

# **Hamilton Manufacturing Corporation**

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1026 Hamilton Dr. Holland, OH 43528 • Phone: 419-867-4858/800-837-5561 • Fax: 419-867-4857 • [www.hamiltonmfg.com](http://www.hamiltonmfg.com)

## **2000V Operational Manual**

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## ABOUT THIS MANUAL

This manual will provide the operator with important information about installing and maintaining the 2000V Changer. General information is provided for the hopper, stacker, and controller. However, if additional information is needed for these components, please refer to the appropriate manual. To obtain assistance from the manufacturer, please call (800) 837-5561 or (419) 867-4858.

When calling for assistance, it is important to have serial numbers readily available. Please take the time to record this information in the spaces provided.

2000V SERIAL # \_\_\_\_\_

HOPPER #1 SERIAL # \_\_\_\_\_

HOPPER #2 SERIAL # \_\_\_\_\_

VALIDATOR MODEL & SERIAL # \_\_\_\_\_

STACKER MODEL & SERIAL # \_\_\_\_\_

CONTROLLER MODEL & SERIAL # \_\_\_\_\_

KEY / LOCK # \_\_\_\_\_

Please complete the warranty card, which was included with your changer, and return it to the manufacturer.

# **I. INTRODUCTION**

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The 2000V Series Changers are equipped with two hoppers for a greater change capacity.

The 2000V Series offers the option of coin acceptance using a Slugbuster® or IDX® Coin Mech.

The Audit Pro 2000 is available to program a variety of payout combinations and offers auditing capabilities and with the thermal printer, complete transaction reporting.

With the 2000V Series, customers may choose from a variety of options. Please note the options you have selected in your machine and record all model and serial numbers of all components.

