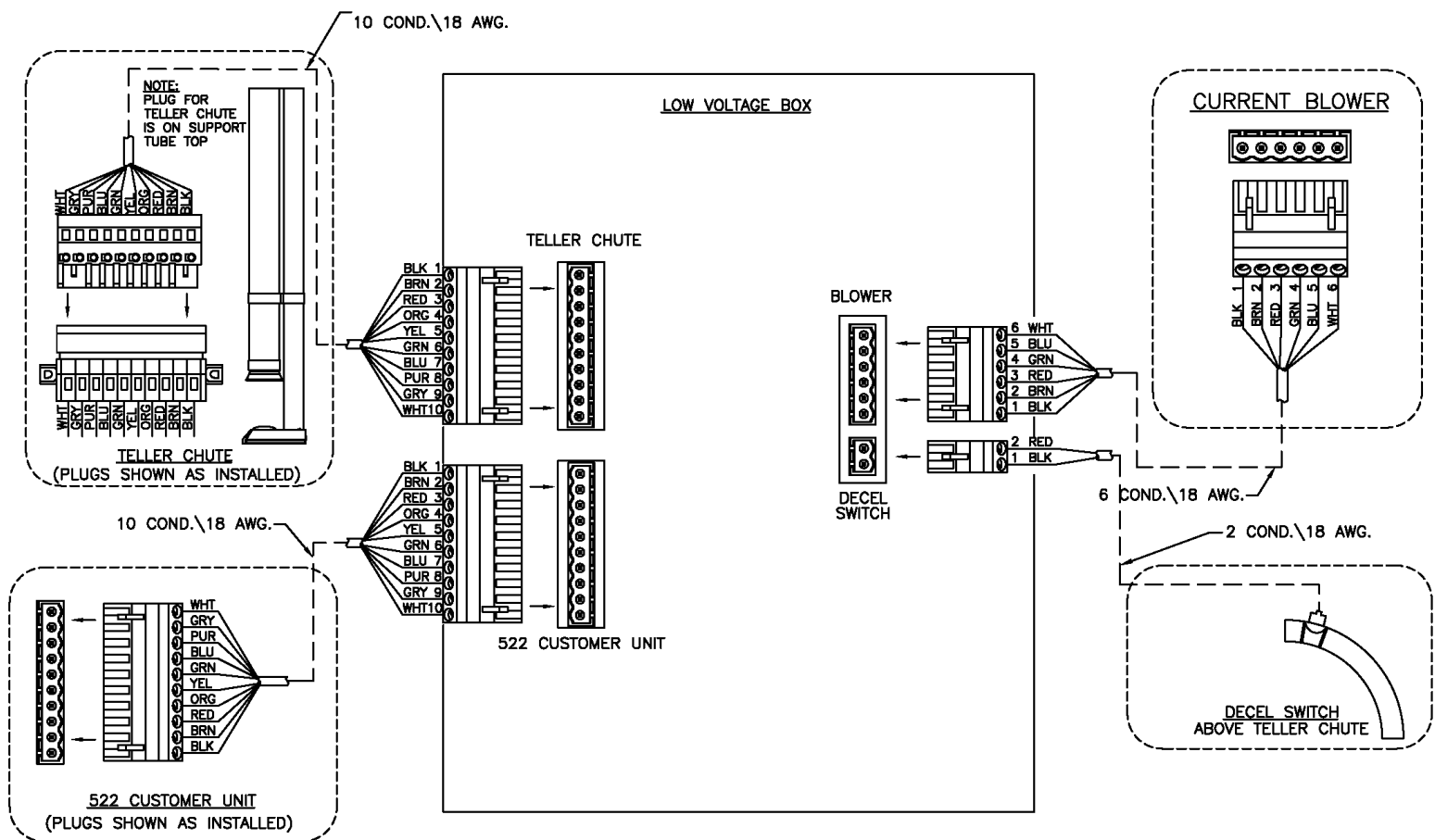
### Recall cycle

1. Customer inserts carrier into Customer unit tip tube
2. Customer presses SEND
3. Customer unit door closes and retracts carrier (*Note: if the safety switch actuator at the top of the door is lifted when the door is closing, the door will reverse and the cycle will be canceled*)
4. Recall cycle begins
5. Pressure blower activates
6. The carrier is dispatched to the teller chute
7. Carrier passes the Deceleration Switch above the teller chute
8. Pressure blower deactivates and Braking Solenoid activates
9. Carrier soft lands at teller chute
10. Recall cycle ends – system is now in ready state

