

JetSort® 2000

High-Speed Coin Sorter/Counter

Operating Instructions



Safety Information, Power Specifications

⚠ WARNING

High voltage inside. Risk of electric shock.

Turn power **OFF** and unplug power cord from machine before cleaning.

Do not defeat safety interlock switches.

Do not attempt repairs. Repairs must be made by authorized Cummins Allison personnel.

Plug three-prong grounded plug (supplied) into properly grounded three-prong outlet.

Read and understand all instructions before use.

⚠ CAUTION

Sort disk rotates when motor is running. Risk of injury.

Do not defeat safety interlock switches.

NOTICE

Improper voltage levels can cause equipment malfunction, damage electrical components, and void warranty.

Provide separate circuit serving only this device and follow listed power requirements to ensure proper operation.

Provide power conditioning/stabilizing devices if necessary.

- **Voltage operating range:** 105-130 VAC
- **Frequency:** 50-60 Hz
- **Full load amps (FLA):** 6A
- **Electrical supply circuit:** The customer must provide a single-phase, dedicated power line that meets the machine's power requirements. Use a properly grounded circuit breaker in compliance with applicable local electrical code.

Environmental Operating Conditions

- **Temperature:** 60°F - 85°F (15°C - 29°C)
- **Humidity:** 30% to 70% (non-condensing)

Compliance Acknowledgments

Laser: This equipment may contain Class 2 laser products and complies with FDA Radiation Performance Standards, 21 CFR Subchapter 1 and the international laser safety standard IEC-60825.1-2001-08.

FCC: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Regulatory: FCC

Getting to Know Your JetSort® 2000

Thank you

Thank you for choosing JetSort® high-speed coin sorter from Cummins Allison.

For Your Records

Please fill in the following information for easy reference.

JetSort Model No.	
JetSort Serial No.	
Your Local Cummins Allison office	Address:
	Phone:

JetSort Features

This manual covers all of the standard features and functions for the JetSort 2000 model. Your particular unit may not be equipped with every option.

To learn more, see **Specifications**.

Recommended Maintenance

To learn more, see **Daily Cleaning Procedures**.

Operations

About JetSort

JetSort 2000 is designed to quickly process and count a U.S. coin set of mixed coins, including penny, nickel, dime, quarter, half dollar and dollar (all dollar types except the Eisenhower Dollar).

JetSort has a sorting accuracy of 99.995 percent and processes as many as 3,600 coins per minute. An intuitive display guides users through each coin-processing transaction, after which batch information is displayed. Comprehensive tracking reports provide data to verify transactions, balance processed coin and create historical records.

Various coin collection methods provide a variety of ways to package coin, including boxes, bags, tubes and wrappers.



Other coin processing machines may be available to process and count non-U.S. coins. Please contact your local Cummins Allison representative for additional information and availability.

Operating JetSort

Before turning on the power, check to make certain that there is a coin box in place for each denomination to be counted.

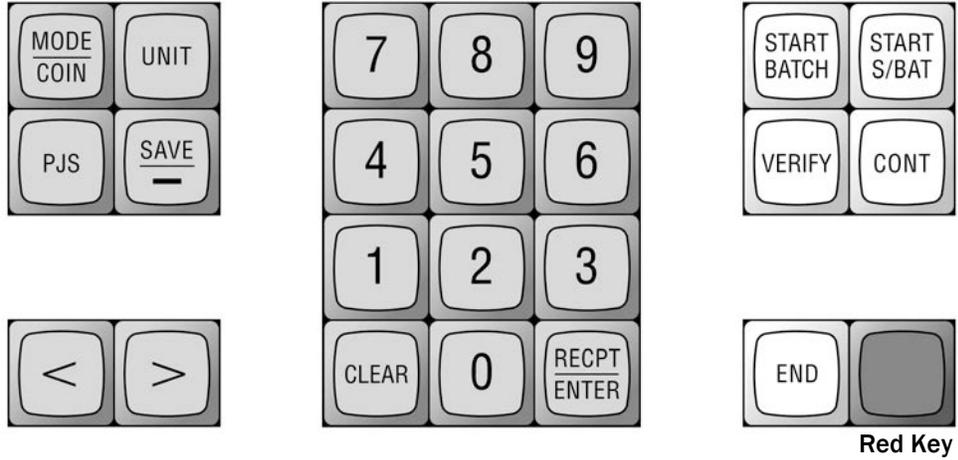
Turn on the main power switch located on the back of the machine next to the power cord.

Press the **START BATCH** key.

Feed coin from the inspection tray into the sorting chamber. A new Batch or Sub-Batch is created by ending the previous, and pressing the **START BATCH** or **START S/BAT** keys.

Control Panel

The control panel includes a numeric keypad and various function keys. Key operations are described below:



Key	Description
MODE/COIN	Enter and exit feature setup mode.
UNIT	Convert displayed dollar value to unit value.
PJS	Access stop-limit settings.
SAVE/-	Save a stop-limit setting. Insert dashes for entry of date labels.
<	Move cursor left.
>	Move cursor right.
CLEAR	Set totals to zero; clear entries.
ENTER/RCPT	Save entries in set up or during coin processing. View coin, receipt or combined totals.
START BATCH	Begin batch.
START S-BATCH	Begin sub-batch.
VERIFY	Count and sort coins without adding amounts to batch, sub-batch or day totals.
CONT	Restart sort head to continue batch or sub-batch
END	End batch and/or sub-batch.
[RED KEY]	Stop coin processing. End <i>Verify Mode</i> . Print reports.

