5. Using the 4 inch plastic cable ties, secure the interconnecting RC & BV wire harnesses to the frame.
6. Fill the Optipay™ CC Coin Changer with the correct denominations of coins (See Figure 20).

Figure 20 Filling the Optipay CC

Figure 21 Optipay™ CC Keypad

7.Press the Plus [+] Keypad Button the Coin Changer twice (2 times) to reset the coin counters (See Figure 21).
8.Insert a variety of bills and coins into the Optipay™ BV and CC to determine if the entire JCM Optipay™ Payment System is operating properly.

OPERATIONAL CHECKS

RETROFIT INSTALLATION OPERATIONAL CHECK

Follow the final operational checks outlined in the respective Optipay™ product Installation Guides.

If further detailed instruction is necessary, refer to the related primary service manual for each of the component parts of this system interconnection, or call JCM Commercial Technical Support for additional instruction.

If additional information for interconnecting an Optipay™ DBV-301, RC-10 or A-66 unit is required, refer to the Optipay™ System Interconnection Guide (Part No. 960-000114) to ensure a proper system integration.

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925 Pilot Road, Las Vegas, Nevada 89119
Office & Technical Support: (800) 683-7248 (option 5 after hours), FAX: (702) 651-0214
E-mail: optipaysupport@jcm-american.com http://www.jcm-american.com

Royal RVRB 372-3 Retrofit Kit

Optipay™ BV/RC into a RedBull Vending Machine

This document contains information for installing and configuring the JCM Optipay™ DBV-301 Bill Validator and RC-10 Bill Recycler into a RedBull Vending Machine. The Royal RVRB 372-3 (RedBull) Retrofit Kit includes the following components and support guides:

- 1- Installation Kit
  (Part No: 701-000197) containing:
  – 4 - #8-32 Kep-lock Nuts
  – 1 - Hole Gasket (Part No: 900-100228)
  – 4 - 4 inch Plastic Cable Ties
  – 1 - Retrofit Guide (Part No: 960-000152).

Tool Requirements

- 1 - #2 Phillips Screwdriver
- 1 - 11/32" Deep Well Nut Drive
- 1 - Pair Wire Cutters
- 1 - Power Drill with a 7/64" Drill Bit.

Optipay™ CC Installation Guide (JCM Part No. 960-000105 Rev. 2 or greater)
Optipay™ BV Installation Guide (JCM Part No. 960-000106 Rev. 3 or greater)
Optipay™ RC Installation Guide (JCM Part No. 960-000107 Rev. 3 or greater)
Optipay™ System Interconnection Guide (JCM Part No. 960-000114 Rev. A or greater)

PRIMARY JCM OPTIPAY™ BV, RC& CC RETROFIT COMPONENTS

Figure 1 illustrates the primary component parts within a RVRB 372-3 Retrofit Kit.