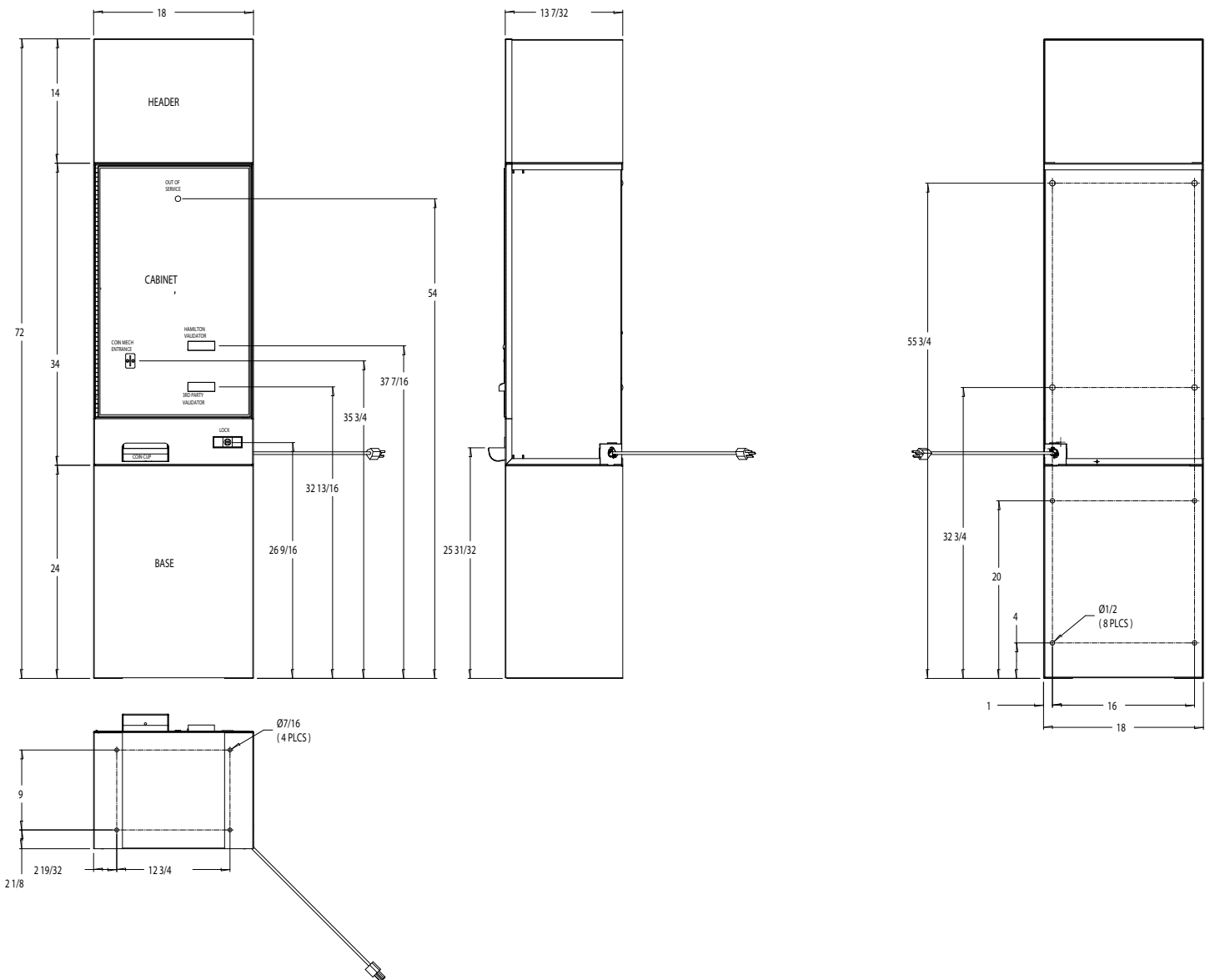
# II. INSTALLATION

## MOUNTING

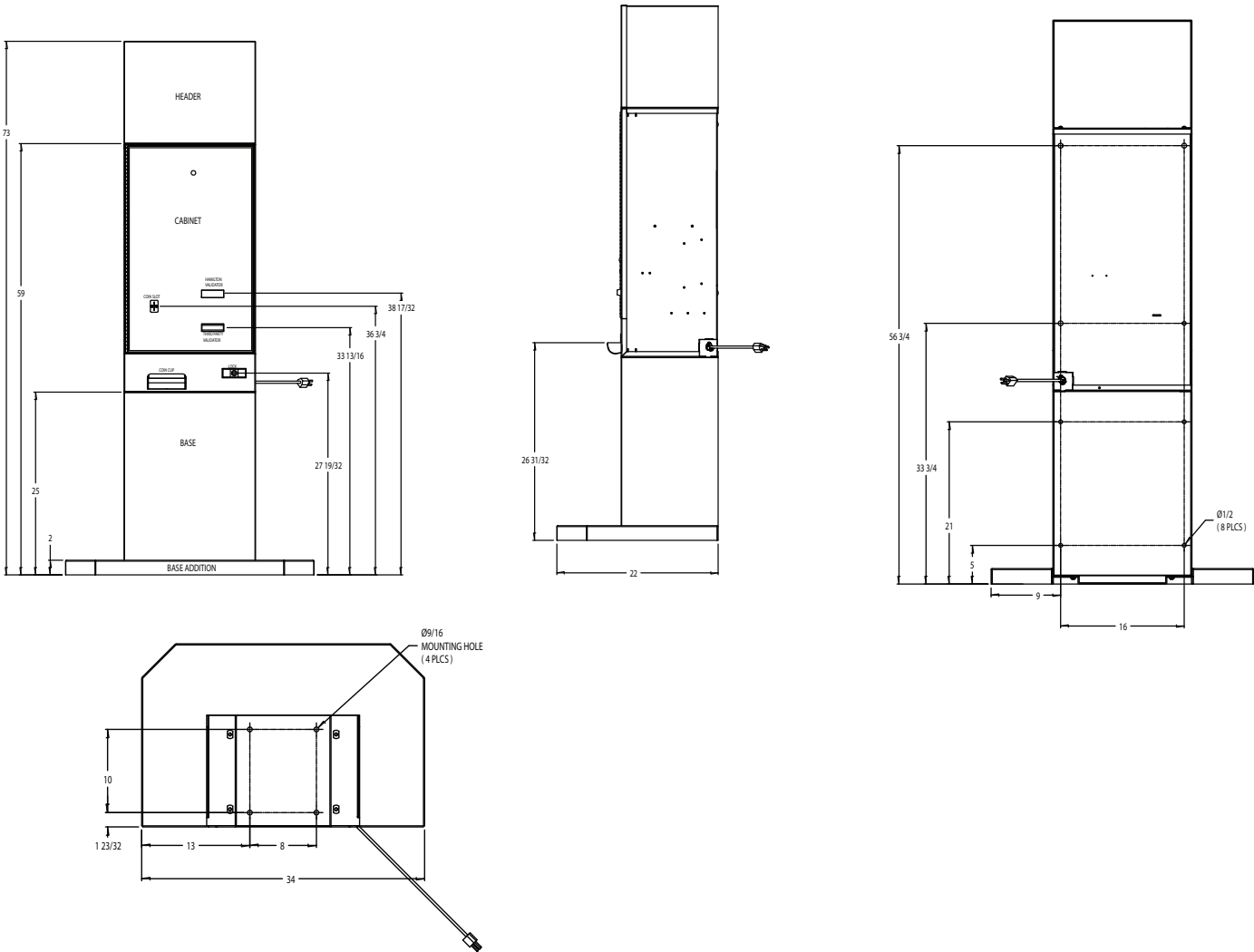
Cabinets are pre-drilled for wall mounting or mounting on an optional base. Bases are pre-drilled for securing to the floor. Do not use leveling screws when fastening to the floor. Changers mounted on bases should be securely fastened to both the floor and the wall. Fasteners to be used should be recommended by your engineer as to strength and suitability for floor and wall composition. Hamilton will not be responsible for injury due to improper installation.

Cabinet size is 34" H x 18" W x 13-7/32" D.

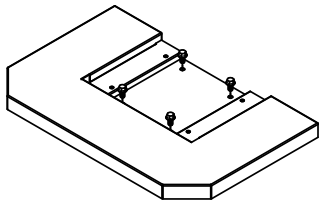
### Base Mounting



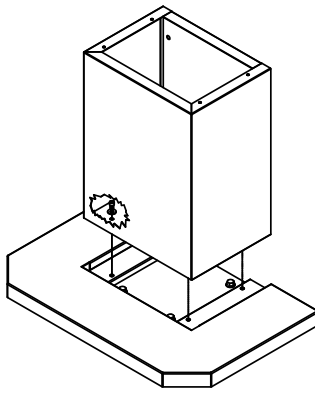
# 2000V Base Addition (Floor Mount Style) Instructions



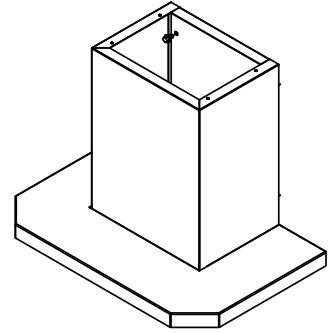
- STEP 1** Using four mounting holes attach base addition securely to the floor using appropriate fasteners recommended by your engineer as to strength and suitability for floor composition.
- STEP 2** Place base on base addition and secure using four 3/8-16 hex bolts and 3/8" washers provided.
- STEP 3** Using four mounting holes attach base securely to the wall using appropriate fasteners recommended by your engineer as to strength and suitability for wall composition.
- STEP 4** Place cabinet on base and attach using four #1/4-20 screws and washers provided.
- STEP 5** Using four mounting holes attach cabinet securely to the wall using appropriate fasteners recommended by your engineer as to strength and suitability for wall composition.
- STEP 6** Attach header by removing #10-24 screws and washers from top of cabinet, placing header in place and securing using the #10-24 screws and washers you have just removed.