Batch Waiting and Batch Ended Conditions

A *Batch Waiting* condition or *Sub-Batch Waiting* condition is indicated when coin sorting has stopped but has not yet been ended. To end batch processing, press **END**.

Batch Waiting Condition

\$	12.00
BATCH WAITING	

Sub-Batch Waiting Condition

\$	166.55
S/BAT WAITING	

Once **END** is selected, the *Batch Ended* condition appears. From the *Batch Ended* condition, a new batch may be started.

Batch Ended Condition

\$	9219.23
BATCH ENDED	

Sorting Batches and Sub-Batches

Once a batch is started, JetSort may display prompts for additional information. The specific prompts are determined through setup selections. These prompts may include date, label, declared balance or additional media, including notes or checks. When processing a batch, these prompts may be skipped by pressing **RCPT/ENTER**.

Start Batch

1. From the *Batch Ended* condition, press **START BATCH**.

\$	0.00
SORT BATCH	

2. Pour coin from inspection tray into sorting chamber.
3. When coin processing is complete, press [**RED KEY**] to stop or allow the sort disk to stop on its own (timeout).

\$	166.55
BATCH WAITING	

4. To continue adding coin to the batch, press **CONT** and process the remaining coins. To end the batch, press **END**.

\$	1389.34
CONT.	SORT BATCH

\$	9219.23
BATCH ENDED	



If *End* is enabled in setup, the **END** key must be pressed twice to end a batch.

Start Sub-Batch

1. From the batch waiting condition, press **START S/BAT**.

\$	0.00
START S/BAT	

2. Pour coin from inspection tray into sorting chamber.
3. When coin processing is complete, press **[RED KEY]** to stop or allow the sort disk to stop on its own (timeout).

\$	166.55
S/BAT WAITING	

4. To continue adding coin to the sub-batch, press **CONT** and process the remaining coins. To end the batch, press **END**.

\$	1389.34
CONT.	START S/BATCH

\$	9218.23
BATCH ENDED	

Entering Labels



In order to use *Labels*, the feature must be enabled through *Setup*.

Labels may be entered to identify origination or processing information, such as route numbers, bag numbers or customer IDs. If Labels A, B, C or D are enable in *Setup*, an entry is required during batch processing.

1. When prompted, enter the desired label on the numeric keypad. As many as 12 characters may be entered, including the dash (**SAVE/-**).
2. Press **RECPT/ENTER**.

					444-21
	LABEL	A	?		

Entering Declared Balance



In order to use the *Declared Balance* feature for the batch and sub-batch, the feature must be enabled through *Setup*.

The *Declared Balance* feature allows a user to key in an expected amount for a batch or sub-batch for comparison to the actual processed amount.

If *Declared Balance* is set to **Yes**, the declared balance display automatically prompts the user to enter an amount on the numeric keypad.

					\$	0.00
BAT		DECL.	BAL	?		

1. Enter the declared balance for the batch or sub-batch using the numeric keypad and then press **RCPT/ENTER**.
2. When coin processing is completed, press **END** to end the batch.

- The screen displays the batch amount in relation to the declared value. If the amount declared and the amount processed is the same, the total batch amount appears on screen with **EVEN** displayed in the upper-left corner.

EVEN	\$	5.25
BATCH ENDED		

If the amount declared is more or less than the amount processed, the difference between the declared and processed amounts appears on the screen with **SHORT** or **OVER** displayed in the upper-left corner.

SHORT	\$	0.25
BATCH ENDED		

Key	Description
EVEN	Value of processed coin equals declared balance.
OVER	Value of processed coin is more than declared balance.
SHORT	Value of processed coin is less than declared balance.

Entering IDs



In order to use *IDs*, the feature must be enabled through *Setup*.

The ID entry feature is used to track as many as 50 users (or some other variable) through an identifying code (numbers one through 50). A prompt to key in an ID appears as batches and sub-batches are processed. When *ID* is enabled in *Setup*, this is a required field.

- When prompted, enter the user ID (a number from one to 50) on the numeric keypad. Press **RECPT/ENTER**.

ID # ?	32
---------------	-----------

Retrieving IDs

If JetSort is equipped with ID software, totals for individual or collective IDs may be displayed. ID totals are displayed through the **DAY** key. The **DAY** key will switch to ID when pressed.

		\$	00.00
<u>BAT</u>	S/B	BOX	DAY

When the cursor is moved to DAY, "DAY" changes to read "id 0." The value in the upper right hand corner of the display represents the total value of coin processed that "day" for all IDs.

Note: A "day" is defined as the values that have accrued since DAY was last cleared.

To view day totals for individual IDs, the machine must display the *Batch Ended* condition.

1. Type the ID number you wish to view and
2. Press **RECPT/ENTER**.

		\$	00.00
BAT	S/B	BOX	<u>Id23</u>

The upper right portion of the display shows the day total for the selected ID.

View Denomination Totals for an ID

1. From the previous screen, press **MODE/COIN** again.
2. Use the < and > keys to scroll through the denominations.

<u>Id23</u>		\$	00.00
ALL	1 ¢	<u>5 ¢</u>	10 ¢

The display shows the total value for each denomination for that ID.

Clearing IDs

Clear IDs individually or all IDs at once. Clearing all IDs at once will clear the Day.

