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PhyzBatch-9000

USER MANUAL

The latest version of this document can be found at : <https://support.tcgmachines.com/knowledge/user-manual>

SAFETY

SETUP

USAGE

MAINTENANCE

Thank you for acquiring a PhysBatch-9000! Our vision is to provide the fastest, most capable, and most trusted trading card processing machine in the world. Your support makes this possible!

Your satisfaction is important to us.

If you have questions or concerns, please reach out either through the contacts listed below, or by making a Support ticket through your account. We're here to help with everything from troubleshooting and maintenance tips to usage or general inquiries.

Office hours are Monday to Friday, 9:00AM to 5:00PM MST/MDT

Phone	North America - 587.600.8244
Email	North American Support – support@tcgmachines.com
	United Kingdom Support – support.uk@tcgmachines.com
	General Inquiries – info@tcgmachines.com
Knowledge Base	https://support.tcgmachines.com/knowledge/

The **PhysBatch-9000** is a card sorting machine designed and intended for **scanning, identification, appraisal, digital cataloging, and physical separation** of trading card game (TCG) cards.

The automated handling of trading cards relies on proper setup to achieve consistent operation. Read this manual prior to setting up or operating the **PhysBatch-9000** for important information on installation, usage and maintenance.

SAFETY

The user/operator is solely responsible for ensuring the PhysBatch-9000 is used as intended and described within this manual. Any operation of the PhysBatch-9000 outside of the intended use is considered misuse and may void the protections and warranty provided by TCG Machines.

Grounding	The PhysBatch-9000 has a 3-prong, grounding power cable which must be plugged in to a grounded outlet. Failure to do so may result in bodily harm as well as damage to the machine.
Movement	Do not touch moving parts, do not move the PhysBatch-9000 when in operation.
Water	The PhysBatch is an electrical device. Do not expose to water or operate it while wet. There is risk of bodily harm and or damaging the machine.
Damage	Do not use the PhysBatch-9000 if any component, element or module is damaged or missing.
Modification	Do not modify the machine. The use of accessories or attachments not authorized by TCG Machines may result in bodily harm or physical damage to the equipment.
Age	Individuals under the age of majority should be supervised to ensure the proper use of the PhysBatch-9000.



The PhysBatch-9000 contains moving parts during operation. Avoid contact with the conveyor and scanner interior during operation to prevent injury.



In case of malfunction, flip the power switch located on the front of the machine to the off position to shut down the robotic functions of the machine. The PhysBatch is equipped with a 2A fuse located near the power receptacle.



Do not, under any circumstances, place your sensitive organs into or onto the machine. Irreparable harm and embarrassment are possible.

CAN ICES-003(B) / NMB-003(B)

This Class B digital apparatus complies with Canadian ICES-003
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

FCC Suppliers Declaration of Conformity (United States)

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.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

SETUP



The PhysBatch weighs approximately 34 kg (75 lbs). Any change in location should be performed by two individuals.

Retain the packaging and all foam for return shipping.

For complete text setup instructions and video go to:
<https://support.tcgmachines.com/knowledge/getting-started-with-your-physbatch>

The following equipment comes with your PhysBatch-9000.



- 1 Hopper Extension w/lid, thumbscrews
- 2 Removable Bin (Bin 1)
- 3 Power Cable
- 4 Card Weight
- 5 Cleaning Wipe Pack (*consumable*)
- 6 Cleaning Sponges (10, *consumable*)
- 7 Replacement Screw Package
- 8 O-Ring Straightener Tool
- 9 Spare Fuse (*consumable*)
- 10 Replacement Cogs and Bearings (2 each)
- 11 Replacement Glass Pane (*consumable*)
- 12 Allen Key Set (1, 2, 2.5, 3, 4, 5mm)
- 13 Front Bay Feed Tail Set (tail, mount, screws, washer, thumbscrew, 2 each)
- 14 Replacement Bearings (2)
- 15 Feed System Tail Spacer