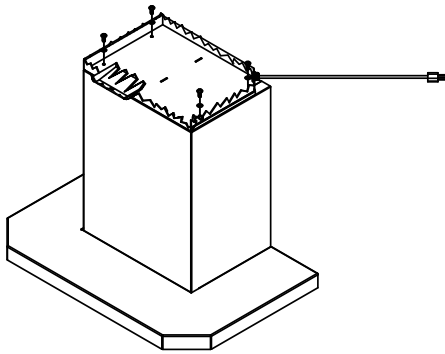
STEP 1



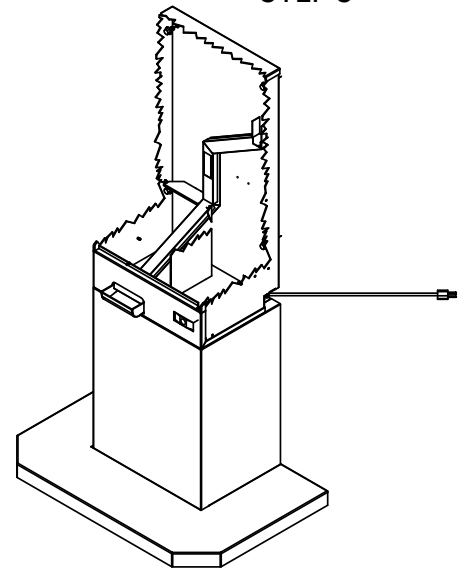
STEP 2



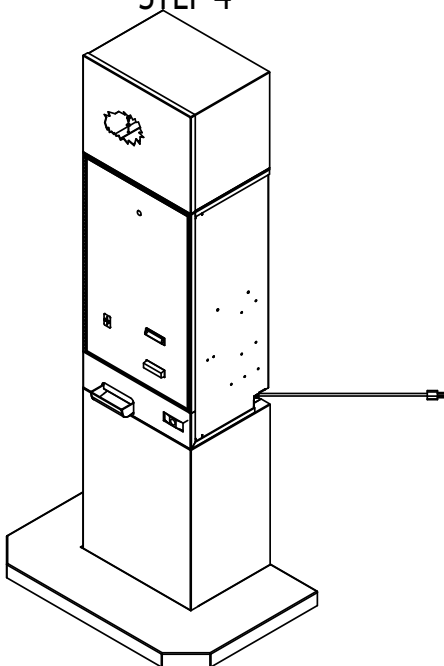
STEP 3



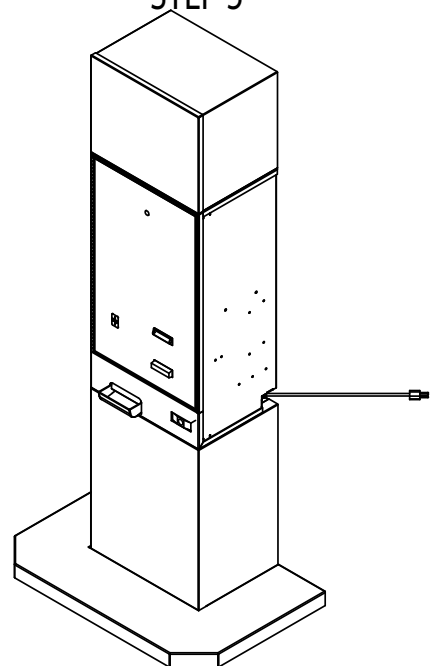
STEP 4



STEP 5

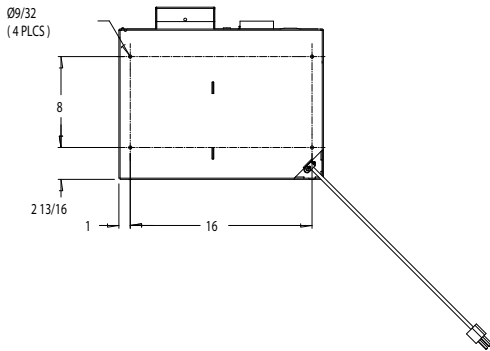
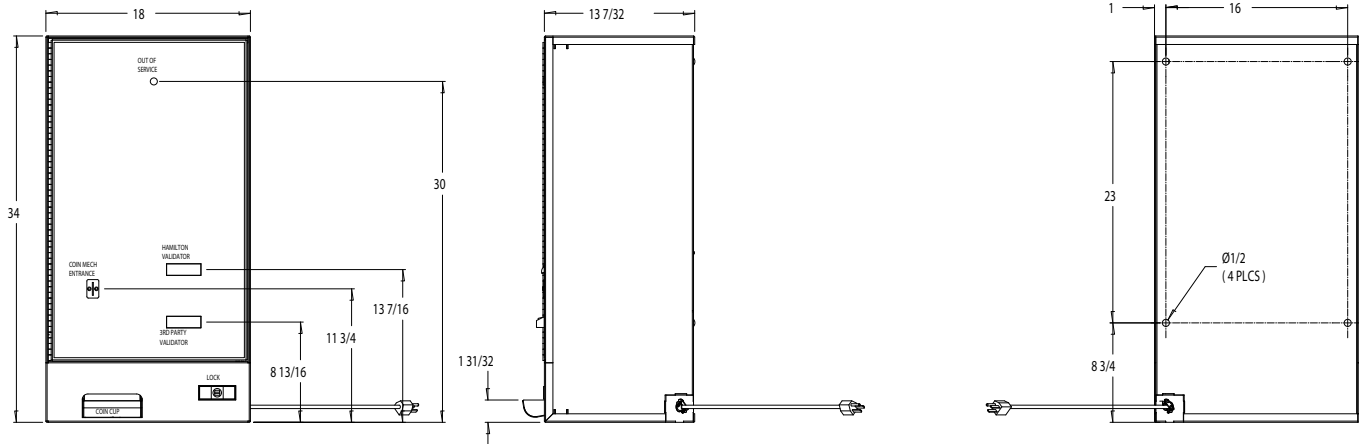


STEP 6



FINISHED

## Wall Mounting



## ELECTRICAL

This currency changer is operated on 120VAC, 60Hz. This changer uses a 5 AMP or 6AMP circuit breaker. Unit may be hard-wired with conduit if desired.



**NOTE: A GROUND FAULT INTERRUPTER IS REQUIRED.** The recommended Ground Fault Interrupter should have the following specifications:

- 120VAC
- 15 AMP
- 6-10mA trip level
- Should not trip when power is removed from circuit.