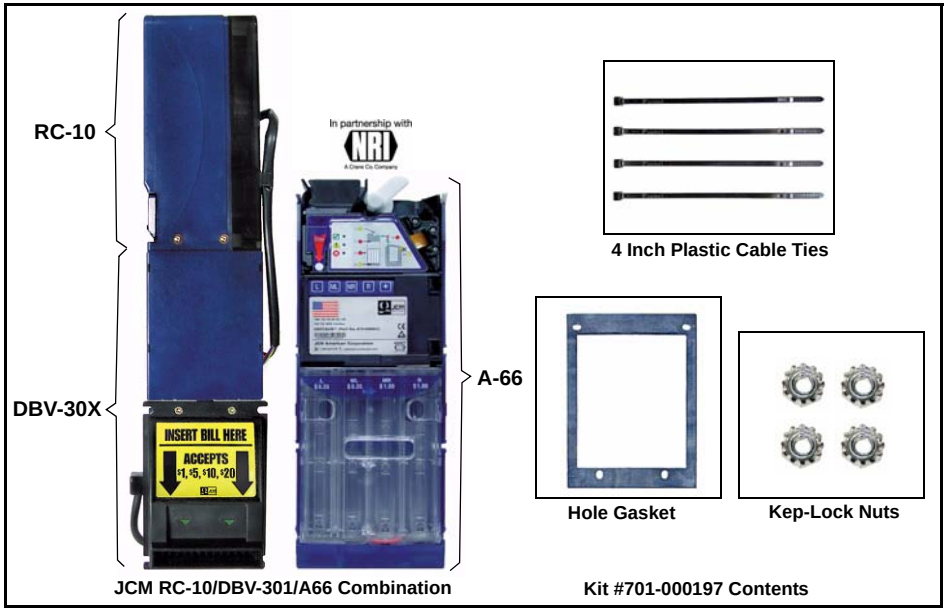

Figure 1 Primary RVRB 372-3 Retrofit Kit Component Parts

OPTIPAY™ BV/RC INSTALLATION STEPS

Use the following steps to install a combined RC-10/DBV-301 unit into a Royal RVRB 372-3 (RedBull) Vending Machine:

1. Remove power to the Vending Machine.
2. Cut the two (2) cable ties that bind the relay harness (See Figure 2 a).
3. Remove the two (2) Relay mounting screws.(See Figure 2 b).
4. Relocate the relay five (5) inches down from the Control Board Housing and three (3) inches left of the door frame (See Figure 3 a). Use the relay as a template to locate marks for drilling two new 7/64 inch holes.
5. Drill the two mounting holes using Power Drill with the 7/64" bit.
6. Remount the Relay in the new location using the original self tapping screws.
7. Re-route the wiring harness and re-secure it in its new location with the Cable Ties supplied in the kit (See Figure 3 b).
8. Unplug the existing Bill Validator's harness and remove the Bill Validator using the 11/32" Nut Driver.

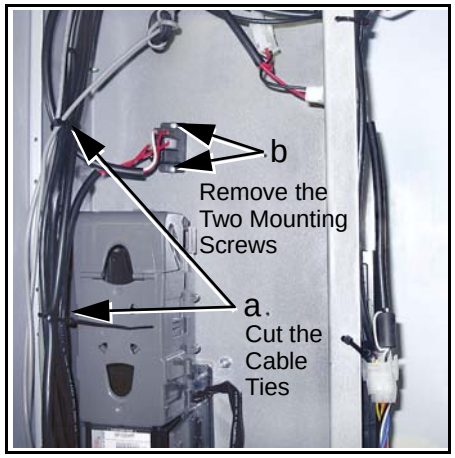

Figure 2 Removing Cable Ties and Relay Mounting Screws

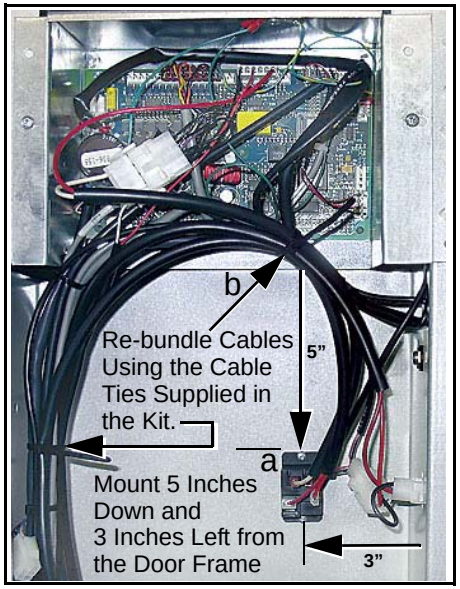

Figure 3 Remounting Relay

9. Carefully cut ¼ inch of material off the bottom of the Gasket supplied in the kit (See Figure 4).
10. Install the modified Gasket onto the four (4) mounting studs at the Bill Validator’s opening (See Figure 5).
11. Install the RC-10 Bill Recycler onto the Optipay™ DBV-301 Bill Validator (See Figure 6).
12. Interconnect the Bill Validator’s Communications Harness to the Optipay™ RC (See Figure 7).
13. Install the combined DBV-301 onto the four (4) mounting studs behind the Gasket and secure it in place using four (4) #8-32 Kep-Lock Nuts supplied in the kit.