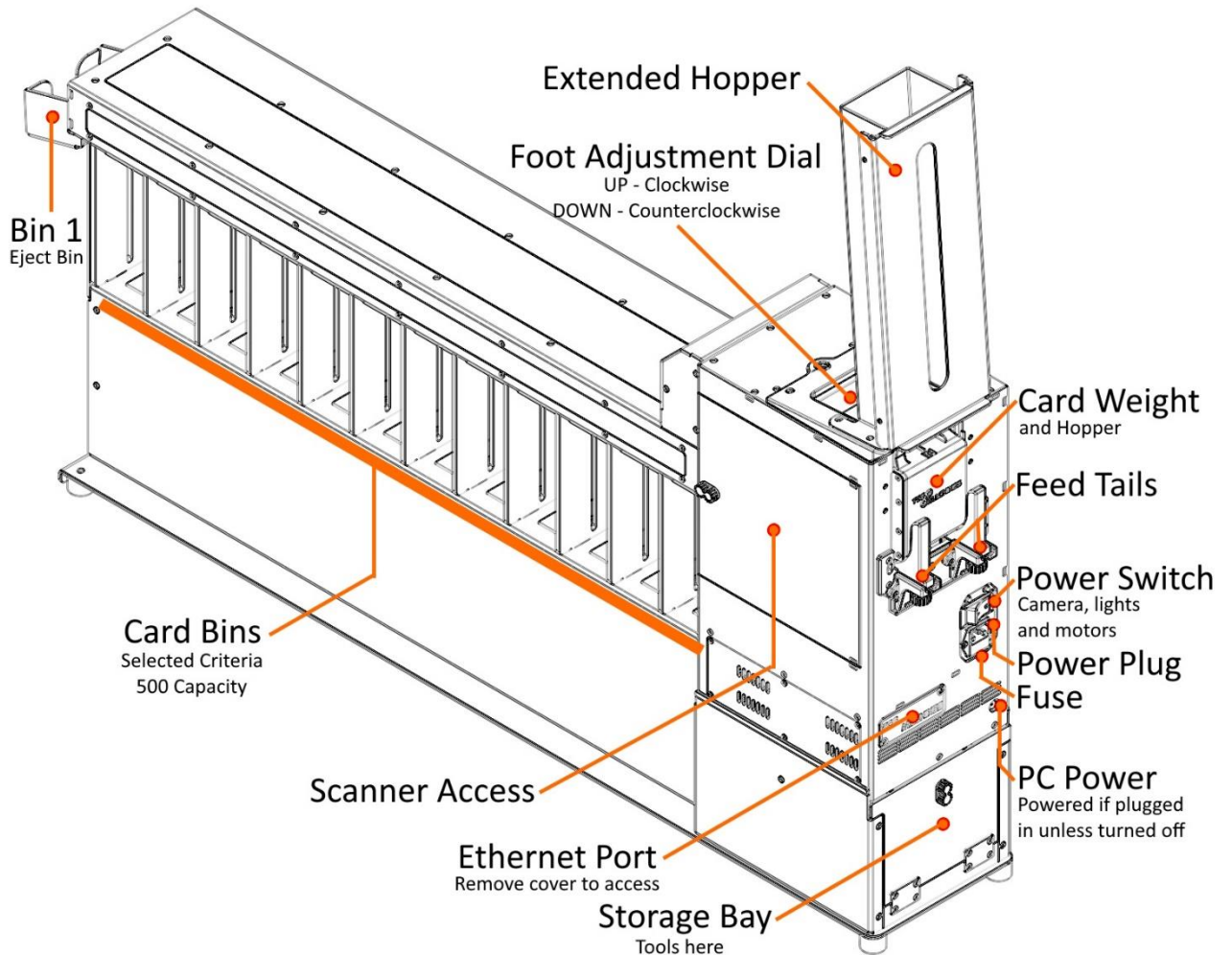


Parts and consumables are in the front bay of the machine. Rotate the latch to access.

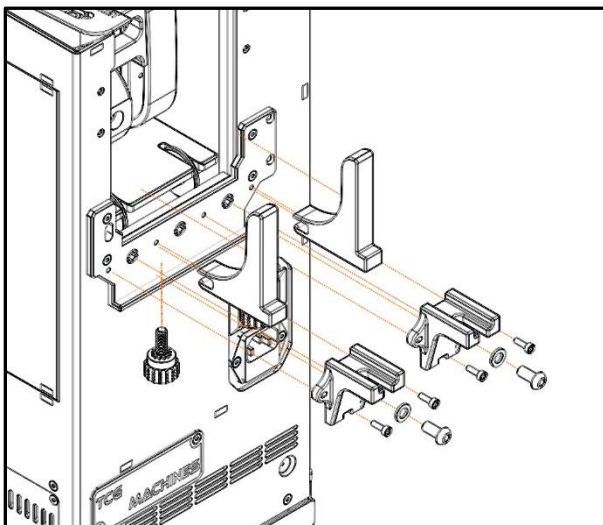
The **Knowledge Base** can be found at the following address:
<https://support.tcgmachines.com/knowledge>

The Knowledge Base is a collection of guides, videos and troubleshooting steps regarding your PhysBatch. It is publicly available on any device with an internet connection.

PhyzBatch Overview



Feed Tail Installation



- 1 Install the two Feed Tail Mounts, using one 5mm screw and two 2.5mm screws
- 2 Install the two vertical Feed Tail sections as shown, using the thumb screw.
- 3 Use the provided Feed System Tail Spacer to set the correct Tail distance from the hopper. See Page 5 for reference.
- 4 A single large tail mounted in the middle may provide better feeding consistency, depending on humidity and card condition. Experiment to see what works best!

Per the step 3 of the Feed Tail Installation Above, see the correct usage of the Tail Spacer on the right.