# III. MAINTENANCE

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**CAUTION!** Do not use oil, grease, or solvents on any part of this changer except as clearly specified in this manual, the hopper manual, the validator manual, or the stacker manual.

## **HOPPER**

Any lubrication in the hopper can result in a faulty payout. To clean the hopper monthly, empty coins and vacuum. Use a soft brush to loosen dirt. Refer to the hopper manual for details on maintenance. (Hamilton HSH Hopper manual document #101-0010.)

## **VALIDATOR**

Refer to the appropriate validator manual for lubrication, maintenance instructions and all other information. THE HAMILTON STA AND XE VALIDATORS SHOULD BE SERVICED ANNUALLY TO MAINTAIN MAXIMUM PERFORMANCE. THIS WORK SHOULD ONLY BE DONE BY A TRAINED TECHNICIAN. (Hamilton STA Validator manual document #101-0011 and Hamilton XE Validator manual document #101-0079.)

## **STACKER**

Refer to the stacker manual for maintenance instructions. (Hamilton Single Stacker manual document #101-0008.)

## **CONTROLLER**

The microprocessor based Hamilton C2000 Controller monitors the systems of the 2000V Bill Changer. If a problem is detected, the controller will shut down and display the appropriate error code. Refer to the C2000 Operation Manual for error codes. (C2000 Operation Manual document #101-0009.)

The twelve DIP switches located near the computer-reset button determine the payback of coins on multi-hopper change units. There is no need to change the switch settings on a typical model 2000V Changer, as they are set to the payout arranged at the time of order. However, if the need arises, the C2000 Operation Manual does offer alternative switch settings. If none of these settings are suitable to your needs, contact Hamilton Mfg. for assistance. YOU MUST HAVE THE CONTROLLER MODEL NUMBER READY WHEN CALLING.

Another option for this machine is the Audit Pro 2000 Controller which allows owners to program specific payouts and also to view audit information. The Audit Pro 2000 Hand-held was designed to be able to be carried to multiple machines or back and forth from the office. THE HAND-HELD IS TEMPERATURE SENSITIVE, DO NOT LEAVE IT IN THE MACHINE. For other information, refer to the Audit Pro 2000 Manual, document #101-0048.

# III. PARTS

## Internal Part List

COMMON PARTS		
PART #	DESCRIPTION	QTY.
61-2635	CABINET, 2000V	1
60-2314	COIN CUP, 2000V	1
60-2307	FLIPPER, 2000V	1
90-9052	NUT, #1/4-20 NYLOCK	4
63-5176	LOCK ENGAGEMENT BAR	1
90-0429	WASHER, #1/4 FLAT	4
90-0222	WASHER, I.D. .41 O.D. .81, TH. .06	4
90-0333	SCREW, #1/4-20 x 1/2" PH	4
63-5015	LOCK, T HANDLE	1
90-0608	CARRIAGE BOLT, 3/8	2
90-0302	NUT, #10-24 NYLOCK	2
63-5081	LOCK CAM	1
47-0080	LAMP, OUT OF SERVICE	1
47-0080A	TINNERMAN SPEED NUT	1
47-0241	PLUG, PLASTIC HOLE	4
48-0051A	GROUND	1
90-0612	WASHER, INT. LOCK #10	4
90-0301	NUT, 10-24 X 3/8 HEX	4
60-2049	EMPTY LIGHT COVER	1
90-0302	NUT, #10-24 NYLOCK	4
47-0200	WIRE NUT, YELLOW	2
47-0269	RING TERMINAL	1
47-0217	LINE CORD	1
47-0029	CONNECTOR, CONDUIT 3/8	1
90-9078	NUT, COUPLING #10-24 X 3/4	2
47-0275	CABLE TIE 6"	15
47-0232	CLAMP, CABLE PANDUIT	14
47-0261	SLEEVING BLACK 1/2	0.4
48-0091	HARNESS, EMPTY LIGHT	1
101-0156	MANUAL, 2000V CHANGER	1
96-0116	DECAL, CONDUIT CONNECTED	1
96-0112	DECAL, DISCONNECT POWER	1
96-0135	DECAL, SECURE PROPERLY	1
96-2016	DECAL, MODEL SERIAL #	1
96-0115	DECAL, INDOOR USE	1
49-1022CLB	POWER BOX 6 AMP ( 2 Hopper)	1

## Internal Part List (continued)

<b>LARGE HOPPER</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
	HOPPER, XTH	1
11-8611	HOPPER, XTH ( QUARTER)	
11-8611A	HOPPER, XTH ( NICKEL)	
11-8611B	HOPPER, XTH ( GOLD DOLLAR)	
11-8611D	HOPPER, XTH ( .800 TOKEN)	
11-8611J	HOPPER, XTH ( DIME)	
11-8611N	HOPPER, XTH ( THIN NICKEL)	
11-8611T	HOPPER, XTH( Ø1.125 TOKEN)	
101-0010	MANUAL, HSH HOPPER	1
<b>SECOND HOPPER</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
60-2317	SECONDARY HOPPER SHELF	1
90-9052	NUT, #1/4-20 NYLOCK	4
	ER-60 HOPPER	1
11-0103	ER-60 HOPPER ( QUARTER)	
11-0103A	ER-60 HOPPER ( NICKEL)	
11-0103B	ER-60 HOPPER ( GOLD DOLLAR)	
11-0103D	ER-60 HOPPER ( .800 TOKEN)	
11-0103J	ER-60 HOPPER ( DIME)	
11-0103N	ER-60 HOPPER ( THIN NICKEL)	
11-0103T	ER-60 HOPPER ( Ø1.125 TOKEN)	
<b>CONTROLLER</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
49-2000A	C-2000 CONTROLLER	1
49-2004A	AUDITPRO CONTROLLER	1
49-2010A	AUDITPRO REMOTE	1
101-0009	C-2000 OPERATIONAL MANUAL	1
101-0048	AUDITPRO 2000 OPERATIONAL MANUAL	1
<b>NO COIN MECH</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
60-2038	BUTTON HOLE COVER	1
90-0302	NUT, #10-24 NYLOCK	2