OPTIPAY™ CC INSTALLATION STEPS

1. Remove the existing Coin Changer (See Figure 16).
2. Install the Optipay™ Coin Changer into the machine where the previous Coin Changer existed (See Figure 17).

Figure 16 Removing Coin Changer

Figure 17 Install the A-66 CC

3. Connect the 4-pin Molex Optipay™ CC Communications Connector into the Optipay™ RC mating receptacle (See Figure 18).
4. Connect the 6-pin Molex Optipay™ CC Communications Connector into the inline MDB Harness mating connector (See Figure 19).

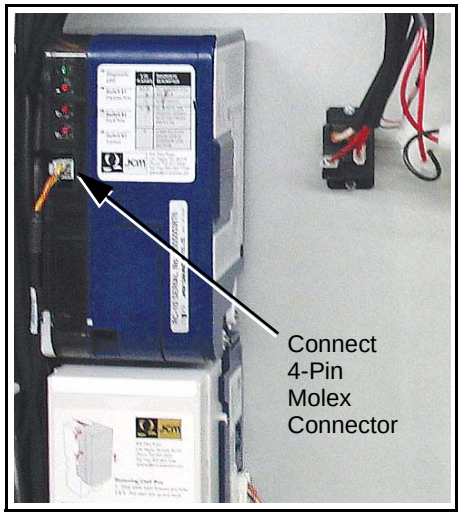

Figure 18 Making A-66 Coin Changer Comm Connection

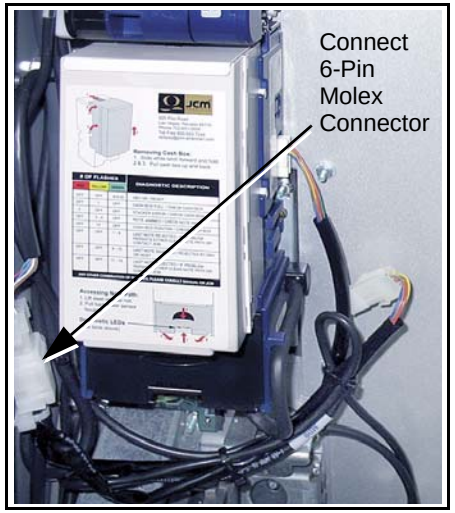

Figure 19 Making A-66 CC MDB Connection

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CASH BOX

When the Recycler is not used, slide the white release tab located on top of the DBV-301 forward (See Figure 13) and pull the Cash Box up and out to remove it.

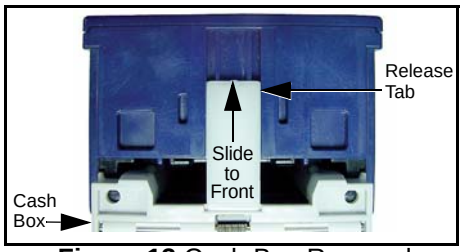


Figure 13 Cash Box Removal

SENSOR MODULE

To remove the Sensor Module, press up [1] on the release rod locking bar and pull the module outward [2] from the frame (See Figure 14).

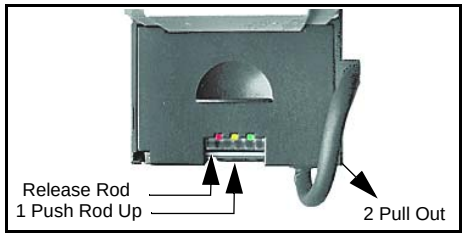
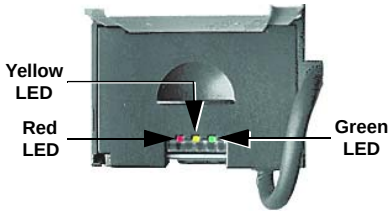


Figure 14 Sensor Module Removal

ERROR CODES

The Figure 15 Table lists the DBV-301 LED Error Code flash definitions.