Once the tails are installed, plug in the PhyszBatch and power it on.



NETWORK SETUP

For the full **Network setup and Troubleshooting** guide go to:

<https://support.tcgmachines.com/knowledge/network-setup>

For a Wired Connection

Recommended

1 Plug your ethernet cable (not provided) into the front port (see PhyszBatch Overview diagram on page 3), behind the TCG Machines panel

2 Log into the “PhyszBatch XX:XX” hotspot and click the Forget Network toggle *if* any wireless information has been entered. If not, no additional setup is required. Log into the address below.

<http://tcgmachines-thinkcentre-m70q-XXXX:3003/login>

XXXX is your service tag • If using a Mac or Chromebook, contact [Support](#)

For a Wireless Connection

1 Connect to the PhyszBatch wireless hotspot – Name: **PhyszBatch XX:XX**, Password: **Tcg1Machines**

2 A networking page should pop up. If a page does not appear, navigate to “192.168.24.1” in your browser. Select your wireless details, enter your password and wait for the “Connected” prompt.

3 Log back into your wireless network and go to the [address](#) provided on the page at the end of step 2.

Troubleshooting Steps

- + Make sure your computer is on the same local network. The first 3 digits of your computer’s local IP should be the same as the PhyszBatch (ex. **192.168.5.X**)
- + Try a different wireless network
- + Make sure ports 443 and 80 are open on your network (these are usually open by default)
- + On wireless, under Advanced when logged into the hotspot, assign a static IP. Assign that same IP to the PhyszBatch on your router. If connecting via that IP, contact [Support](#).

FEEDER CALIBRATION

Load cards into the hopper as shown. Feed the first card under the foot and curve the cards so they fit the hopper tails. Place the card weight on top with the handle pointing upwards and the arrow pointing inwards.



Now that your PhyzBatch is set up and connected to your network, it will need some adjustments to the feeding mechanism. Differing thicknesses in cards, humidity and card condition can mean settings are not the same between locations, or between different card sets and games. Minor adjustments may be performed while the machine is running.

Watch the feeder adjustment guide for best results:
<https://support.tcgmachines.com/knowledge/feed-fixer-adjustments>

How to open the scanner bay:
<https://support.tcgmachines.com/knowledge/how-to-access-scanner-bay>

1

Load the hopper with ~100 cards and the weight.

2

From the Maintenance Menu, choose **Feed Cards**. Feed cards, 1-5 at a time, and adjust the foot as necessary (see below), increasing the count when successful.

3

When the machine can sort 50+ cards individually without stopping (this mode supports up to 120), move on to regular usage.

4

Due to differences in humidity, card thickness, finish and condition, periodic adjustments will be required to maintain consistent card feeding.

Clockwise

If no cards are feeding into the machine or it is taking multiple feed attempts per card, adjust the dial clockwise 5° until cards feed properly. This raises the foot.



Counterclockwise

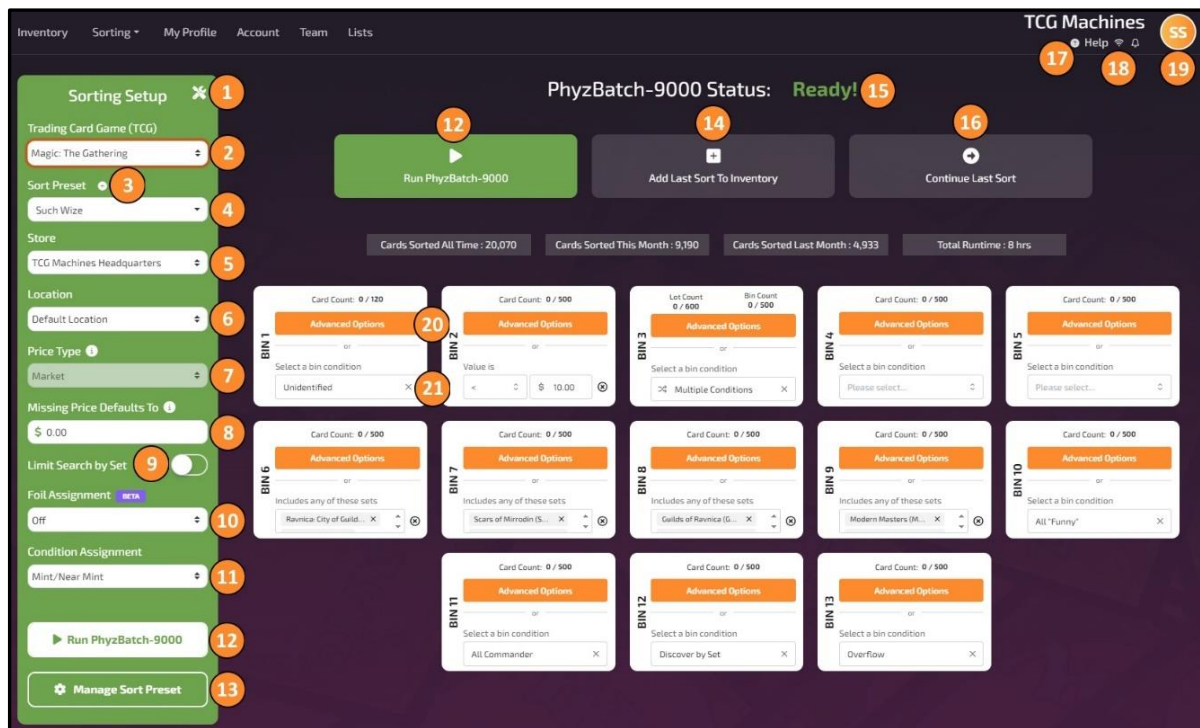
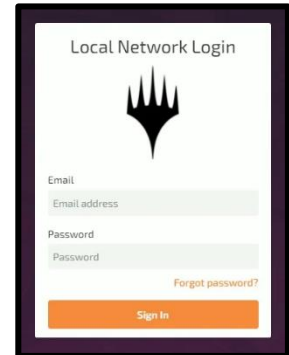
If multiple cards are feeding into the machine, adjust the dial counterclockwise 5° at a time until single cards enter. This lowers the foot.