1. From a Batch Ended screen press the **MODE/COIN** button.
2. Use the < and > keys to scroll to **DAY**.
3. Enter the desired ID number. Leave 0 or enter 0 to clear all IDs.
4. Press the **RECPT/ENTER**.
5. Press the **CLEAR** key.

\$ 00.00
CLEAR idXX TOTAL?

6. When you are prompted for confirmation, press **CLEAR** again.

Press **MODE/COIN** to return to the *Batch Ended* screen and continue processing coin.

Print ID Reports

Print reports include ID totals if the ID feature is available on your machine.

		\$ 00.00	
BAT	S/B	BOX	<u>Id23</u>

To view an individual or cumulative ID total:

1. Press the ID desired. Enter 0 for a report of all ID totals together. Enter 0-0 (appears "id=0") for a report of each ID total.
2. Press the **RECPT/ENTER** key.
3. Press the **[RED KEY]** for three seconds.
4. Press **MODE/COIN** to return to the main screen.

Stop Limits: Programmable Jet-Stops (PJS)

A PJS limit is the amount at which coins stop filling boxes for each denomination. PJS limits can be set to restrict the number of coins within a box or to restrict the value of coins within a box. PJS limits are entered and stored in the JetSort memory via the *PJS* menu. Factory-default limits for the first two settings are (1) FULL and (2) HALF. An additional 97 setting limits may be programmed via the PJS menu.

Preset Full Box Limits			
Denomination	Box Coin Limit	Bag Coin Limit	Value Limit
Pennies	1,000	5,000	\$10/\$50
Nickels	500	4,000	\$25/\$200
Dimes	1,000	10,000	\$100/\$1,000
Quarters	500	4,000	\$125/\$1,000
Half Dollars	200	2,000	\$100/\$1,000
Dollars (SBA)	200	2,000	\$200/\$2,000

View PJS Limits

1. Press **PJS**.
2. Press < or > to select the desired denomination. Shown below, the five cent limit is 500 coins. To reach the 25¢, 50¢, \$1 screen, press < or > until the screen appears.

PJS		500	
ALL	1 c	<u>5</u> c	10 c

3. Press **PJS** to return to the *Batch Ended Condition*.

Recall PJS Limits

1. Press **PJS**.

PJS		ALT FILE	----
<u>ALL</u>	1 c	5 c	10 c

2. With the cursor under **ALL**, enter the file number on the numeric keypad. The limits for each denomination are automatically set to the saved limits.

PJS		FULL FILE	01
<u>ALL</u>	1 c	5 c	10 c

3. Press **PJS**.

Change PJS Limits by Denomination Value



This process changes a denomination limit but does not permanently save the limit. The limit change is valid only until a new limit is used. To set a permanent PJS limit, see *HOW TO USE/Stop Limits: Programmable Jet Stops/Save PJS Limits by File Number*.

1. Press **PJS**.
2. Press < or > to select the desired denomination.
3. Enter the new limit on the numeric keypad. Shown below, the five cent limit is changed to 200 coins. To return to the previous limit press **CLEAR** before proceeding.

PJS			200
ALL	1 c	<u>5 c</u>	10 c

4. Press **PJS** to set the limit or to change the denomination. The limit will be saved until another file is recalled or a new limit is set.

Save PJS Limit by File Number

1. Press **PJS**.
2. Press < or > to select the desired denomination.
3. Enter the new limit on the numeric keypad. Shown below, the five cent limit is changed to 375 coins. To clear the limit press **CLEAR**.

PJS			370
ALL	1 c	<u>5 c</u>	10 c

4. Press **SAVE** to permanently save the new limit.
5. Enter a two-digit number between 03 and 99 that has not been previously assigned.

PJS	SAVE FILE	05
ALL	1 c	5 c
		10 c

Press **PJS**. Note: The new limit must not be lower than the amount of coin already processed into the box or higher than the capacity of the container.

Clear Boxes

Coins accumulate until a box limit is reached. Container limits are set via the Stop Limits: Programmable Jet Stop (PJS) Limits feature of the Setup menu.

JetSort box totals may be cleared when individual box-stop limits are reached, at any time before limits are reached or if desired, all at one time.

Clear Box as Limit is Reached

When a box or bag has reached its stop limit, JetSort stops processing coin and flashes a limit message on the display screen. The limit message displays the denomination that has reached its limit. In the following example, the 25¢ box has reached 502 coins (two coins more than the 500 coin limit).

	502
LIMIT	25 c

1. To clear the box, press **CLEAR**. The number in the upper right-hand screen indicates the number of coins over the stop limit. These coins must be removed from the box and moved to the new, replacement box.

	2
CLEAR 25 c BOX?	

2. Transfer the overage (number of coins in the upper right-hand screen) to the new box.
3. Press **CLEAR**.
4. Press **CONT** to continue coin sorting.

Clear Box before Limit is Reached

A box may be cleared before a limit is reached in order to reduce the number of stops during sorting.