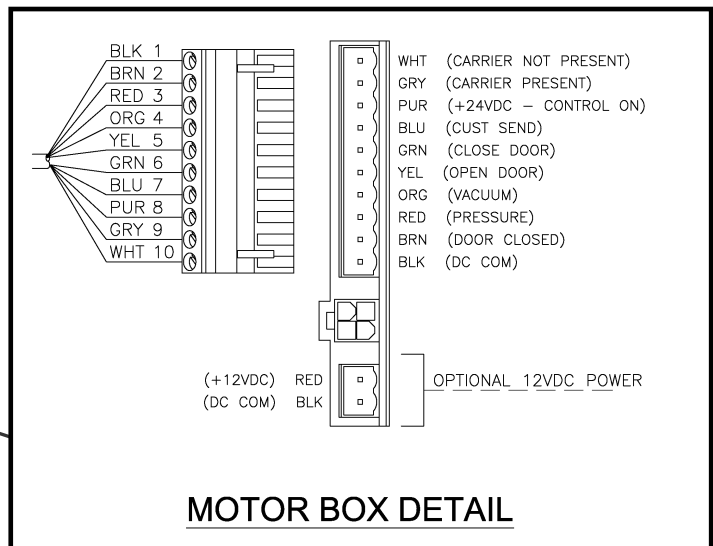
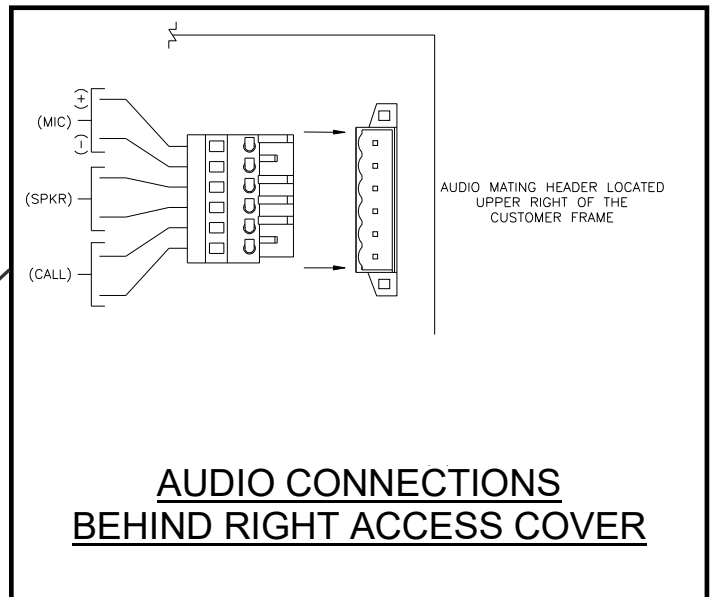
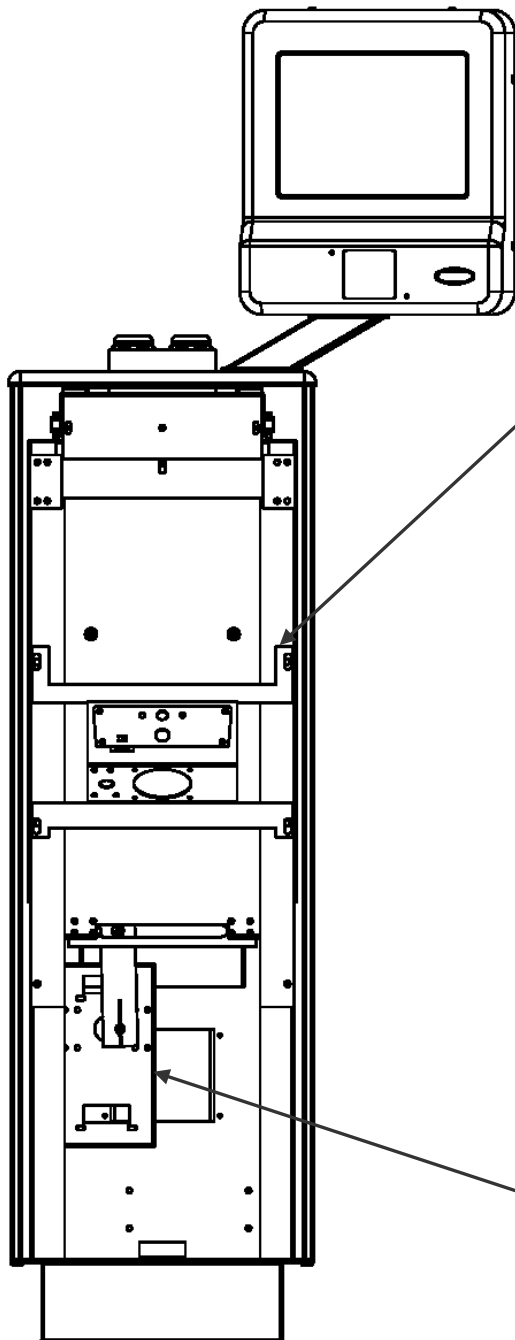
## Installation