Sensor Module Error Code Flash Indications

Number of Flashes			Diagnostic Description
Red	Yellow	Green	
OFF	OFF	SOLID	DBV / OK / READY
OFF	1	OFF	CASH BOX FULL / CHECK CASH BOX
2	OFF	OFF	STACKER ERROR / CHECK CASH BOX
3	OFF	OFF	NOTE JAMMED / CHECK NOTE PATH
OFF	4	OFF	NOTE JAMMED / CHECK NOTE PATH
OFF	10	OFF	CASH BOX POSITION / CHECK CASH BOX
OFF	OFF	1-8	LAST NOTE REJECTED / IF PROBLEM PERSISTS EITHER CLEAN NOTE PATH OR CONTACT JCM
OFF	OFF	9-10	LAST NOTE INHIBITED / REJECTED BY DBV OR HOST
OFF	OFF	11-15	LAST NOTE REJECTED / IF PROBLEM PERSISTS EITHER CLEAN NOTE PATH OR CONTACT JCM

Figure 15 DBV-301 Error Codes

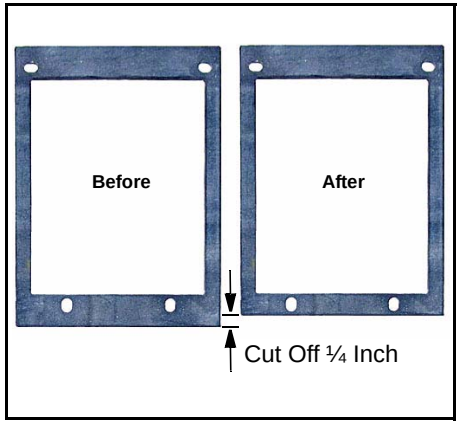


Figure 4 Cut-Off Gasket Bottom

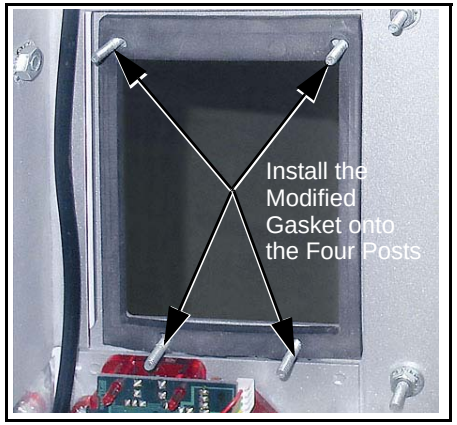


Figure 5 Installing the BV/RC

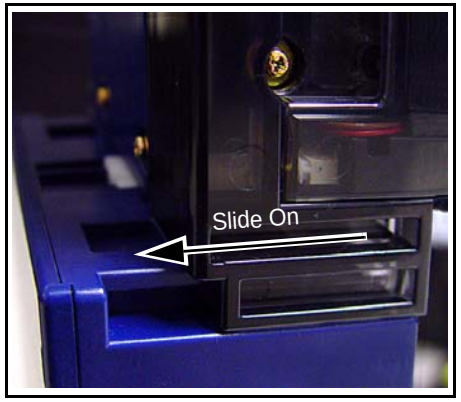


Figure 6 Installing RC onto BV

14. Connect the MDB communication harness to the DBV-30X (See Figure 8 a).

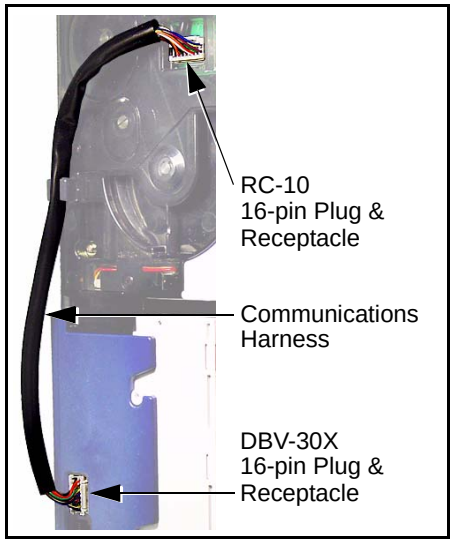


Figure 7 Connect RC to BV Harness

Caution: Tighten mounting nuts until snug. DO NOT Over tighten.

