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support.tcgmachines.com/knowledge



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 purpose to build tools to help people run profitable trading card businesses. 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	Support – support@tcgmachines.com General Inquiries – info@tcgmachines.com
Knowledge Base	https://support.tcgmachines.com/knowledge/
Discord Link	https://discord.gg/zmvhzHjQyZ

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

The automated handling of trading cards relies on proper setup and maintenance 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 into 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 it 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 crate for return shipping.

For complete text setup instructions and video go to:

<https://support.tcgmachines.com/knowledge/getting-started-with-your-physbatch>

The following additional equipment comes with your PhysBatch-9000.



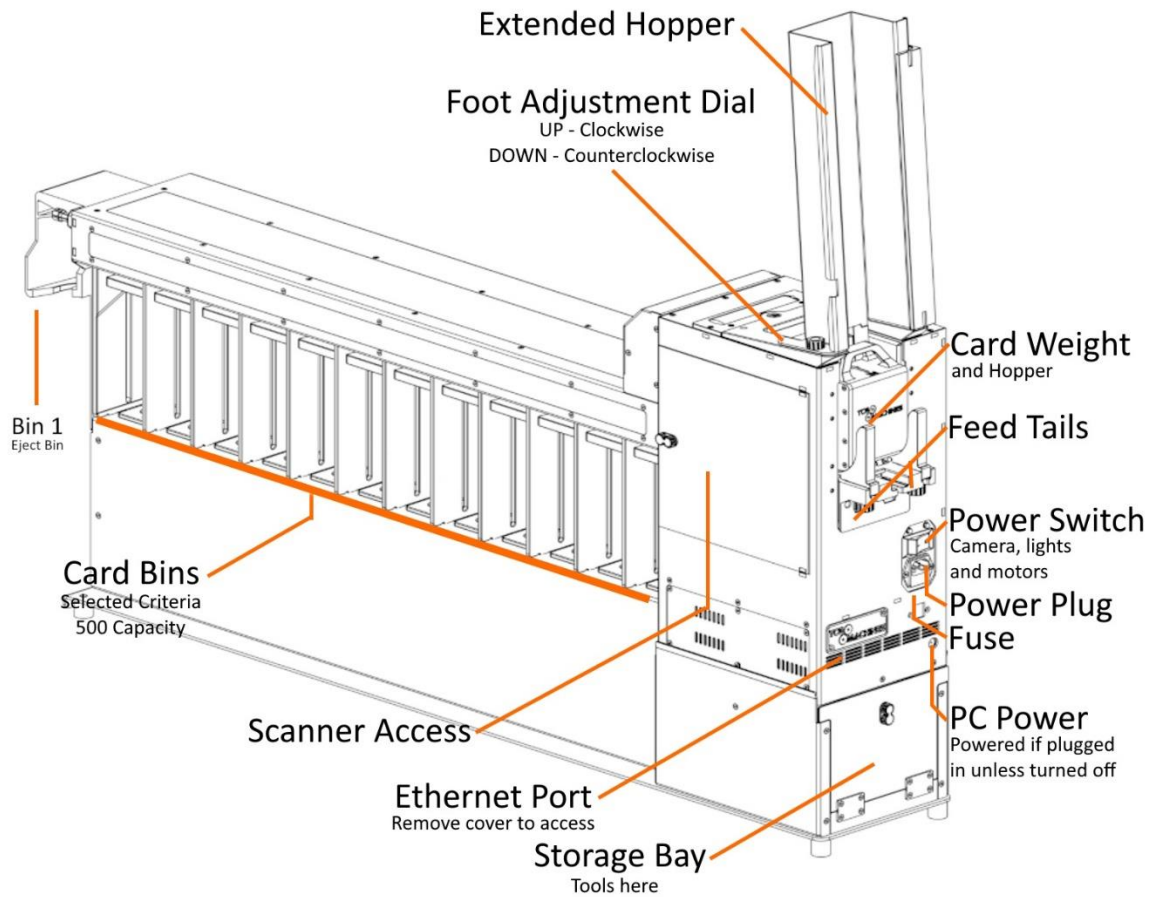
- 1 Removable Bin One
- 2 Power Cable
- 3 Replacement Glass Pane (*consumable*)
- 4 Hopper – Card Retention Rails & extended hopper
- 5 Cleaning Sponges (10, *consumable*)
- 6 Card Weight
- 7 Grabber Wheel Cleaning Tool
- 8 Tool Set
- 9 Accessory Kit Legend
- 10 Foam Rollers
- 11 Extra bearings, cogs, and thumbscrews
- 12 Replacement Piston
- 13 High Humidity Tails
- 14 Replacement belts
- 15 Cleaning Wipe