Card Feeder Foot Height Adjustment

USAGE



There are two login pages. The global login (pictured left, secure.tcgmachines.com) will work from anywhere and allow access to your inventory and sorting history. **You cannot control the PhyszBatch from this login.** The local login (pictured right, see Network Setup, page 4 for link) will only work on the same local network the PhyszBatch is connected to and is used for sorting. If only “Sort History” and not “Sort” is available, you are on the global login.



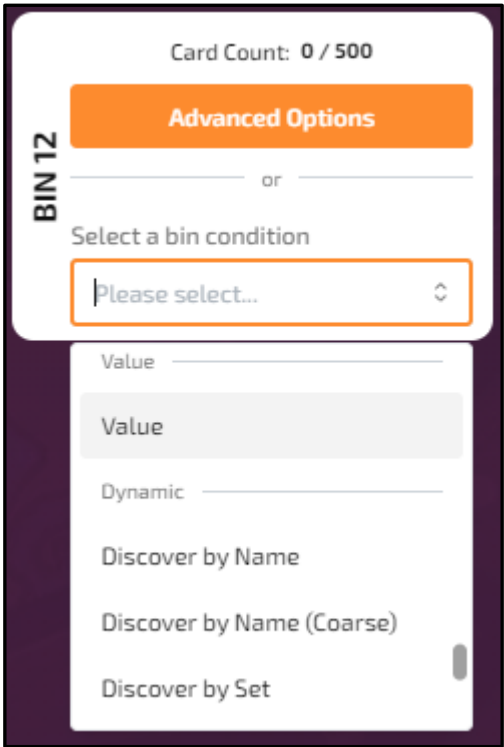
Click on **Sorting** and then **Sort** to reach the PhyszBatch sorting interface.

- | | |
|---|--|
| 1 Maintenance Menu | 12 Start sorting |
| 2 TCG being sorted | 13 Edit or delete your saved sort settings |
| 3 Create new custom presets (+) | 14 Add last in-progress sorted cards to Inventory |
| 4 Choose existing presets | 15 Current PhyszBatch Status (Ready, Sorting, Error, etc.) |
| 5 Select Store (create new stores in Account) | 16 Continue last unfinished sorting session |
| 6 Select Location (create new locations in Account) | 17 Support menu (Tickets, Knowledge Base) |
| 7 Select Pricing Source | 18 Announcements |
| 8 Select default price used if pricing not found | 19 Profile, Log Out, perform manual software update |
| 9 Limit possible identified cards to specific sets | 20 Basic bin criteria |
| 10 Foil Assignment (Off, Detect, or force foil/normal) | 21 Advanced bin criteria |
| 11 Select default card condition (NM, LP, etc.) | |