### Control Field Wiring Diagram (P/N: 500330)

**NOTE:** All Class 2 interconnecting cabling must be done in compliance with the ARTICLE 800.33 (A) FPN No.2, exception No.2, of the NEC (National Electrical Code) by an authorized/qualified personnel.



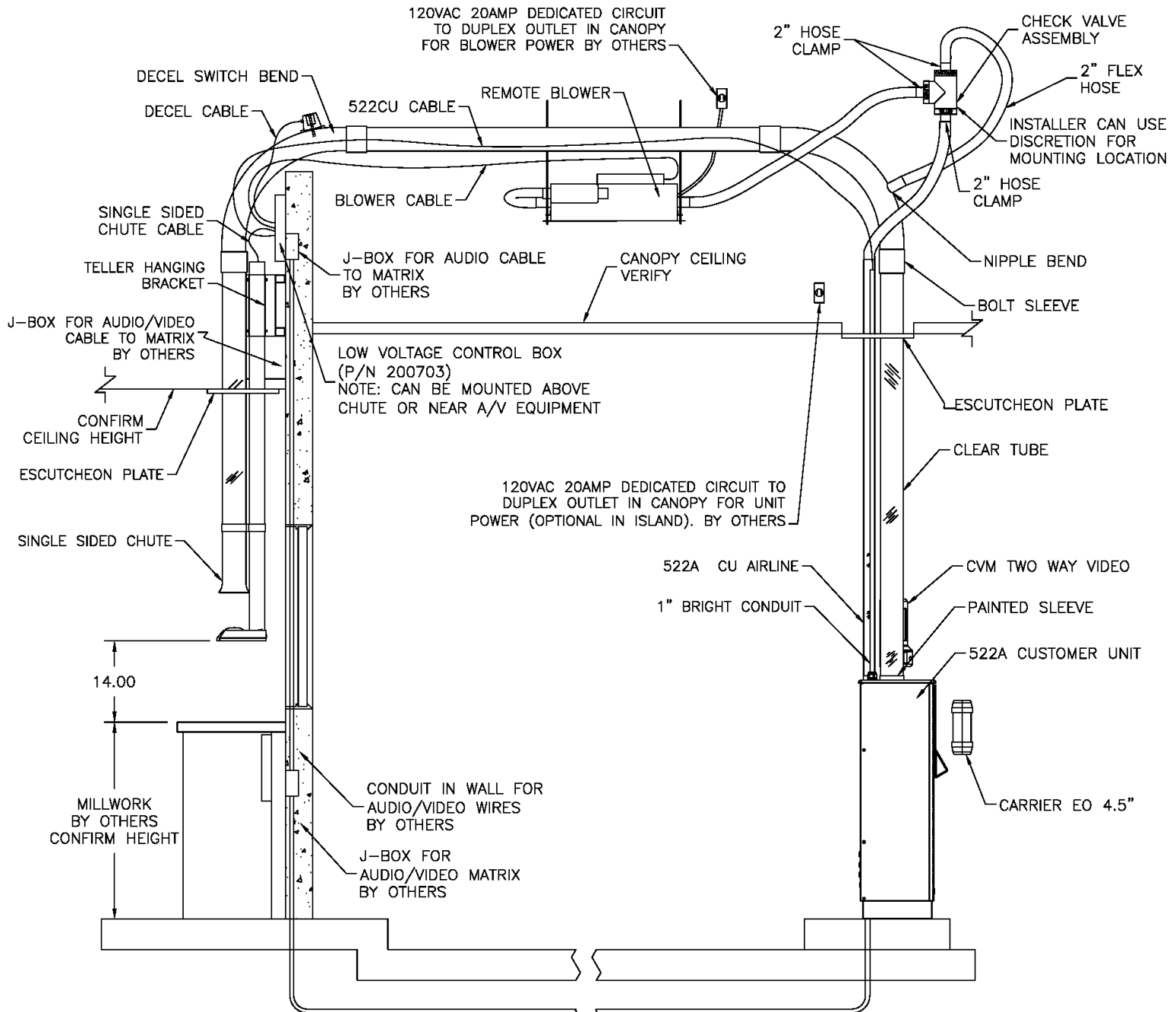
### Control/Audio Field Wiring Diagram



(Shown without front cover)

## System Riser Diagram & Options

### Parts Descriptions:



### *Tubing*

All tubing *must* be sealed properly. *Seal all joints* – especially those at the teller and customer units. All inside edges of tube joints *must be de-burred and ground to an angle* to prevent excessive wear on carriers.