The **Knowledge Base** can be found at the following address:

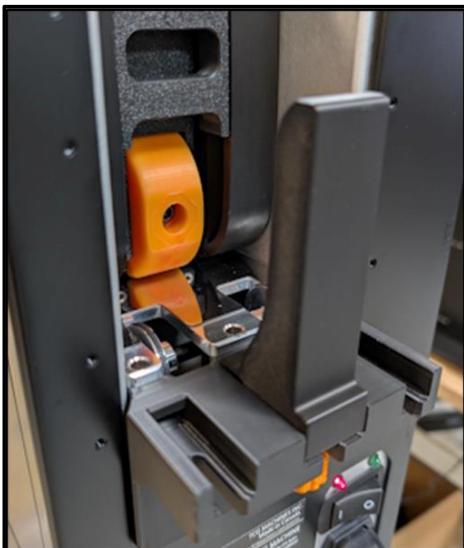
<https://support.tcgmachines.com/knowledge>

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



High Humidity Tail Installation (Optional)



- 1** In high humidity, cards behave differently, swap tails to improve performance.
- 2** To remove the original tails: loosen the bottom screw and slide them out.
- 3** To install the tail: slide it on, then tighten the bottom screw. Note that the tail spacer cannot be used with the middle tail.
- 4** The depth of the tail is typically best when it's lined up with the edge; however, in some cases, you may need to move it forward slightly. Note, humidity can change with the weather and a dehumidifier may be a better solution

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 PhysBatch Overview diagram on page 4), behind the TCG Machines panel
- 2 Log into the “PhysBatch 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. Located near the machine's power plug

- If using a Mac or Chromebook, contact [Support](#)

For a Wireless Connection

- 1 Connect to the PhysBatch wireless hotspot – Name: **PhysBatch 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 PhysBatch (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 PhysBatch on your router. If connecting via that IP, contact [Support](#).
- + The wireless hotspot is only active for 60 minutes, and is on the 2.4GHz band. If you don’t see it, restart the PC on the PhysBatch by holding down the power button until the light goes out, then press it again.
- + Try turning the wireless on your PC off and on to refresh it.

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.

How to adjust the Feed Fixer 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 Set the height of the feeder foot so that one card can easily slide underneath, and two cards have resistance. Load ~200 cards.
- 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.