BASIC SORTING

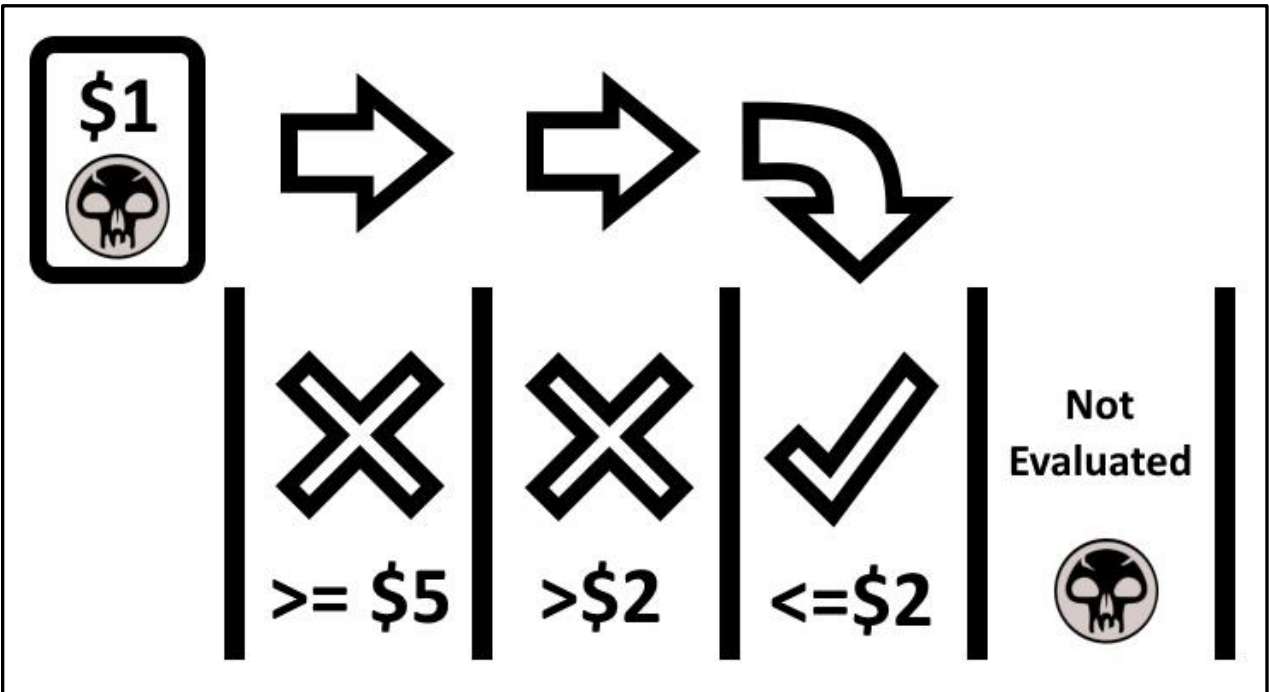
- 1 Select a preset (4) from the menu
- 2 Individual bin criteria can be edited from either the dropdown (21) or by selecting Advanced Sorting (20)
- 3 When satisfied with settings, you may save them with the + button (3). Press Run Sort (12) to start.
- 4 When the sort is complete, press End Sort (16) and choose whether to upload, filter or not save cards scanned to Inventory. Regardless of what you choose, your completed sorts will always be saved and accessible in your Sort History.

There must always be an Unidentified Bin and an Overflow Bin

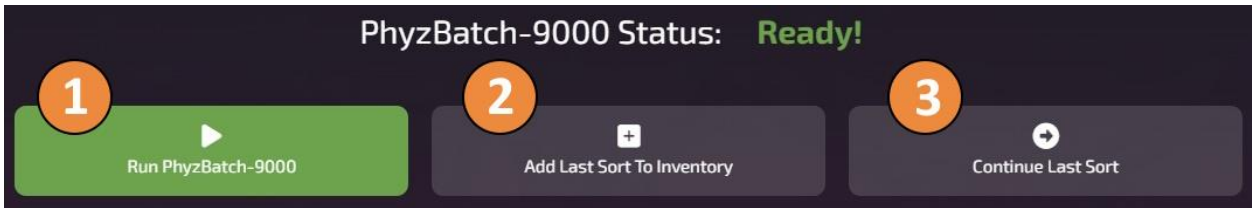


For more a more comprehensive breakdown of sorting options, see: <https://support.tcgmachines.com/knowledge/sorting-guide>

Bins will be evaluated from low (Bin 2) to high (Bin 13):

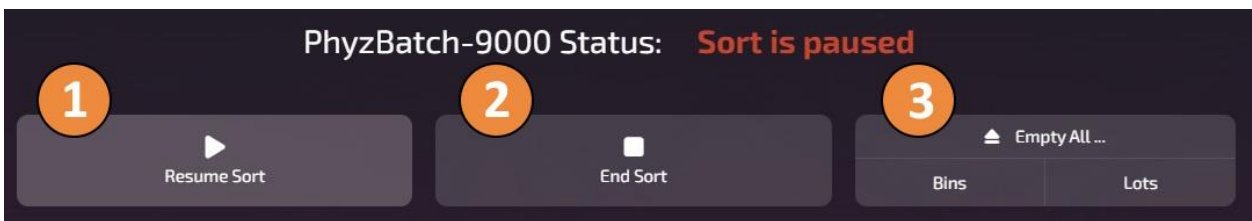


PAUSED SORTS



The screen above will display when logging in or refreshing the Sort page. It will only appear when a previous Sort session has not been ended. Once a Sort session has been ended, it cannot be resumed.