1. Remove the box to be cleared and replace it with an empty box.
2. Press **MODE/COIN**.

		\$	144.20
BAT	S/B	<u>BOX</u>	DAY

3. Press < or > until the cursor is under **Box**.

BOX		\$	144.20
ALL	1 c	5 c	<u>10 c</u>

4. Press **MODE/COIN**.
5. Press < or > to the denomination to be cleared.
6. Press **CLEAR**.

			0
CLEAR		10 c	<u>BOX?</u>

7. Press **CLEAR** again to clear box and return to the *Batch Ended* condition.

Clear All Boxes

1. Remove boxes and empty or replace with empty boxes.

		\$	144.20
BAT	S/B	<u>BOX</u>	DAY

2. Press **MODE/COIN**.
3. Press < or > until the cursor is under **Box**.

4. Press **MODE/COIN**. Cursor defaults to **ALL**.
5. Press **CLEAR**.

BOX		\$	144.20
<u>A</u> LL	1 c	5 c	10 c

BOX		\$	144.20
CLEAR ALL BOXES?			

6. Press **CLEAR** again to clear boxes and return to the *Batch Ended* condition.

Clear DAY Totals

1. Press **MODE/COIN** to move cursor to bottom line.
2. Press < or > until the cursor is under **DAY**. Write down or otherwise record **DAY** total.

		\$	322.42
BAT	S/B	BOX	<u>DAY</u>

3. Press **MODE/COIN** to clear DAY totals by denomination.
4. Press **CLEAR** to clear all DAY totals.
5. Display prompts for confirmation.

		\$	322.42
CLEAR DAY TOTAL?			

6. Press **CLEAR** a second time to confirm. All day, batch and sub-batch totals are now cleared to zero. Box totals are unaffected.

		\$	0.00
<u>B</u> A T	S/B	BOX	<u>DAY</u>

7. Press **MODE/COIN** twice to exit.

Display Totals

1. From a *Batch Ended Condition*, press **MODE/COIN**.

		\$	0.00
BAT	S/B	BOX	<u>DAY</u>

2. Press < or > until the cursor is under the desired mode (see mode descriptions below).

Mode	Description
BAT	Total coin value of current batch.
S/B	Total coin value of current sub-batch.
BOX	Total coin value of all boxes.
DAY	Total value of coins processed since Day Total was last cleared.
Id XX	DAY total by user ID (if enabled in <i>Setup</i>).



To view individual ID totals, enter ID # and press RCPT/ENTER.
To view combined total of all IDs, enter "0" and press RCPT/ENTER.

3. With the mode selected (cursor under desired mode), press **MODE/COIN** to display the total for each denomination. Press < or > to scroll through all denominations, including the second screen for denominations of 25c 50c, and \$1.

BOX		\$	0.00
<u>ALL</u>	1 c	5 c	10 c

BOX		\$	25.00
<u>25 c</u>	50 c	\$1	

4. Press **MODE/COIN** to exit.



Selecting UNIT while denominations are displayed toggles the values between total dollars and the number of coins.

View Coin, Receipt or Combined Totals

Select **RCPT/ENTER** to view totals for coin only, receipts only, or receipts and coins combined for current batch, sub-batch or day total. Display identifies total type:

\$	1289.34
BATCH WAITING	

RCTS	\$	100.00
BATCH WAITING		

R&C	\$	1389.34
BATCH WAITING		

Mode	Description
BLANK [COIN]	Total coin value of current batch.
RCTS	Total receipt value, including currency, checks, travelers' checks, rolled coin and tickets.
R&C	Total of combined receipts and coins

Printed Report

The following is an example of printed reports representing a single batch composed of two sub-batches.

All data fields in the example are enabled in *Setup*. Only fields enabled in *Setup*, the field does not appear on the printed report.

SUB-BATCH REPORT		
DATE:	3-18-11	
AUDIT:	00144-0120-001	
B.	475	
C.	2	
ID:	12	
	UNIT	VALUE
COIN TOT.	24	0.98
CHECKS		123.39
CURRENCY		527.00
MISC.		20.00
TOTAL RECEIPTS		670.37
GRAND TOTAL		<hr/> 671.37

Verify Counts

Coins may be sorted and counted without adding the amount to the batch, sub-batch or day totals.

1. From a *Batch Ended* condition, pour coins to be counted into inspection tray. Press **VERIFY**.

\$ 0.00 VERIFY
--

2. Press [**RED KEY**] or wait for process to timeout. Record the amount.

\$ 155.21 VERIFY WAITING
--

3. Press **VERIFY** a second time to return to current operating condition.

\$ 1278.46 BATCH ENDED
--

Setup



Setup menu screens are sequential. To set or change a programmed feature, press < or > to scroll through the menu selections until the desired feature menu is reached.

Once the desired feature is modified, press **MODE/COIN** to return to the menu selections. Press < or > to scroll through remaining features or turn the JetSort off to exit.

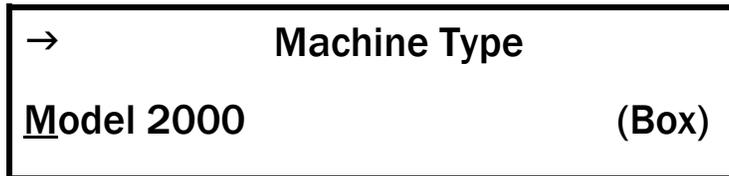
Access Setup Menu

1. Turn the power switch off (power switch is located on the back of the machine next to the power cord).
2. Press and hold **START BATCH**.
3. Turn the power switch on.

Machine Type

Machine Type menu configures JetSort for the correct coin collection. The selection in this screen also sets the default setting for the *Box/Bag* menu. Box and bag settings for each denomination may also be independently set as shown in *SETUP/Set Specific Denominations to Box or Bag*.

1. To configure box or bag, press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to choose between a **Box** or **Bag** model.