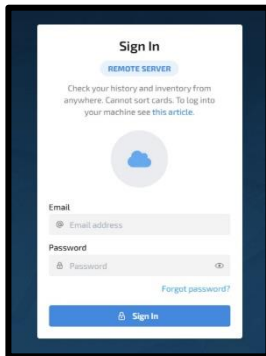


Counterclockwise

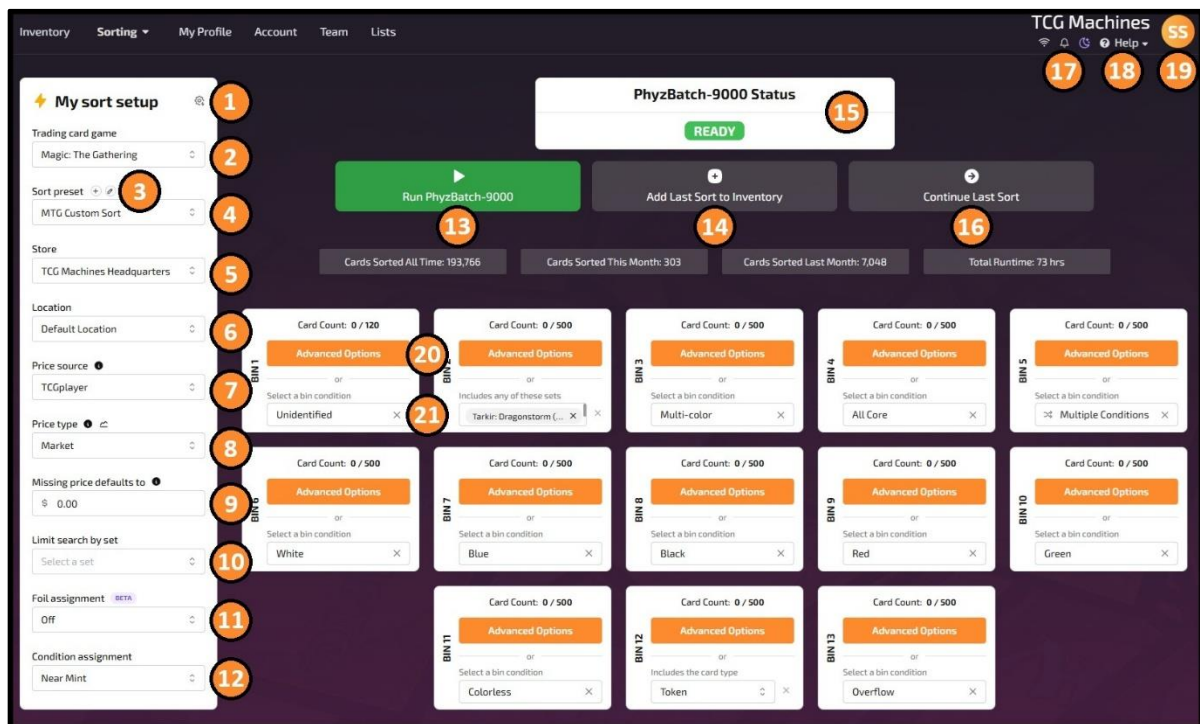
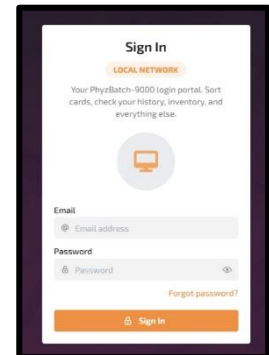
If multiple cards are feeding into the machine, adjust the dial counterclockwise 5° at a time until single cards enter. This lowers the foot.

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, including the option to view and verify cards. **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 (loads drop-down options) | 12 Select default card condition |
| 2 TCG being sorted | 13 Start or Pause sorts |
| 3 Create or edit custom presets | 14 Add last in-progress sorted cards to the Inventory |
| 4 Choose saved sort settings and presets | 15 Current PhyszBatch Status (Ready, Sorting, Error, etc.) |
| 5 Select Store (create new stores in Account) | 16 Continue the last unfinished sorting session |
| 6 Select Location (create new locations in Account) | 17 Network Strength, Announcements, Dark Mode |
| 7 Select Pricing Source | 18 Support Tickets and Knowledge Base |
| 8 Select Price Type (dependent on Pricing Source) | 19 Profile, Log Out, updates (loads drop-down options) |
| 9 Set the default price if pricing is not found | 20 Advanced bin criteria options |
| 10 Limit possible identified cards to specific sets | 21 Selected / Basic bin criteria |
| 11 Foil Detection (Off, Detect, or prefer foil/normal) | |

Basic Sorting

- 1 Select a preset (4) from the menu
- 2 Individual bin criteria can be edited from either the dropdown (20) or by selecting Advanced Sorting (21)
- 3 When satisfied with the settings, you may save them with the + button (3). Press Run Sort (13) to start.
- 4 When the sort is complete, press End Sort (14) 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

Card Count: 0 / 500

Advanced Options

BIN 12

or

Select a bin condition

Please select...