- 1 Start a new sort session. The previous sort will be ended and saved to Sort History, but not Inventory. Similar to “**Continue Without Upload**” below.
- 2 Move to the page with sort results, edit and then add them to your Inventory. Ends the previous sorting session after hitting **Upload** on the filter page. Similar to “**Filter and Select**” below.
- 3 Resumes the previous Sort session including settings and bin counts.



The screen above will display when pausing an in-progress Sort session.

- 1 Resumes the current Sort session
- 2 Ends the Sort session
- 3 Clear the counts of lots, bins or both. Make sure to physically remove the cards.

Cards are stored locally on your PhysBatch until you explicitly end the Sort session. Once the sort has ended (Page 10), the machine will verify sorted cards have successfully been saved to the central server. The completed sorting session will then be available in Sort History.

ENDING A SORT

When the sort is ended there are 3 options for what to do with cards.

Filter and Select

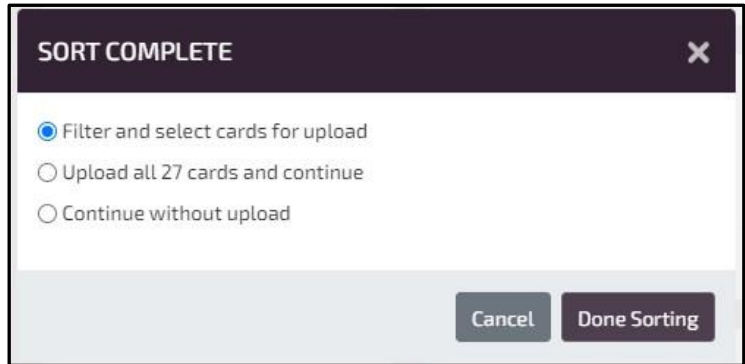
Brings you to a page that allows you edit your scanning results. Cards may be edited and filtered before being loaded to Inventory. Ends the sorting session after pressing **Upload** on the filtering screen.

Upload All

Loads all cards scanned that session into your Inventory without editing or filtering. Ends the sorting session.

Continue Without Upload

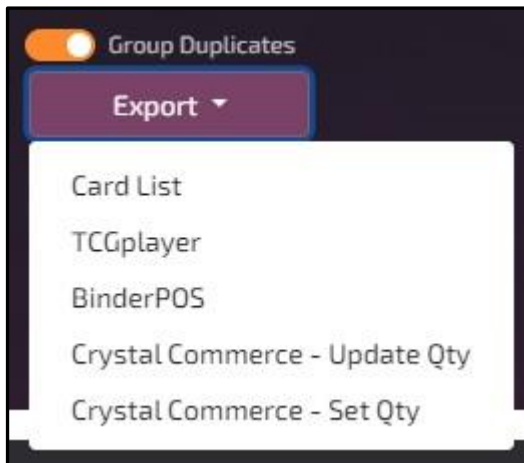
Ends the sorting session. No cards will be entered into your Inventory.



Cards may only be added to your Inventory at the end of a sorting session. They cannot be loaded from Sort History later.

Once a sorting session is finished, the results will always be saved to your Sort History, regardless of if you have uploaded cards to your inventory.

EXPORTING CARDS



Once you have completed a sort, you can export the results to multiple services via a CSV file. Exports can be initiated from:

1 Sort History

2 Inventory

3 The Sort session filtering page, accessible from
📄 Filter and Select (above)
📄 Add Last Sort to Inventory (Page 9, ②)

When unchecked, the Group Duplicates toggle will show all cards individually, in the order they were scanned. This only works for viewing cards in Sort History and the Card List export. For all other exports and Inventory, cards will be grouped and will have a total quantity.

TOP NAVIGATION MENU

Inventory

Sorting ▼

My Profile

Account

Team

Lists

For a full guide to the user interface go to:

<https://support.tcgmachines.com/knowledge/user-interface-guide>

Inventory

Contains your card inventory. Cards are loaded to your inventory *at the end of a sorting session*. These cards can be edited individually or in bulk actions. Note that saved pricing is fixed and does not update.

Sorting

The dropdown contains Sort, which is used to control the physical machine to sort cards, and Sort History, which is a list of all previous sort sessions and their cards, whether the cards were sent to Inventory or not.

Note that Sort will only appear if you're logged into the PhyszBatch locally through the provided address (see page 6).

My Profile

This section contains settings for individual profiles, your account name, and the location to change your password. Profiles belong to accounts.

Tip: Enable stoppage notifications in your profile to receive audio or email cues when a sorting session has stopped.

Account

This is the master account, containing all your profiles. You can also see your subscriptions and update payment details.

Tip: One profile is required *per PhyszBatch* if multiple machines are present. Only one profile may be logged into one machine at a time.

Team

This is where profiles are created and edited. At least one profile is required per machine to use multiple machines simultaneously.