## Internal Part List (continued)

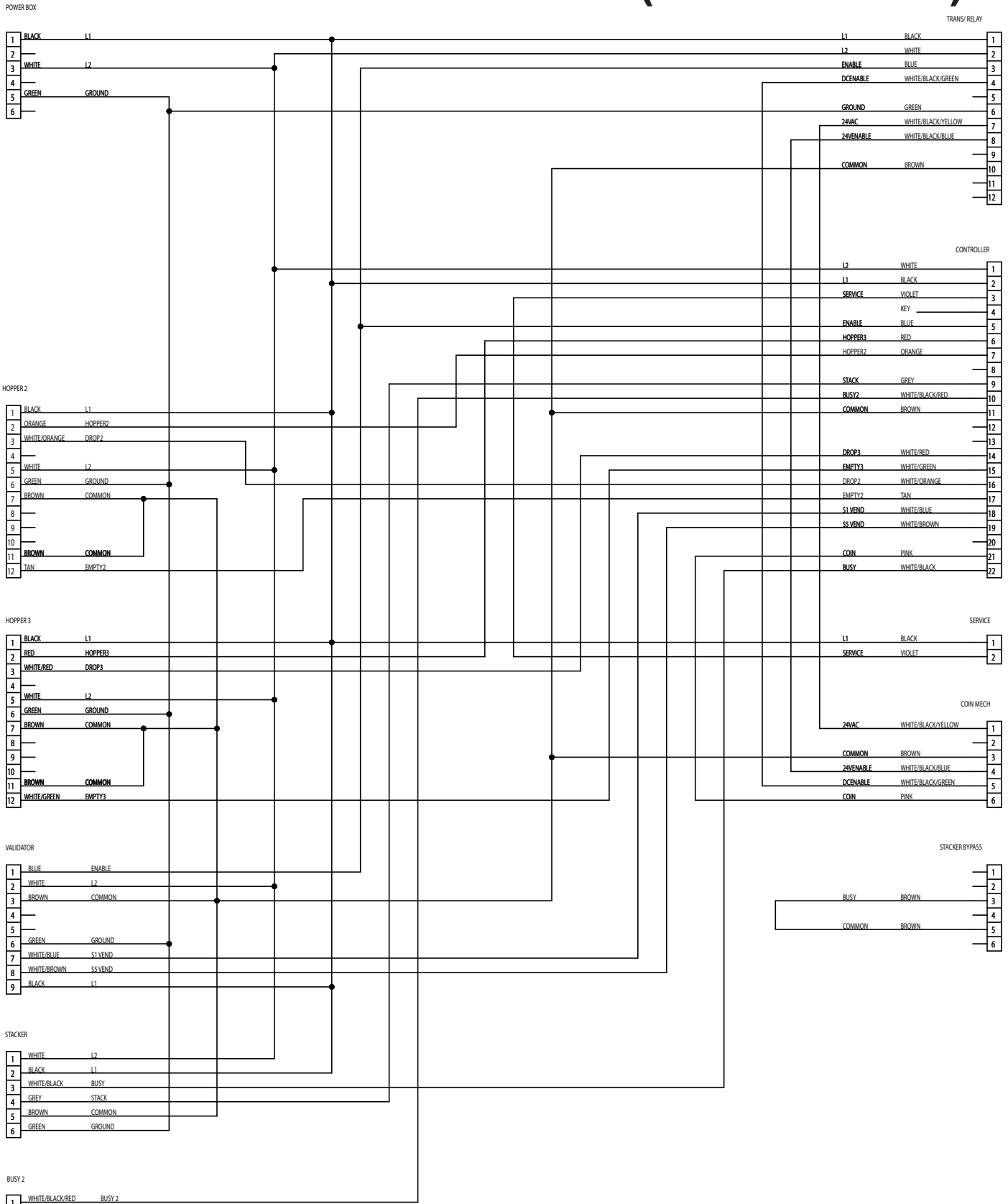
COIN MECH		
PART #	DESCRIPTION	QTY.
	COIN MECH	1
80-9251	IDX-10 MICRO FIT 2x3	
80-9252	SLUGBUSTER MICRO FIT 2x3	
60-2308	COIN DIVERTER, XTH ECONOCHANGER	1
90-0130	SCREW, #6-32 x 1/8" PH	1
90-0321	NUT, #8-32 NYLON	2
90-0517	STUD, BALL #8-32 x5/8"	2
	COIN SLOT	1
60-0014	COIN SLOT, QUARTER	
60-0015	COIN SLOT, TOKEN	
60-0116	COIN SLOT, BLANK	
60-0369	COIN SLOT, DOLLAR	
60-2029	COIN CHUTE LONG	1
60-2014	COIN CHUTE COVER	1
90-0120	SCREW, #4-40 x 1/8" PH	1
90-0302	NUT, #10-24 NYLOCK	2
60-2206	COIN MECH BRACKET	1
60-2221	TOKEN BOX	1
05-0000	TRANSFORMER RELAY PAN	1
TO ADD XE		
PART #	DESCRIPTION	QTY.
	MAIN HARNESS	1
48-3178	HARNESS, 2000V MAIN XE WITH COIN MECH	
48-3179	HARNESS, 2000V MAIN XE	
46-4001	VALIDATOR, XE	1
36-0036	STACKER SINGLE	1
60-0107	BRACKET FRONT LOAD	1
60-2219	SUPPORT BRACKET	1
90-0248	THUMB SCREW, #8-32 x 3/8	1
90-0416	WASHER, #8 BRASS	1
48-3107	HARNESS, XE	1
60-0115	BRACKET, VALIDATOR	1
90-0302	NUT, #10-24 NYLOCK	4
90-0411	WASHER, # 8 INTERNAL LOCK	6
90-0143	SCREW, #8-32 x 5/16" PH	4
101-0008	MANUAL, SINGLE STACKER	1
101-0079	MANUAL, XE	1
90-0319	NUT, #8-32 HEX	2
60-2315	VALIDATOR FILLER PLATE	1
90-9052	NUT, #1/4-20 NYLOCK	4