Stop Limits

The *Stop Limits* menu sets the box- and bag-stop limits to **Full** (full boxes or full Federal bags), **Half** (half boxes or half Federal bags) or **Infinity** (no limit).

1. To configure stop limits, press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to choose **Full**, **Half** or **Infinity**.



Set Specific Denomination to Box/Bag

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press < or > to scroll forward to the desired denomination: **1¢**, **5¢** or **10¢**.
3. Press **CONT** to change the specific denomination to **Box** or **Bag**.

→ 1¢	5¢	10¢
Box	<u>B</u> ag	Box

4. Press **MODE/COIN** to move cursor to the top menu line.
5. Press > to scroll forward to the next set of denominations and repeat steps one through three.

→ 25c	50c	\$1
Bag	<u>B</u> ox	Box

Declared Balance

The *Declared Balance* menu allows the declared value to be compared to actual value at the end of each batch or sub-batch.

If the declared batch/sub-batch is set to **Yes**, each user is prompted to enter a declared value while processing coin. For more information about using declared balances, see *HOW TO USE/Declared Balance*.

1. To set the declared-balance feature to **Yes** (enabled) or **No** (disabled), press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press < or > to scroll forward to the desired selection: **BAT** (batch) and/or **S/B** (sub-batch).
3. Press **CONT** to select **Yes** or **No**.

→ DBal	BAT	S/B
	<u>Y</u> es	No

Currency, Checks and Miscellaneous Media

The JetSort allows users to enter, as part of a batch and sub-batch, values for other media, such as currency, checks, and miscellaneous media (MISC) - including but not limited to: travelers' checks rolled coin and tickets.

Each menu has three modes: **Dollars And Cts**, **Dollars Only** and **No**. These modes refer to allowable decimal places for each value. The setting for **Dollars And Cts** allows the user to enter values less than whole dollars. The setting for **Dollars Only** allows the user to enter only whole dollars. The setting for **No** disables entry of any additional media.

- The value of \$10.00 in *Dollars And Cts* mode is entered on the keypad as **1-0-0-0**.
- The value of \$10.00 in *Dollars Only* mode is entered on the keypad as **1-0**.

Each mode, *Currency*, *Checks* and *MISC* media, have separate feature menus in the *Setup* menu. Set each feature as follows:

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Dollars And Cts**, **Dollars Only** or **No**.

→	CHECKS <u>D</u> ollars And Cts
---	--

→	CURRENCY <u>D</u> ollars Only
---	---

→	MISC <u>N</u> o
---	---------------------------

Labels

The *Label* menu allows users to identify batches and sub-batches on printed reports in four user-defined categories. Labels, such as route numbers, bag numbers or customer #s may be entered for each batch or sub-batch. Each label may have as many as 12 digits Label information is entered during batch processing and is not stored in long-term memory.

Labels will print within batch and sub-batch reports according to the following descriptions.

Label Heading	Description
A	Batch label: only appears in printed batch reports.
B	Batch/Sub-batch label: appears in printed batch and sub-batch reports.
C	Sub-batch label: only appears in printed sub-batch reports.
D	Sub-batch label: only appears in printed sub-batch reports.

Turning Labels On/Off

Each label may be set independently. The default for each setting is **Off**.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press < or > to scroll forward to the desired selection: **A**, **B** or **C**.
3. Press **CONT** to select **On** or **Off**.

→ A:	B:	C:
Off	<u>On</u>	Off

Label D

Label D is set independently. The default for each setting is **Off**.

1. Press **MODE/COIN** to move the cursor to the bottom menu line under **Off**.
2. Press **CONT** to select **On**.

→ D:	DATE
<u>Off</u>	Off

Date

The *Date* menu may be **On** or **Off**. If the date option is on, the user is prompted to enter a date at the beginning of a new batch, after clearing DAY totals. Dates are entered on the numeric keypad, followed by **Enter**. Dashes may be used between characters (MM-DD-YY). Select **SAVE/-** for the dash. When *Date* is enabled in Setup, this is a required field.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press < or > to scroll forward to the desired selection: **Date**.
3. Press **CONT** to select **On** or **Off**.

→ D:	DATE
Off	<u>O</u> n

ID Codes

The user *ID* feature is used to segment information into units. IDs can be used to identify units, including users, products, routes or market segments. The user is prompted to enter the ID at the beginning of a new batch or sub-batch. When *ID* is enabled in Setup, this is a required field.

Batches and sub-batches can be cleared while the totals remain in memory for each ID. Up to 50 IDs can be assigned a numeric identifier, beginning with the number one (“01”).

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Yes** or **No**.

→ ID Codes:
<u>Y</u> es

End Key Requirement

Setting the *End Key* requirement impacts the user process for closing batches and sub-batches.

End-Key Requirements	Description
Yes, Needed	The user is required to select End following each sub-batch. The next sub-batch cannot begin until End is selected. The user selects End a second time to end a batch.
Not Needed	The user is not required to select End to end a sub-batch. Sub-batches are initiated when Start S/Batch is selected at the next use. The user selects End once to end a batch.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Yes, Needed** or **Not Needed**.

→ End Key ?
Not Needed

→ End Key ?
Yes, Needed

End-Batch Display

The *End Batch Display* may be set to display the total batch amount or to display zero. If set to **Total Amt**, the total batch or sub-batch amount displays following each coin-processing transaction. If set to **Zero**, “0” displays following each batch or sub-batch.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Total Amt** or **Zero**.