Lists

The Lists section is used to create custom lists of cards for use as bin criteria. Use lists to pull orders, create custom decks, pull cards for buy/sell lists, and any other processes you can think of!

For a full guide to lists, go to the following link:

<https://support.tcgmachines.com/knowledge/how-to-use-lists>

MAINTENANCE

The PhysBatch-9000 should require minimal regular maintenance aside from cleaning.

Cleaning Guide:

<https://support.tcgmachines.com/knowledge/cleaning-guide>

CLEANING

The frequency of cleaning the machine depends significantly on the quality of cards being sorted. New TCG stock requires less cleaning than old stock in most cases.

Part to Clean	Old Stock	New Stock
Feed Wheels	5,000-10,000	10,000-20,000 ¹
Glass ²	20,000	30,000
Foam Rollers	30,000	50,000
Rubber Rollers	50,000	100,000
Conveyor	250,000+	250,000+

¹ New stock from specific printing regions can require more frequent cleaning

² Light scratching of the glass is normal wear and tear

Feed Wheels

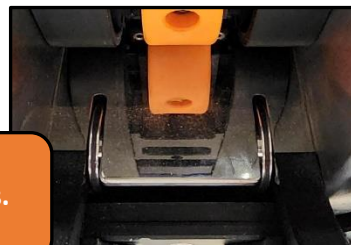
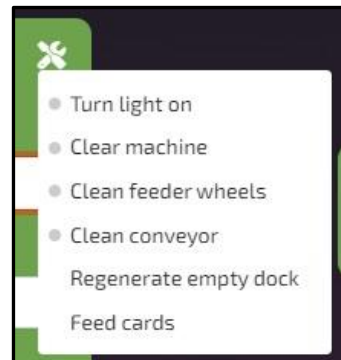
Feed wheels require the most cleaning of all components, as they are the first point of contact with cards. Dust or card debris can significantly reduce feed wheel grip, leading to cards not being fed into the scanner properly. Wheels should be cleaned every 5,000-20,000 cards depending on the condition of cards being fed into the machine.

1 Remove all cards from the hopper

2 Select **Clean feeder wheels** from the Maintenance Menu. This will cause them to continuously rotate until disabled.

3 Dampen the provided sponge or a microfibre cloth and hold it to the wheels for 10-20 seconds or until the wheels appear clean. Some black residue is expected; this is mostly dust fused with the rubber.

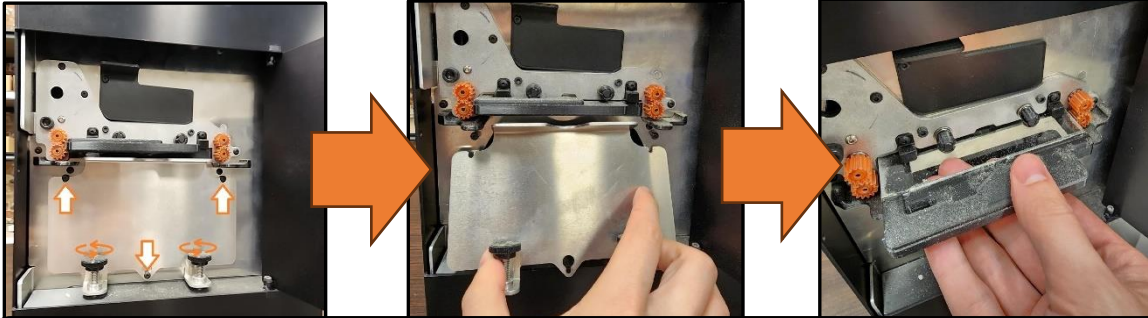
4 Select **Clean feeder wheels** again to turn them off.



Tip: Use distilled water or isopropyl alcohol for best results.

Glass

Glass doesn't need to be cleaned unless a significant amount of dust has accumulated. Small scratches from the foam rollers are normal wear and tear and will not affect the accuracy of the machine. The interior of the scanner may be blown out with air through the viewport (black plastic cover), or the glass may be removed for direct cleaning.



Tip: The top of the plate presses up on the glass, so it has firm contact with the foam rollers. The thumbscrews should be finger-tight so that the plate holds the glass tray in place.

Foam Rollers

As the card dust on foam rollers increases, their grip decreases. If cards are slipping on the foam rollers and not feeding through properly, cleaning the rollers can increase their grip and help mitigate the problem. Use a small amount of water or isopropyl alcohol on a cloth. The rollers may be cleaned through the viewport or by removing the glass tray:



Grabber Rollers

The rubber wheels are what pull cards into the scanner after the feed wheels have moved them forward. The grabber rollers work on pressure, so grip is less important, and they do not have to be cleaned frequently (or ever, depending on card condition). Remove the glass tray to have sufficient access to clean the rollers. Use a microfiber cloth and a small amount of water or isopropyl alcohol applied to the cloth.