## **Internal Part List (continued)**

<b>TO ADD COIN CO</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
48-3180	HARNESS, 2000V MAIN 3RD PARTY WITH COIN MECH	1
46-0168	VALIDATOR, COIN CO	1
48-3182	HARNESS, MARS & COINCO ADAPTOR	1
60-2316	VALIDATOR ADJUSTOR PLATE, 2000V	1
60-2315	VALIDATOR FILLER PLATE	1
90-9052	NUT, #1/4-20 NYLOCK	8
90-0145	SCREW, #8-32 x 5/8 PH	4
<b>TO ADD MARS</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
48-3180	HARNESS, 2000V MAIN 3RD PARTY WITH COIN MECH	1
46-0200	VALIDATOR, MARS 110V	1
05-0001	RELAY BOX	1
48-3182	HARNESS, MARS & COINCO ADAPTOR	1
60-2316	VALIDATOR ADJUSTOR PLATE, 2000V	1
60-2315	VALIDATOR FILLER PLATE	1
90-0145	SCREW, #8-32 x 5/8 PH	4
90-9052	NUT, # 1/4-20 NYLOCK	8
<b>LOCK INSERT</b>		
<b>PART #</b>	<b>DESCRIPTION</b>	<b>QTY.</b>
63-5028	LOCK INSERT, LARGE	1

# Appendix A

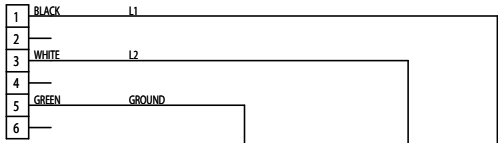
## Main Harness w/Coinmech (Part #48-3178)