Set all DIP Switches to their appropriate settings as described in the related JCM equipment's installation.

15. Route the new wiring down and to the right of the newly installed DBV-301/RC-10 combination (See Figure 9 b), and secure it in place with the remaining cable ties supplied in the kit (See Figure 9).

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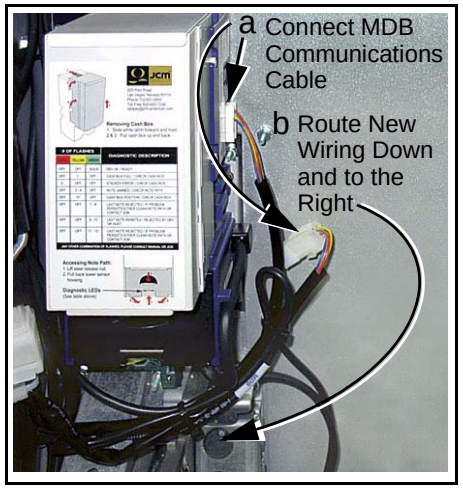


Figure 8 Routing New Wiring

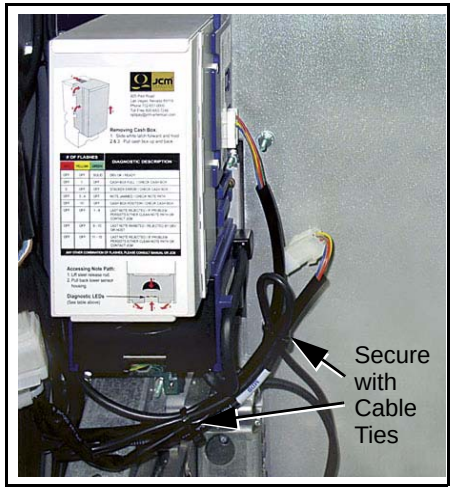


Figure 9 Bundling Cables

MOUNTING INSTRUCTIONS

The DBV-301 Bottle Mask must be mounted flush to the door surface without interference as illustrated in Figure 10a. Tighten the four mounting nuts in the order illustrated in Figure 10b.

Caution: Turn the equipment power OFF before removing or replacing any components.