Grabber rollers



Tip: Place your cloth over a screwdriver



Tip: Turn the gears by hand to rotate the rollers

Conveyor

The conveyor shouldn't need cleaning very frequently, if ever. However, the rubber O-rings can migrate along the shaft, so they should be inspected periodically to ensure proper alignment.

1

Remove the thumb screw on the back underside of the conveyor cover, near Bay #2. Remove the cover by pulling it away from the scanner.

2

Check the position of the O-rings on the conveyor shafts. They should be lined up as shown with 3 rings above and 2 below. The left and right rings should be lined up on each shaft.

3

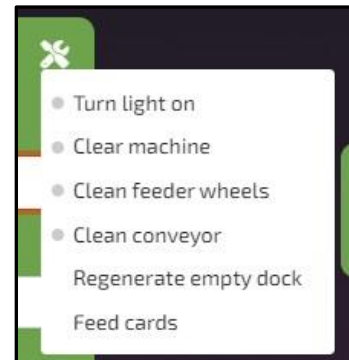
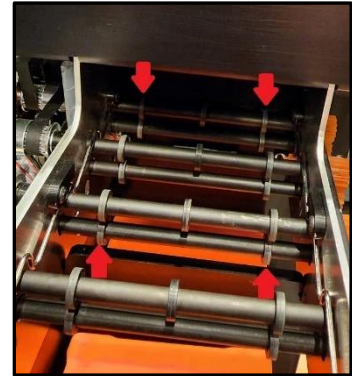
O-rings may be cleaned with a cloth dampened with either water or isopropyl alcohol.

4

Clean conveyor may be selected from the Maintenance Menu to run the conveyor to assist with cleaning. Click it again or turn off the machine main switch to disable it.

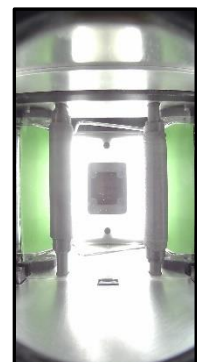
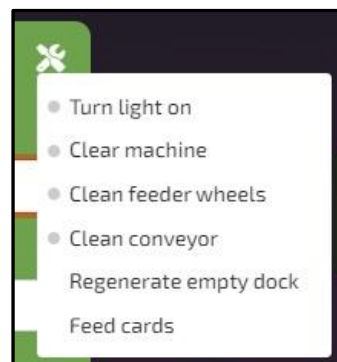


Warning: There is no safety stop in conveyor cleaning mode. Turn off the main switch to disable.



REGENERATE EMPTY DOCK

This will create a new image of the interior of the scanner. This image is what the scanner uses to compare against cards, so it can determine where the edge of a card is. If the "empty" image is different than what it compares against, it will assume there is a card in the bay, which can lead to false **"Camera Obstructed"** messages. You may use this feature to inspect the interior for dust or debris, and to compare against sample "good" images. Make sure the interior image is similar to the provided samples or the machine may not function correctly.





Declaration of Conformity



TCG Machines, Inc.
1212 34th Ave SE
Calgary, AB T2G 1V7 Canada

Declares under our sole responsibility that the product:

PhyzBatch-9000

Conforms with the provisions of the following EC Directives, including all amendments, and with national legislation implementing these directives:

Machinery Directive 2006/42/EC
Low Voltage Directive 2014/35/EU
EMC Directive 2014/30/EU
RoHS Directive 2011/65/EU
Radio Equipment Directive 2014/53/EU

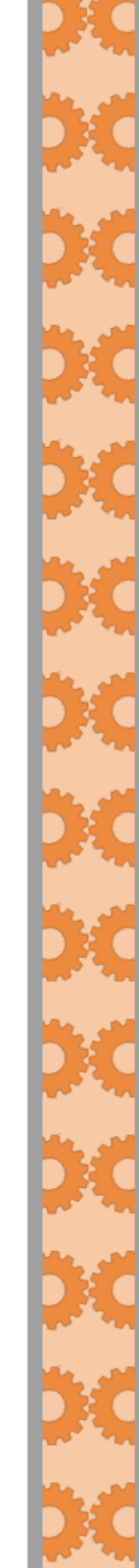
This product carries the CE Mark, which was first affixed in 2022.

Place
Calgary, AB

Signed by and on Behalf Of
TCG Machines Inc.

Date
1/15/2024

D. Kusler
Dan Kusler
Chief Product Officer
1212 34th Ave SE
Calgary, AB T2G 1V7



Version	Date	Description of Changes	Author(s)
V1.0	25-JUL-2022	Issued for Release	AF
V2.0	24-AUG-2022	Simplified Layout	AF
V2.1	29-NOV-2022	Updated Equipment List, gate shim removal, KB link	JW
V3.0	10-MAY-2023	Refresh of policies and installation	JW
V4.0	05-JUL-2024	Complete rewrite	JW