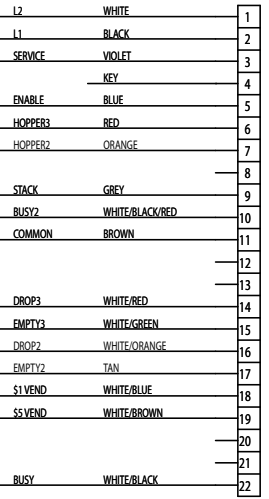
# Appendix B

## Main Harness (Part #48-3179)

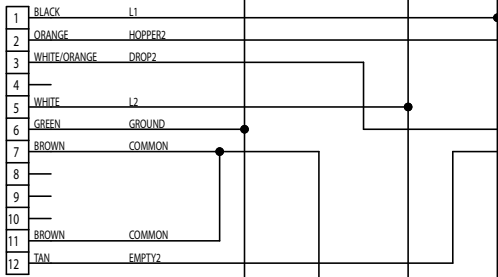
POWER BOX



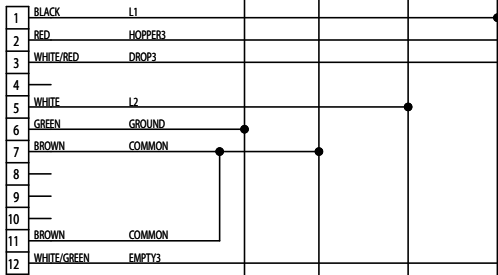
CONTROLLER



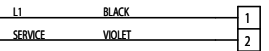
HOPPER 2



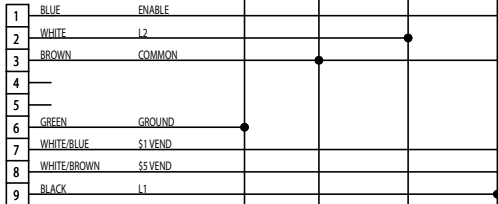
HOPPER 3



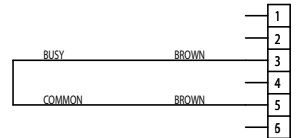
SERVICE SERVICE



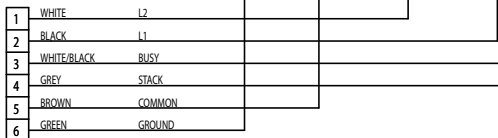
VALIDATOR



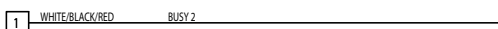
STACKER BYPASS



STACKER



BUSY 2

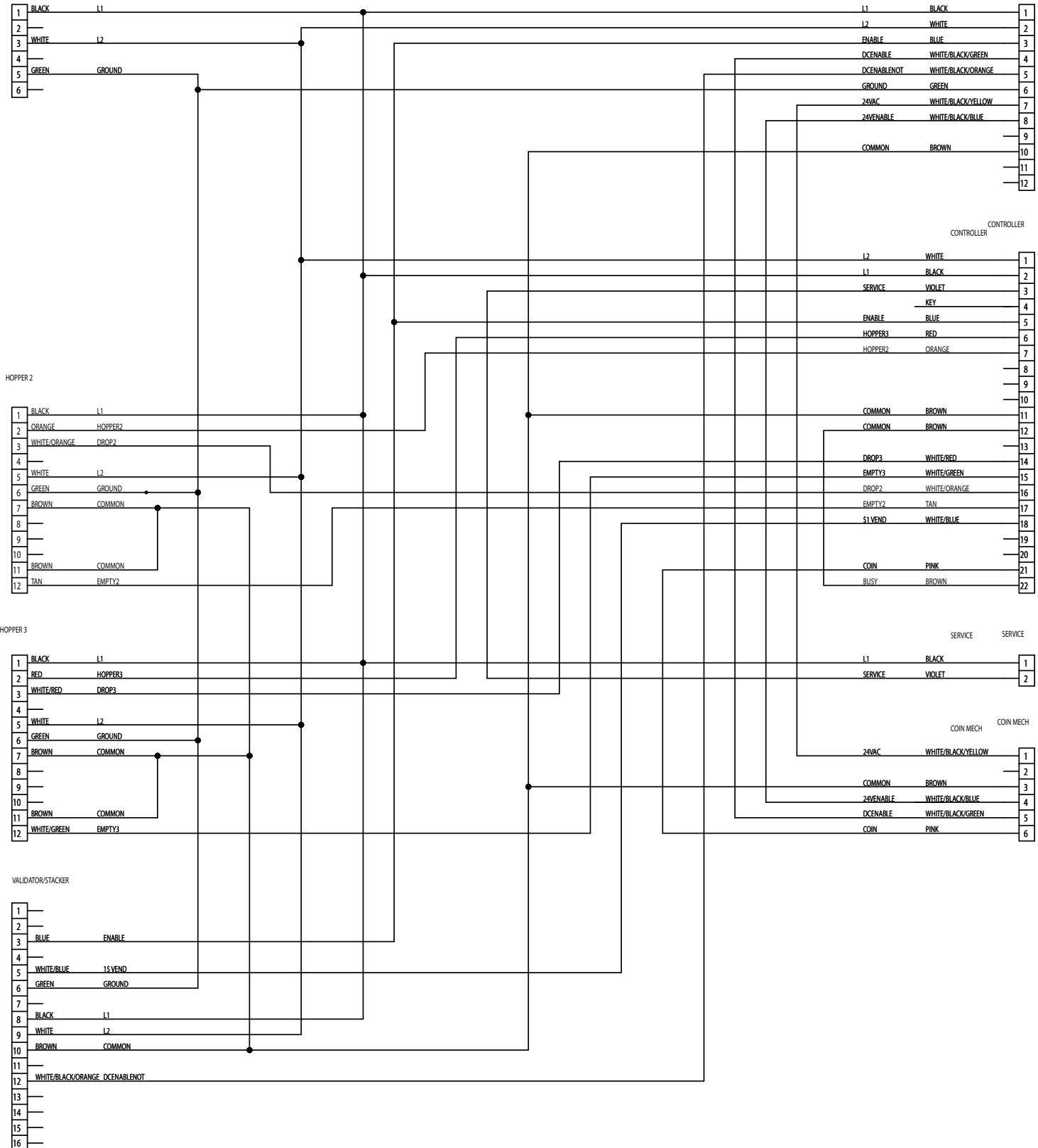


# Appendix C

## 3RD Party Harness (Part #48-3180)

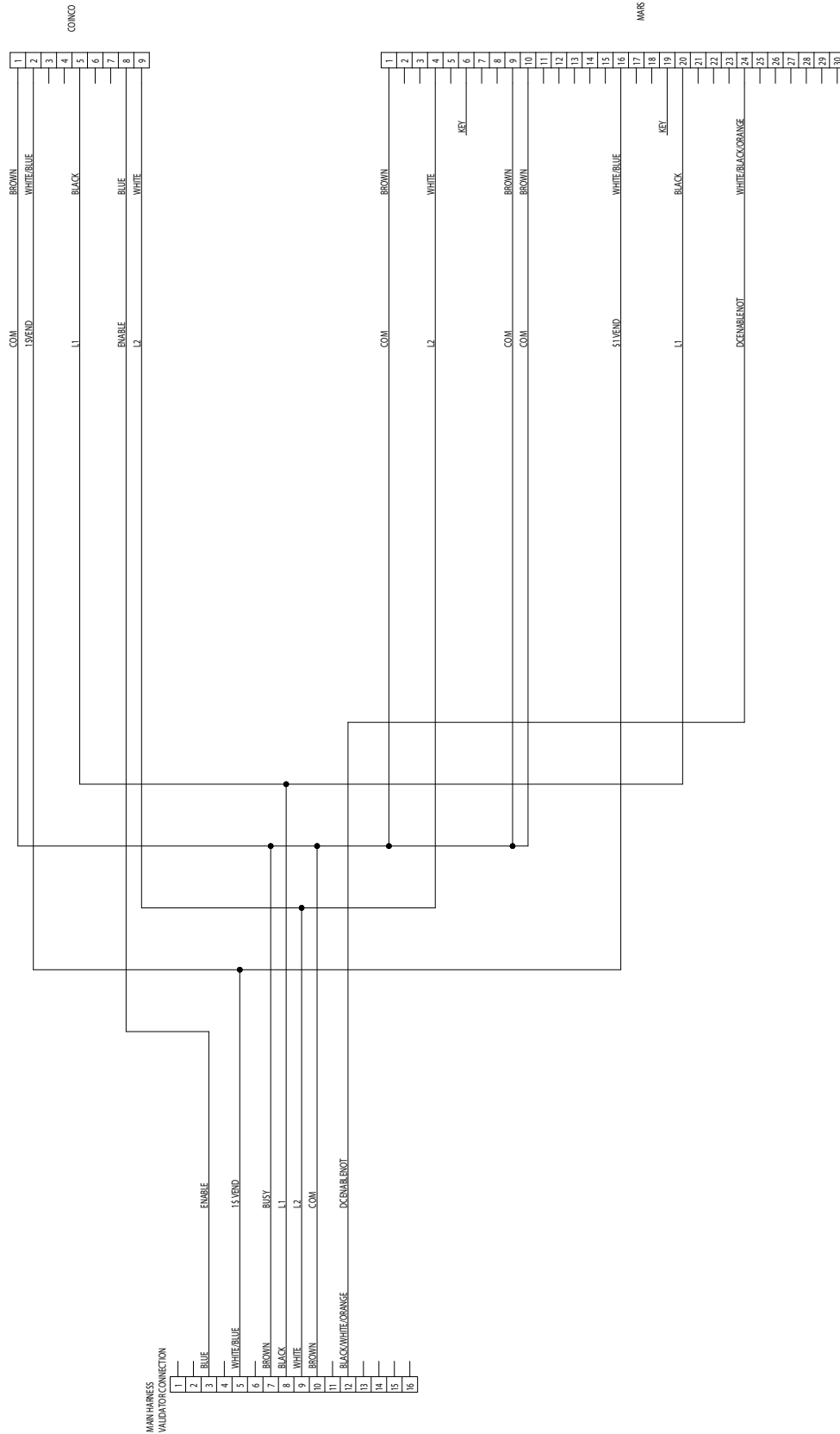
POWER BOX

TRANS/RELAY



# Appendix D

## Mars & Coinco Adapter (Part #48-3182)



# LIMITED WARRANTY AGREEMENT OF HAMILTON MANUFACTURING CORP.

Hamilton Manufacturing Corp., an Ohio Corporation, (“Seller”) warrants to Purchaser that all new equipment shall be free from defects in material and factory workmanship for a period of one (1) year from the original shipping date. Hamilton Manufacturing Corp. further warrants if any part of said new equipment in Seller’s sole opinion, requires replacement or repair due to a defect in material or factory workmanship during said period, Seller will repair or replace said new equipment. Purchaser’s remedies and the liabilities and obligations of Seller herein shall be limited to repair or replacement of the equipment as Seller may choose, and Seller’s obligation to remedy such defects shall not exceed the Purchaser’s original cost for the equipment. Purchaser EXPRESSLY AGREES this is the EXCLUSIVE REMEDY under this warranty. There are no other express or implied warranties which extend beyond the face hereof. All warranty repair service must be performed by either a Factory Trained Service Representative or **HAMILTON MANUFACTURING CORP., 1026 Hamilton Drive, Holland, Ohio 43528 PHONE (419) 867-4858 or (800) 837-5561, FAX (419) 867-4867.**

The limited warranty for new equipment is conditioned upon the following:

1. The subject equipment has not, in the Seller’s sole opinion, been subjected to: accident, abuse, misuse, vandalism, civil disobedience, riots, acts of God, natural disaster, acts of war or terrorism.
2. The Seller shall not be liable for any expense incurred by Purchaser incidental to the repair or replacement of equipment and Purchaser shall assume full responsibility for any freight or shipping charges.
3. The coverage of this warranty shall not extend to expendable parts.
4. Purchaser shall have a warranty registration card on file with Seller prior to any claim in order for warranty protection to apply.
5. No warranty coverage is applicable to any equipment used for currency other than that specified at the time of the purchase.
6. Seller expressly disclaims any warranty that counterfeit currency will not activate said equipment.
7. Seller expressly disclaims any warranty for any losses due to bill manipulation or theft or loss of cash under any circumstances.
8. Use of the equipment for anything other than its intended and designed use will void the Limited Warranty Agreement. Use of equipment for anything other than its intended and designed use includes, but is not limited to, downloading software/applications not certified by Seller such as e-mail, spyware, screen savers, viruses, worms, third party software, web search engines, cookies, spam, desktop applications, games, web surfing, etc.