### *Timer Adjustment*

Adjust timer (T1) for approximately 5 seconds greater than the time required for an empty carrier to be recalled from the customer unit to the teller unit (this should be 2-3 seconds after the carrier lands at the teller unit). See Appendix A for switch settings and other timing settings.

## Maintenance

### *Carriers*

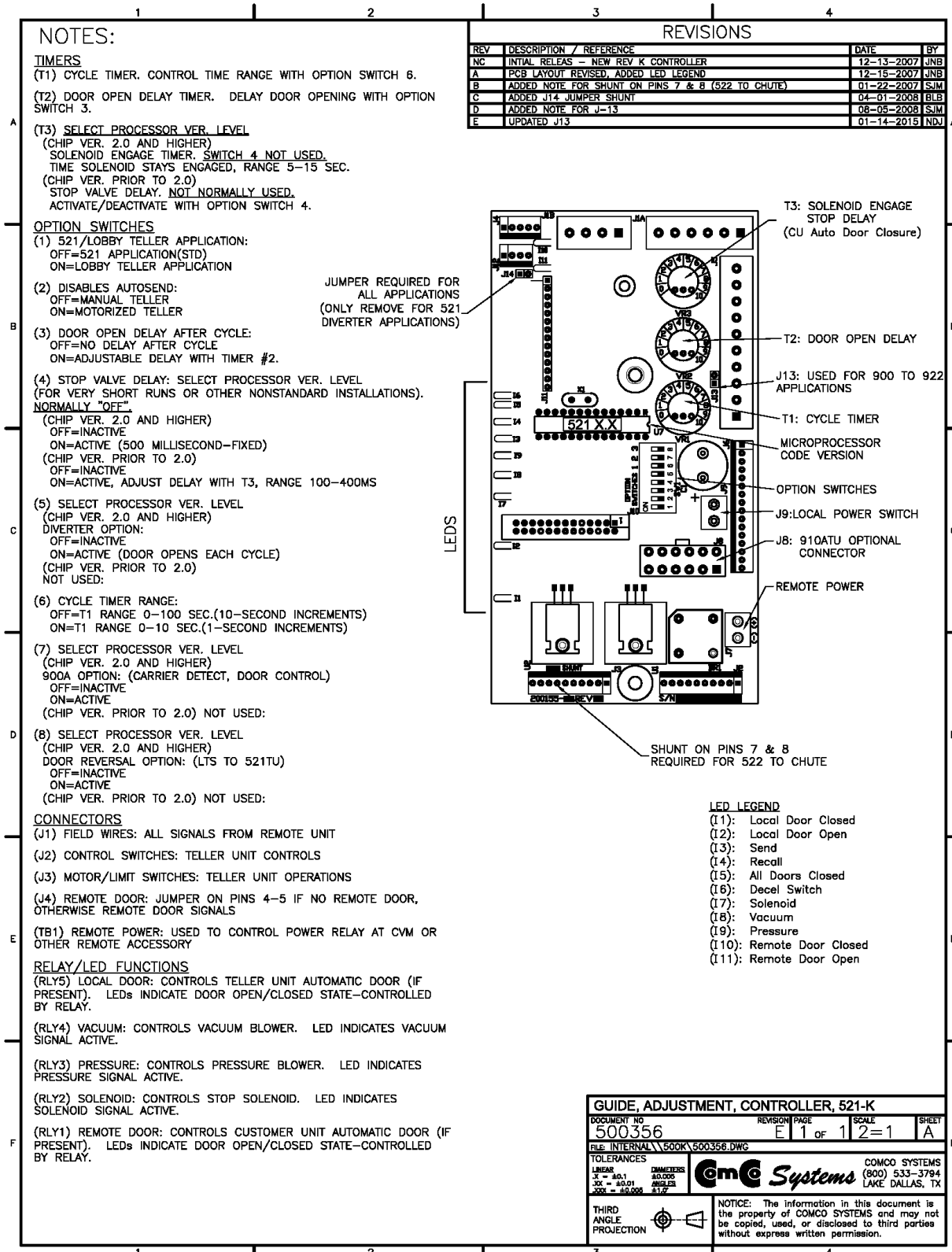
Carriers should be inspected regularly for signs of wear. Carriers landing hard at either customer or teller unit may be a sign of worn wear bands on carrier.