Value

Value

Dynamic

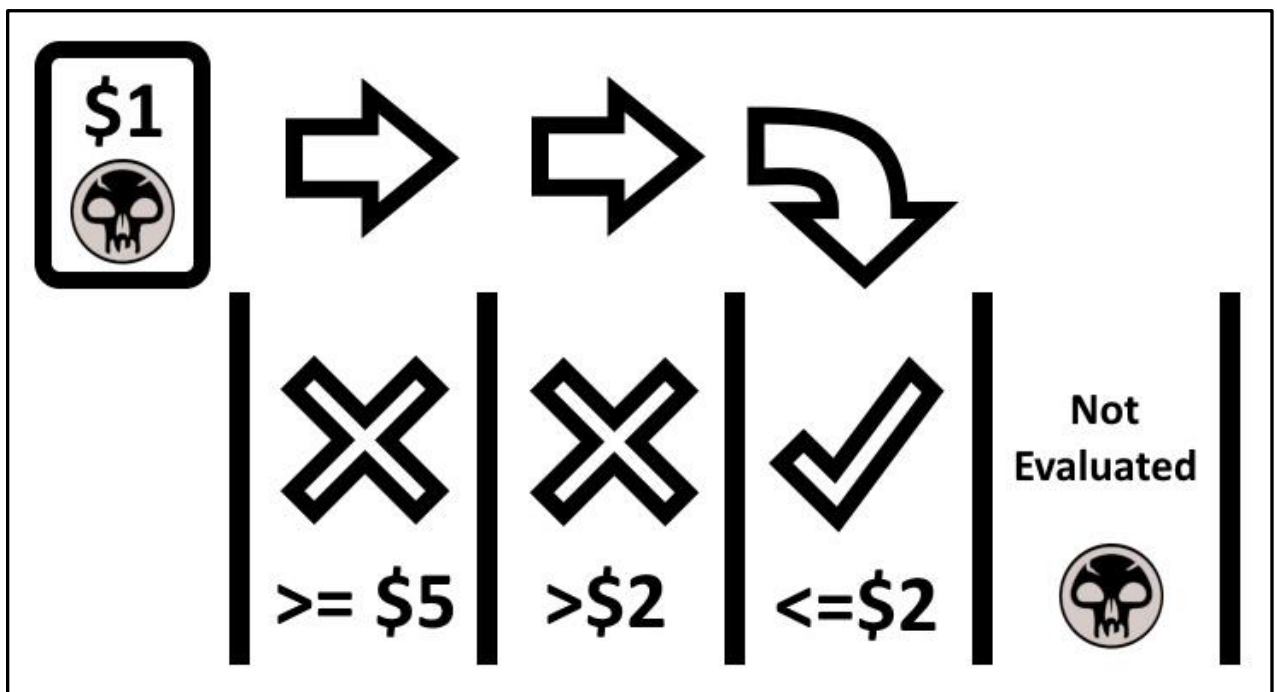
Discover by Name

Discover by Name (Coarse)

Discover by Set

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.

If an error occurs during sorting, click on “learn more” to learn about it, and how to fix it. You can always contact Support for further assistance!



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.

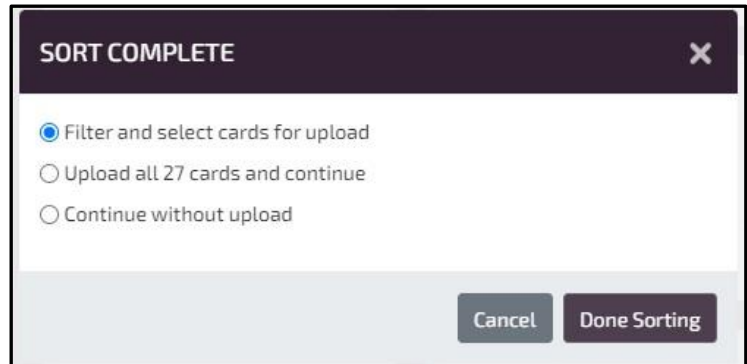
Cards are stored locally on your PhysBatch until you explicitly end the Sort session. Once the sort has ended (Page 10), the machine will verify sorted cards have successfully been saved to the central server. The completed sorting session will then be available in Sort History.

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.



A dark-themed dialog box titled "SORT COMPLETE" with a close button (X) in the top right corner. It contains three radio button options: "Filter and select cards for upload" (which is selected), "Upload all 27 cards and continue", and "Continue without upload". At the bottom right, there are two buttons: "Cancel" and "Done Sorting".

Upload All

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

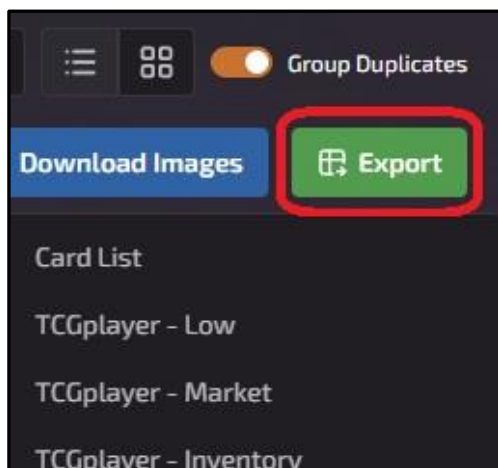
Cards may be loaded to your inventory at any time from Sort History by clicking Add to Inventory

Continue Without Upload

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

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.

EDITING Cards

The Quick Correct feature is used to review and if necessary, change scanned cards or add new cards after sorting is completed. It can be found in either **Sort History > View Cards** or by selecting the **Filter Cards** option when *ending* a sorting session.