Seller further warrants all repair or service work performed by a factory trained representative or Hamilton Manufacturing Corp. for a period of ninety (90) days from the date the repair or service work was performed. Purchaser’s remedies and the liabilities and obligations of Seller herein shall be limited to repair or replacement of equipment as Seller may choose, and Seller’s obligation to remedy such defects shall not exceed the Purchaser’s depreciated value of the equipment. Purchaser EXPRESSLY AGREES this is an EXCLUSIVE REMEDY under this warranty. There are no other express or implied warranties on repair or service work performed by a factory trained representative or Hamilton Manufacturing Corp. which extend beyond the face hereof.

The limited warranty for repair and service work is conditioned upon the following:

1. The subject equipment has not, in the Seller's sole opinion, been subjected to: accident, abuse, misuse, vandalism, civil disobedience, riots, acts of God, natural disaster, acts of war or terrorism.
2. The Seller shall not be liable for any expense incurred by Purchaser incidental to the repair or replacement of equipment and Purchaser shall assume full responsibility for any freight or shipping charges.
3. The coverage of this warranty shall not extend to expendable parts.
4. Purchaser shall have a warranty registration card on file with Seller prior to any claim in order for warranty protection to apply.
5. No warranty coverage is applicable to any equipment used for currency other than that specified at the time of the purchase.
6. Seller expressly disclaims any warranty that counterfeit currency will not activate said equipment.
7. Seller expressly disclaims any warranty for any losses due to bill manipulation or theft or loss of cash under any circumstances.
8. No person or entity other than a factory trained representative or Hamilton Manufacturing Corp. has performed or attempted to perform the subject repair or service.
9. Using equipment which has been serviced or repaired for anything other than its intended or designed use such as downloading software applications not certified by Seller will void the Limited Warranty Agreement. This includes software/applications such as e-mail, spyware, screen savers, viruses, worms, third party software, web search engines, cookies, spam, desktop applications, games, web surfing, etc.

THIS AGREEMENT IS MADE WITH THE EXPRESS UNDERSTANDING THAT THERE ARE NO IMPLIED WARRANTIES THAT THE EQUIPMENT SHALL BE MERCHANTABLE, OR THAT THE GOODS SHALL BE FIT FOR ANY PARTICULAR PURPOSE. PURCHASER HEREBY ACKNOWLEDGES THAT IT IS NOT RELYING ON THE SELLER'S SKILL OR JUDGMENT TO SELECT OR FURNISH EQUIPMENT SUITABLE FOR ANY PARTICULAR PURPOSE AND THAT THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THAT WHICH IS DESCRIBED HEREIN.

The Purchaser agrees that in no event will the Seller be liable for direct, indirect, or consequential damages or for injury resulting from any defective or non-conforming new, repaired or serviced equipment, or for any loss, damage or expense of any kind, including loss of profits, business interruption, loss of business information or other pecuniary loss arising in connection with this Limited Warranty Agreement, or with the use of, or inability to use the subject equipment regardless of Sellers knowledge of the possibility of the same.

# **Hamilton Manufacturing Corporation**

1026 Hamilton Drive  
Holland, OH 43528

**Sales Phone:** (888) 723-4858    **Sales Fax:** (419) 867-4850  
**Customer Service Phone:** (800) 837-5561    **Customer Service Fax:** (419) 867-4857  
**Parts Phone:** (866) 835-1721    **Parts Fax:** (419) 867-4867

**Website:** <http://www.hamiltonmfg.com>

**Email Addresses:**

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