Wear bands should be replaced regularly – usually every 3-6 months, depending on usage.

### *Customer Unit & Teller Chute*

The carrier deceleration switch is required for proper operation. If it is inoperable, the carrier will land hard at the teller chute.

Carrier deceleration switches should be replaced regularly – usually every 2-3 years, depending on usage.





### Customer Unit (P/N: 201283-1)

Field Service Wiring Kit				200438
<i>Part Number</i>	<i>Description</i>		<i>U/M</i>	<i>Quantity</i>
601479	Cable, AC Power		Ea	1
603149	AC Power Entry Module		Ea	1
603125	Plug, 10 Position, Phoenix		Ea	1
601434	Zip Tie, 14"		Ea	1

### STC2000 Teller Unit (P/N: 200656)

Field Service Installation Kit				
<i>Part Number</i>	<i>Description</i>		<i>U/M</i>	<i>Quantity</i>
201255	Bracket, Wall, STC2000		Ea	1
400995	Escutcheon, STC2000		Ea	1
910007	#10 Flat Washer - Zinc		Ea	4
910035	10-32 x 5/8" Pan Head Phil, Zinc		Ea	2
910036	10-32 Nylon Insert Hex Nut		Ea	2
910171	10-24 x 3" Pan Head Stainless		Ea	4
910242	#8 x 1/2" Hex Washer Head Tek Screw		Ea	4
910277	10-24 Toggle		Ea	4

## *Return Material Authorization Procedure*

**Please follow the instructions below to return any items to ComCo Systems for repair.**

- Call ComCo Systems at 800.533.3794 to request a Return Materials Authorization number (RMA#). EMAIL: PARTS@COMCOSYSTEMS.COM
- Please give the Customer Service Representative the following information;
  - Company Name and Phone Number
  - Company Contact
  - Store#
  - Component (s) being returned for repair
  - Description of problem
  - Serial number of product
- Send your return items to the following address;

ComCo Systems  
306 W. Overly Dr.  
Lake Dallas, TX. 75065

RMA# XXXX

All RMAs will be processed in the order they are received. ComCo Systems will not accept any returns that do not have an RMA# assigned.

To check on the status of an RMA call our Customer Service Representatives with your RMA#.

### ComCo Systems

[www.comcosystems.com](http://www.comcosystems.com)

24/7 Toll Free Number

800.533.3794

Fax

940.222.2699

• **Customer Service & Technical Support**

[service@comcosystems.com](mailto:service@comcosystems.com)

800.533.3794 Option 2

[support@comcosystems.com](mailto:support@comcosystems.com)

• **Parts Orders**

[parts@comcosystems.com](mailto:parts@comcosystems.com)

800.533.3794 Option 4

• **Equipment and System Sales**

[sales@comcosystems.com](mailto:sales@comcosystems.com)

800.533.3794 Option 5

• **Project Management**

800.533.3794 Option 1

• **Accounting**

[accounting@comcosystems.com](mailto:accounting@comcosystems.com)

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