→ End Bat Display
Total Amt.

LCD Contrast

The *LCD Contrast* (screen contrast) may be adjusted as desired. Contrast settings range from **01** to **15**. Setting changes can be viewed on the screen during adjustment.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select a setting between **01** and **15**.



Auto Oiler (Optional)

JetSort has an optional auto oiler for high volume U.S. gold dollars or with non-U.S. coin sets. If the machine is installed with an oiling kit, the *Oil* option should be **On**. This setting allows a small drop of oil to be dispensed onto the sorting disk to lubricate coins.

The amount of oil dispensed onto the sorting disk is determined by the volume of coin processed. The *Coin* setting may be set from 1 to 99. This numeric setting represents “coins in oil per thousand.” A setting of 4 or 5 is recommended for standard use. For example, if 4 is entered, a drop of oil will be dispensed every 4,000 coins. For additional information about coin-volume settings, contact a Cummins Allison representative.

The *Pulse* determines the length of time the auto oiler motor will be on when it is activated to dispense oil. In most circumstances, the factory setting of .10 (one-tenth of a second) is recommended.

Press **MODE/COIN** to move the cursor to the bottom menu line.

1. Press **CONT** to select **On** or **Off**. If **On** is selected, proceed to steps 3 and 4. If **Off** is selected, exit feature menu.
2. Press **>** to scroll forward to **Coin**. Enter numeric setting as recommended by a Cummins Allison Service Representative. Press **RCPTS/ENTER**.
3. Press **>** to scroll forward to **Pulse**. Enter numeric setting as recommended by a Cummins Allison Service Representative. Press **RCPTS/ENTER**.



Prime and Check Oiler

The *Shot* and *Prime* features are used for initial auto oiler setup. *Shot* dispenses one drop of oil onto the sort head.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **On** to dispense one drop of oil onto the sort head. Wipe off any excess oil with a soft cotton cloth and discard the cloth when finished.

Prime ensures that oil is correctly running through the oiler hose and that air pockets are removed from the oil tube.

3. Press < or > to scroll forward to **Prime**.
4. Press **CONT** to select **On**.

→ Oil	Shot	Prime
	Off	Off

Print Format 1

JetSort reports are generated to match user-selected features and configurations. The report modes listed below are based on standard options; actual reports may vary, depending on which options are selected in *Setup*.

Print Mode Setting	Description
Print Mode 1	Includes date; randomly-assigned audit number, sequential batch and sub-batch numbers; custom labels, ID, coin units and total (not by denomination), media totals; and declared balances (with over/short amount).
Print Mode 2	Includes Print Mode 1 items plus coin units and totals by denomination for batches and sub-batches.
Print Mode 3	Includes randomly-assigned audit number; sequential batch and sub-batch numbers; and total amount processed.
Print Mode 4	Includes total processed value.

Report printing may be set to **Auto** or **Dmnd**.

Report Setting	Description
Auto	Batch and sub-batch reports print automatically following the end of each closed transaction.
Dmnd	Setting not used.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Mode 1, 2, 3** or **4**.
3. Press **<** or **>** to scroll forward to **Format (1)**.
4. Select **Auto** or **Dmnd**.

→ Print	Format (1)
Mode 1	Auto

See examples that follow (next page).

Print Mode 1

SUB-BATCH REPORT

DATE: 3-18-11
AUDIT: 00144-0120-001

B: 475
C: 21
ID: 12

	UNIT	VALUE
COIN TOT.	24	0.98
CHECKS		123.39
CURRENCY		527.00
MISC.		20.00
TOTAL RECEIPTS		670.37
GRAND TOTAL		671.37

SUB-BATCH REPORT

DATE: 3-18-11
AUDIT: 00145-0120-002

B: 475
C: 17
ID: 3

	UNIT	VALUE
COIN TOT.	57	7.63
CHECKS		75.23
NOTES		373.00
GIFT CARDS		0.00
TOTAL RECEIPTS		448.23
GRAND TOTAL		455.86

BATCH REPORT

DATE: 3-18-11
AUDIT: 00145-0120-002

A: 475
B: 2

Id #	RCPTS	TOTAL
12	670.37	.98
3	448.23	455.86

	UNIT	VALUE
COIN TOT.	106	8.61
CHECKS		198.62
CURRENCY		900.00
MISC.		20.00
TOTAL RECEIPTS		1,118.62
GRAND TOTAL		1,127.23

Print Mode 2

BATCH REPORT

DATE: 3-18-11
AUDIT: 00145-0120-002

A: 475
B: 2

Id #	RCPTS	TOTAL
12	670.37	.98
3	448.23	455.86

COIN	UNIT	VALUE
0.01	36	.36
0.05	9	.45
0.10	8	.80
0.25	28	7.00

UNIT	VALUE
COIN TOT.	81 8.61
CHECKS	198.62
CURRENCY	900.00
MISC.	20.00
TOTAL RECEIPTS	1,118.62

GRAND TOTAL	1,127.23
-------------	----------

Print Mode 3

00154-0125-001 SB	353.16
00155-0125-002 SB	39.52
00156-0125-003 SB	367.78
00157-0125-004 SB	228.47
00157-0125-004 B	988.93

Print Mode 4

353.16
39.52
367.78
228.47
988.93

Print Format 2

Print Format 2 has two features: 1) *ID Breakdown* and 2) *Red Totals*. The *ID Breakdown* feature details each transaction by user ID on printed reports. To properly record IDs for this printed report, the *ID Codes* feature must also be **On** (for more information, see *SETUP/ID Codes*). The *Red Totals* feature highlights specific totals on reports by using red and black ink (see table below).