Quick Correct Layout

Quick Correct Sorted Cards

1 Search all Magic: The Gathering cards...

2 Scanned

3 Matched

4 Editable card parameters (N, S, C, P, F, B)

5 Similar Cards (Ctrl+S, Ctrl+up or down)

6 Card display order sorting

7 Sorted cards search bar

8 Confidence Filter (High / Medium / Low)

9 Hotkeys reference

Name	Set	Number	Condition	Foil Type	Bin	Confidence	Status
Goblin Rock Sled	Fourth Edition	199/378	Near Mint	Normal	12	⬆	Modified
Staff of the Flame Magus	Magic 2014	220/249	Near Mint	Normal	12	⬆	Reviewed
Graveyard Shovel	Innistrad	225/264	Near Mint	Normal	12	⬆	Reviewed
Adriana's Valor	Conspiracy: Take the Crown	1/221	Near Mint	Normal	12	⬆	—
Grapeshot Catapult	Fourth Edition	322/378	Near Mint	Normal	12	⬆	—

No pending changes

- 1 Add / Choose card search bar (Ctrl+S)
- 2 Image of scanned card
- 3 Matched card
- 4 Editable card parameters (N, S, C, P, F, B)
- 5 Similar Cards (Ctrl+S, Ctrl+up or down)
- 6 Card display order sorting
- 7 Sorted cards search bar
- 8 Confidence Filter (High / Medium / Low)
- 9 Hotkeys reference

You can use hotkeys (9) to edit even faster.
Mouse over cards to magnify!

Log in at <https://secure.tcgmachines.com/>
on a new tab or window to scan and edit
simultaneously

For more a more comprehensive Quick Correct guide, see:
<https://support.tcgmachines.com/knowledge/quick-correct-guide>

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. These cards can be edited individually or in bulk actions. Note that saved store pricing is fixed and does not update. Store Pricing is shown in **green**, and updated Market pricing is shown in **blue**.

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 PhyxBatch 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* PhyxBatch 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 and your environment. New TCG stock requires less cleaning than old stock in most cases.

Part to Clean	Old Stock	New Stock
Feed Wheels ¹	5,000-10,000	10,000-20,000
Glass ¹	Once per day	Once per day
Belt Rollers	30,000	50,000
Grabber Rollers ²	100,000	250,000
Conveyor ²	Once per day	Once per day

¹ New stock from specific printing regions can require more frequent cleaning. Light scratches on the glass are normal.

² Rollers should be checked for alignment (see [Cleaning Guide](#)) daily

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 the cards being fed into the machine. We recommend replacing the feed wheels every two or three million cards sorted.

1

Remove all cards from the hopper

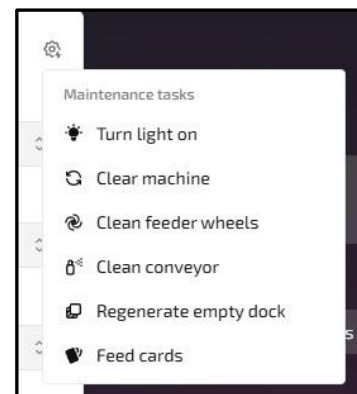
2

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

3

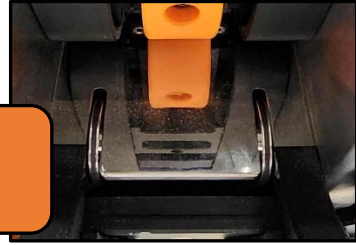
Dampen the provided sponge or a microfibre cloth and hold it to the wheels for 10-20 seconds or until the wheels appear clean. Some black residue is expected; this is mostly dust fused with the rubber.

4



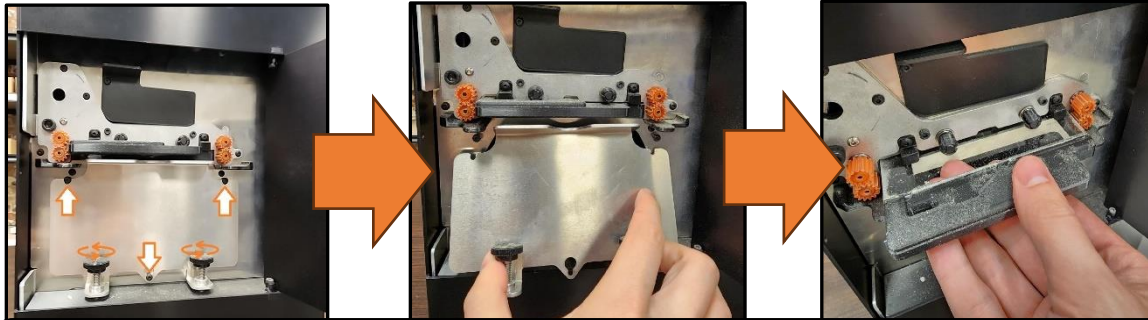
Select **Clean feeder wheels** again to turn them off.