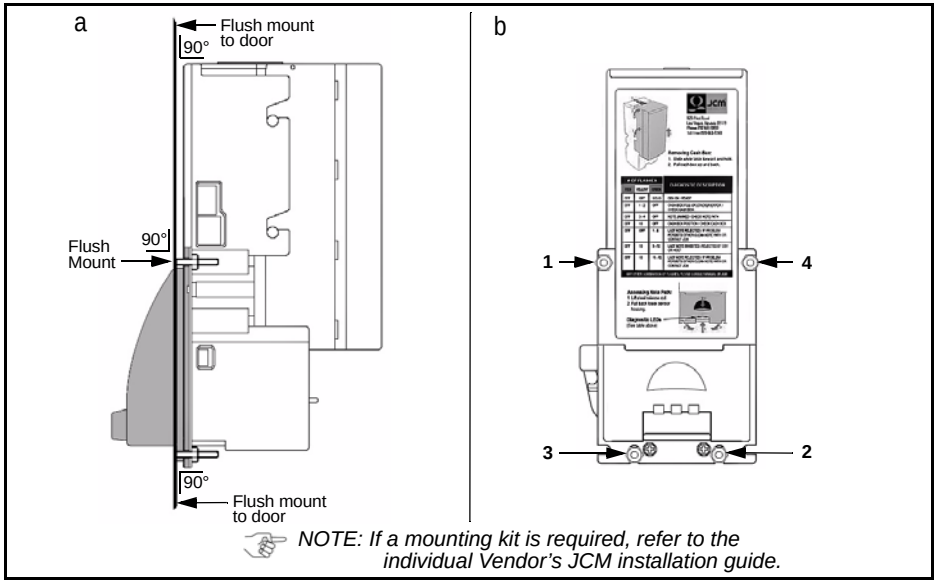
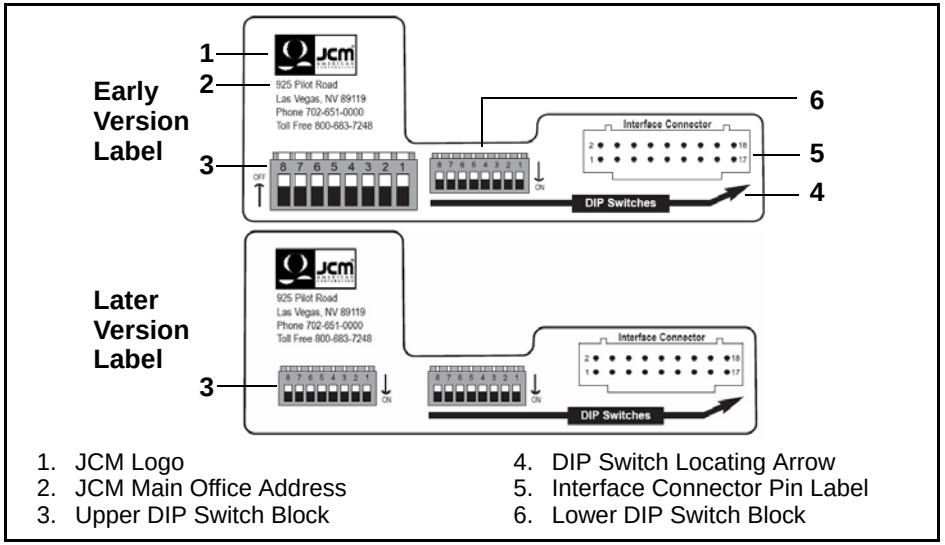


Figure 10 Bottle Mask Mounting Considerations

DIP SWITCH LABELS AND SETTINGS

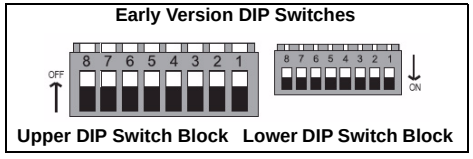
Figure 11 illustrates the label differences between the early and later version DBV-301 DIP Switch Blocks.

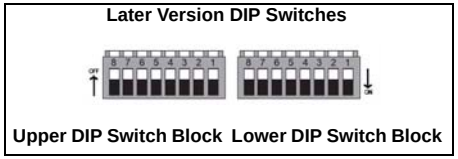


1. JCM Logo
2. JCM Main Office Address
3. Upper DIP Switch Block
4. DIP Switch Locating Arrow
5. Interface Connector Pin Label
6. Lower DIP Switch Block

Figure 11 Early & Later Version DIP Switch Side Label

Figure 12 defines the DBV-301 DIP Switch settings.





Upper 8 position (Large/Red) DIP Switch Block settings are:

1. OFF = Accept $1 ON = Reject $1
2. OFF = Accept $5 ON = Reject $5
3. OFF = Accept $10 ON = Reject $10
4. OFF = Accept $20 ON = Reject $20
5. Always = OFF
6. Always = OFF
7. Always = OFF
8. OFF = Normal ON = Test Mode

Lower 8 position (Small/White) DIP Switch Block settings are:

1. DIP Switches 1-7 Always = OFF
2. DIP Switch 8 OFF = MDB I/F, DIP Switch 8 ON = Pulse I/F*

*See DBV-30X Operations Manual (Part No. 960-000103 Rev.) for Pulse I/F settings.

Figure 12 Default DIP Switch Settings

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