ID Breakdown

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **id Brkdn** or **NO id Brkdn**.
3. Press **<** or **>** to advance to **Format (2)**.

→ Print	Format (2)
id <u>B</u>rkdn	Red-

→ Print	Format (2)
<u>N</u>o id Brkdn	Red1

Print Red Totals

The *Red Totals* setting allows the user to select red ink on printed reports for totals and IDs.

Ink Setting	Description
Red-	Reports print in black ink.
Red 1	Fields that are printed in red ink when a Citizen IDP560 RSL serial printer is used: A: B: C: D: GRAND TOTAL DECLARED BALANCE VARIANCES
Red 2	N/A

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Red -, Red1, or Red2**.

→ Print	Format (2)
id <u>B</u>rkdn	<u>R</u>ed2

Communication Mode/Protocols

There are four Communication Protocols available when transmitting data from the JetSort to a computer. They are **Immediate**, **Polled**, **Immed + Lim** and **Poll + Lim**.

Communication Protocols	Description
Immediate	JetSort initiates all transmissions: Reports are sent through the communication port as soon as they are generated whether by keystroke or bag limit warning.
Polled	Receiving computer initiates all transmissions: The receiving computer must poll the JetSort for data. The JetSort can store only the last sub-batch or batch. If another batch or sub-batch is started, the JetSort will push the report through whether or not the computer is ready to receive it.
Immed + Lim	Totals plus bag limits that were reached are immediately sent upon ending batch
Poll + Lim	Totals plus bag limits are sent when computer polls JetSort.

There is also a communication option: **Acknowledgement**.

Communication Option	Description
Acknowledge (+ ACK)	“+ACK” is the factory-default setting. JetSort has the option of receiving a "handshake" signal from the receiving device (computer). To receive an acknowledgment, enable the ACK function by selecting +ACK . If JetSort does not get a response from the computer, “Comm Link Error” appears.
(- ACK)	Disable Acknowledge option.

→ Comm Mode:

Immediate

-Ack



Consult a Cummins Allison representative to set communication mode protocols.

Communication Report/Data Transmission (Optional)

Data from the JetSort is sent to the computer in the form of a report. There are two different modes to which the JetSort can be programmed.

Data Transmission	Description
Normal	Standard computer protocol will be generated.
Wedge	The machine interfaces to the Cummins Allison Software Wedge.

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select **Normal** or **Wedge**.



Brake Setting

The *Brake Setting* cannot be changed.

Communication Ports

JetSort has four communication ports for peripherals such as remote display, printer, computer, bar-code reader, JetScan™ or JetCount®. In order to connect a peripheral device to the JetSort, select the appropriate data transmission functions, such as baud rate, stop bits and parity. For more information, contact your local Cummins Allison Representative.

Device Options	Description
Prt	Printer
Co	Computer
Bcr	Bar-code reader
JtS	JetScan™ currency scanner
JtC	JetCount® currency scanner
Rmt	Remote display – available on Port 1

To change port configurations for *Port 1*, *Port 2*, *Port 3* or *Port 4*:

1. Press **MODE/COIN** to move the cursor to the bottom menu line.
2. Press **CONT** to select device: **Prt**, **Co**, **Bcr**, **JtS**, **JtC Rmt** or **Off**.
3. Press **>** to scroll forward to **Baud Rate**.
4. Select rate to coincide with how baud rate is set on the connected device: **600**, **1200**, **2400**, **4800** or **9600**.
5. Press **>** to move to **Stop Bits and Parity**.
6. Select stop bits and parity to coincide with how they are set on the connected device: **7, Odd**; **7, Evn**; **7, NP**; **8, Odd**; **8, Evn**; or **8, NP**.

→ **PORT 1 SETUP:**

JtS **1200,** **7, Odd**

Reference

Error Recovery

If a jam occurs while sorting coin, or if there is a sensor malfunction, the JetSort immediately stops, the red error light flashes and the display blinks one of two error messages:

- **SENSOR ERROR** – jam has occurred at the sensor
- **TABLE ERROR** –table has stopped rotating or slowed.

NOTICE

Using metallic tool could cause sensor damage.
Always use non-metallic tool.

Sensor Error Recovery

Sorting Halted
SENSOR ERROR

1. Press **CLEAR** to determine location of the obstruction.

CLEAR
10¢ SENSOR

2. Remove the inspection tray and, using a **non-metallic** tool, clear the blocked sensor.
3. If the sensor has not been adequately cleared or another sensor is blocked, the blocked sensor is indicated on the screen. Repeat step two.

If the sensor has been cleared, the **VERIFY OR CONT** screen appears.

4. To continue transaction, press **CONT**. If verification of processed coin is necessary, follow the instructions under Reconcile Batch – after **Table Error Recovery**.

SENSOR CLEARED
Verify Or Cont

Table Error Recovery

Sorting Halted TABLE ERROR

1. Remove the inspection tray and, using a **non-metallic** tool, clear all loose coin from sort disk area.
2. Press **CLEAR** to clear the error.
3. The message “SENSORS CLEARED, Verify or Cont” will appear.
4. . To continue transaction, press **CONT**.
5. If verification of processed coin is necessary, press the Verify key and follow the instructions under Reconcile Batch.