Tip: Use distilled water on the belt rollers and isopropyl alcohol on the feed wheels for best results.



Glass

Glass doesn't need to be cleaned unless dust has accumulated. Some small scratches from the belt 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 belt rollers. The thumbscrews should be finger-tight so that the plate holds the glass tray in place.

Belt Rollers

As the card dust on the belt rollers increases, their grip decreases. If cards are slipping on the belt rollers and not feeding through properly, cleaning the rollers can increase their grip and help mitigate the problem. Use a small amount of water on a cloth. The rollers may be cleaned through the viewport or by removing the glass tray. While holding the cloth in place against the belts, use your other hand to manually turn the rollers.



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, and they do not have to be cleaned as frequently. Remove the glass tray to have sufficient access to clean the rollers. Use a cleaning cloth, and a small amount of water or isopropyl alcohol applied to the cloth, and then attach it to the Grabber Roller Cleaning Tool.



Grabber rollers



Tip: Place cloth & tool against the rollers



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

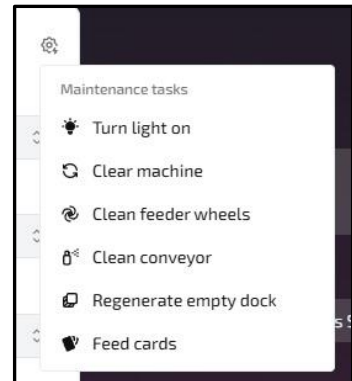
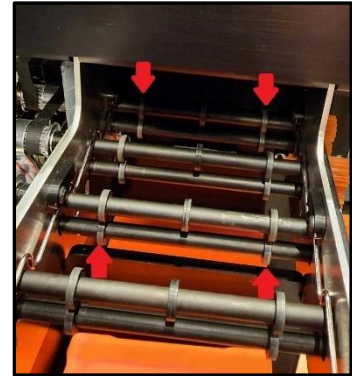
O-rings may be cleaned with a cloth dampened with either water or isopropyl alcohol.

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's main switch to disable it.

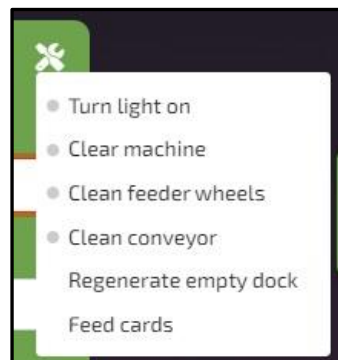


Warning: There is no safety stop in conveyor cleaning mode. Turn off the main switch to disable.



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 sample 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:

Low Voltage Directive 2014/35/EU
EMC Directive 2014/30/EU
Radio Equipment Directive 2014/53/EU

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

当該機器には電波法に基づく、技術基準適合証明等を受けた特定無線設備を装着している

"This device is equipped with specified radio equipment that has received technical conformity certification under the Radio Act."

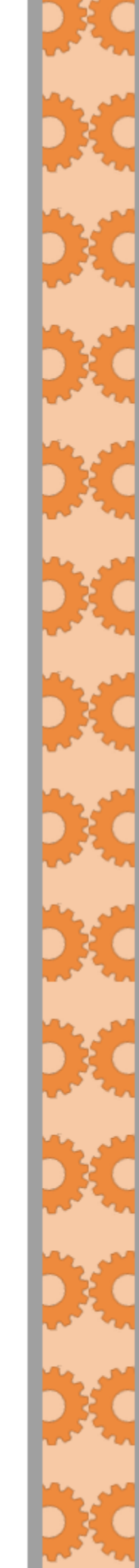
Contains Transmitter Module: FCC ID PD9AX203NG

Place
Calgary, AB

Signed by and on Behalf Of
TCG Machines Inc.

Date
1/15/2024

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
V4.1	30-JUL-2025	Updates to software and design changes	JW
V4.2	22-SEP-2025	Added Quick Correct, updated UI changes	JW
V4.3	22-APR-2026	Updated UI images, added wireless certifications	JW
V4.4	20-MAY-2026	Updated images and cleaning instructions	MF