	\$	322.25
CONT.	SORT	BATCH

Reconcile Batch

1. To verify the transaction after a jam, empty all coin from all boxes/bags into inspection tray.
2. Press **VERIFY** to begin sorting coin.

	\$	723.41
RECONCILE		

3. Press [**RED KEY**] or wait for process to timeout. Record the amount.

	\$	723.41
RECON WAITING		

4. Press **VERIFY** a second time. Display returns to current operating condition.

	\$	322.25
BATCH WAITING		

5. Press **END** to end the current batch or **START S/BAT** for the next transaction.

Daily Cleaning Procedures

Daily cleaning of JetSort machines is recommended to ensure maximum productivity and reliability.

Recommended Cleaning Materials

CAUTION

Simple Green, the recommended cleaning agent, can be an eye irritant. Avoid eye contact. If eye contact occurs, flush eye(s) with cool water for 5 minutes – remove contact lenses if present – continue flushing eye (s) with cool water for 15 more minutes. If irritation persists, consult physician.

Individuals with sensitive skin should rinse hands after using.

- Simple Green Safety Towels. (Part number: 022-2118-00.) A pre-moistened microfiber towel also may be used. If using Simple Green concentrate, dilute to: 30 ml of Simple Green per 240 ml of water. For material-safety-data sheets, see simplegreen.com.
- Microfiber towels. (Part number: 022-2223-00.)
- Vacuum cleaner. (In the United States: Order standard vacuum part number 022-1959-00 or heavy-duty vacuum part number 022-1308-00. Outside of the United States: Buy vacuum locally.)

Daily Cleaning

WARNING

High-voltage levels may be present. Risk of electric shock.

Turn power OFF and unplug power cord from machine before cleaning.

NOTICE

To avoid machine/component damage and potential voiding of existing warranty, follow these procedures:

Only use the specified tools for cleaning machine. Never use metal tools.

If using Simple Green concentrate, dilute to: 30 ml of Simple Green per 240 ml of water.

Never use cleaners containing ammonia. Ammonia may remove labels from machine.

Never spray cleaners directly on machine components.

Cleaning JetSort Sorting Chamber

NOTICE

Clean sort disk only as instructed. Do not attempt to remove oil coating on disk. Removing oil from disk negatively impacts performance and may negate disk warranty.

If disk cannot be cleaned with a clean, dry microfiber towel or cotton cloth, contact a Cummins Allison service representative for assistance.



Never wipe sort disk or pad, except as instructed in this document.

1. Remove coin tray to access the inside of the machine.
2. Remove any stray coins or other objects by hand.
3. Vacuum interior areas to remove accumulated dust or debris.
4. Raise and inspect sort disk.
5. Remove any debris by hand and clean disk if needed using dry microfiber towel, a clean cotton cloth, or a soft, non-metallic brush.

NOTICE

Sort head damage can result from using metallic brush.

Use only soft, non-metallic brush as instructed by a Cummins Allison representative.

To prevent damage and to maintain coin-sorting function as designed, do not brush sort pad that rests on lower disk.

1. Lower sort disk and secure latch.



Correct: disk is secured



Incorrect: disk is not secured

2. Reinstall tray and secure in place.
3. Clean remaining **exterior** surfaces as needed with a Simple Green Safety Towel. If using Simple Green concentrate, dilute 1 part Simple Green with 8 parts water. Apply with microfiber towel.

Safety Messages and Advisories

Icon	Definition
	Warning indicates a hazardous situation which, if not avoided, could result in death or serious injury.
	Caution indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
	Notice is used to address practices not related to personal injury. In this manual, notice indicates a situation which, if not avoided, could result in property damage.
	Highlights a situation where an incorrect action or sequence of actions could lead to lost or inaccurate data, operation in an incorrect mode, or unintended outcomes in machine function.
	Highlights information that is necessary or useful to know prior to executing a procedure.
	Highlights information that is interesting or useful to know after completing a procedure.

Specifications

JetSort 2000	
Accuracy	99.995+ percent (one mis-sort possible in 20,000 normal/undamaged circulated coins)
Denominations/Coin Collection	1 cent single box/bag 5 cents single or box/bag 10 cents single or box/bag 25 cents single or box/bag 50 cents single box/bag \$1 single box/bag
The \$1 denomination includes the Susan B. Anthony, Sacagawea, and presidential dollar coins. Eisenhower dollar coins cannot be counted.	
Pre-Set Box Limits	Factory settings: full, half, and infinity User programmable: any amount
Dimensions (Approximations)	19.6" wide, 20.5" deep, and 18.5" high 74.2" wide with security doors open
Weight of Machine	125 lb.
Power Requirements	105-130 VAC; 50/60 Hz
Sorting Speed	2,400 mixed coins per minute 3,600 dimes per minute
Cabinet Color	Charcoal gray



852 Feehanville Drive
Mt. Prospect, IL 60056
800 786 5528
cumminsallison.com

© 2014 Cummins-Allison Corp. All rights reserved.

All trademarks remain the property of their respective owners.

Cummins-Allison Corp. has endeavored to make the content of this document accurate and complete, but this information is subject to correction or change without prior notice.

This manual contains proprietary information of Cummins-Allison Corp. It is intended solely for the information and use of parties authorized by Cummins Allison to maintain the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without express written permission of Cummins Allison.

022-7017-00 REV. C