

# Hot Wheels

## Troubleshooting and Known Issues Guide



**HOT WHEELS**

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## INTRODUCTION

This troubleshooting guide is intended to provide a centralized reference for identifying, understanding, and resolving known issues encountered during system operation. It consolidates common problems, their root causes, and proven solutions to reduce downtime and improve efficiency. By capturing lessons learned and recurring failure patterns, this guide enables support personnel to quickly diagnose issues and apply consistent, validated fixes.

## PURPOSE OF THE GUIDE

This guide provides a list of known issues that may occur with the Hot Wheels game, along with their corresponding resolutions. It is intended to support quick identification and resolution of problems, reducing downtime and ensuring consistent troubleshooting.

## KNOWN PROBLEMS AND RESOLUTIONS

This section contains a list of known issues and associated corrective actions. Reference the applicable issue and follow the linked procedure to perform the required corrective steps.

## HARDWARE CHANGES SUMMARY

### Drag Chain Binding or Locking Up

A correction may need to be made to the **drag chain** if a “locking-up” is experienced when the targets move to either end of the track:

[LINK TO RESOLUTION!](#)

### Pucks are getting stuck on the target shield.

A modification has been made to the **puck rebound shield** to prevent pucks from getting stuck on the target shield:

[LINK TO RESOLUTION!](#)

### Target belts on the target assembly become loose.

If the **target belts** on the target assembly become loose, please follow the belt adjustment instructions:

[LINK TO RESOLUTION!](#)

### Playfield wire harness to provide better power for the lights.

A modification has been made to the **playfield wire harness** to provide better power for the lights and to extend the lifetime of the Raspberry Pi I/O Board:

[LINK TO RESOLUTION!](#)

### **Matrix display wire harness to maintain better video display quality.**

A modification has been made to the **matrix display wire harness** to maintain better video display quality:

[LINK TO RESOLUTION!](#)

### **Pucks get caught on the back end of the playfield.**

If pucks get caught on the back end of the playfield, an adjustment to the **lower puck scoop** can be implemented:

[LINK TO RESOLUTION!](#)

### **Install Card holders.**

**Card holders** have been created to give players a convenient place to put their cards:

[LINK TO RESOLUTION!](#)

### **Bracket assembly of the puck catcher funnel.**

A correction to **the bracket assembly of the puck catcher funnel** may need to be made:

[LINK TO RESOLUTION!](#)

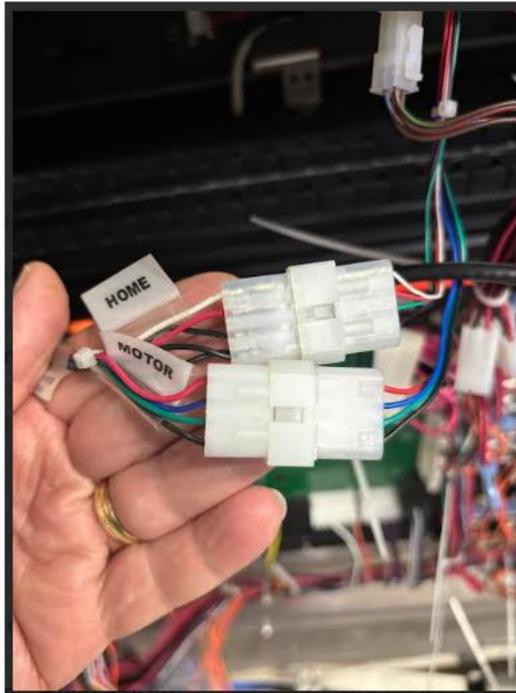
## Game Malfunctions observed in the field

**Issue:** Car fails to travel vertically up the scoreboard during gameplay.

**Cause:** The MOTOR and HOME connectors are connected incorrectly.

**Solution:** Check the two connectors for proper orientation and color matching.

1. **Locate the connectors:**
  - One connector is labeled **HOME**.
  - The other is labeled **MOTOR**.
2. **Identify the wires by color:**
  - **HOME connector:** White and Red wires (flat side of connector)
  - **MOTOR connector:** Red and Blue wires (flat side of connector)
3. **Connect correctly:**
  - Match the wires by color when connecting the male and female connectors.
  - **Do not swap** the HOME and MOTOR connectors; each must align with its corresponding wire colors.
4. **Verify:**
  - Use the image below as a guide to correctly match the connectors.
  - After connecting correctly, test the car. It should now travel up the scoreboard properly.



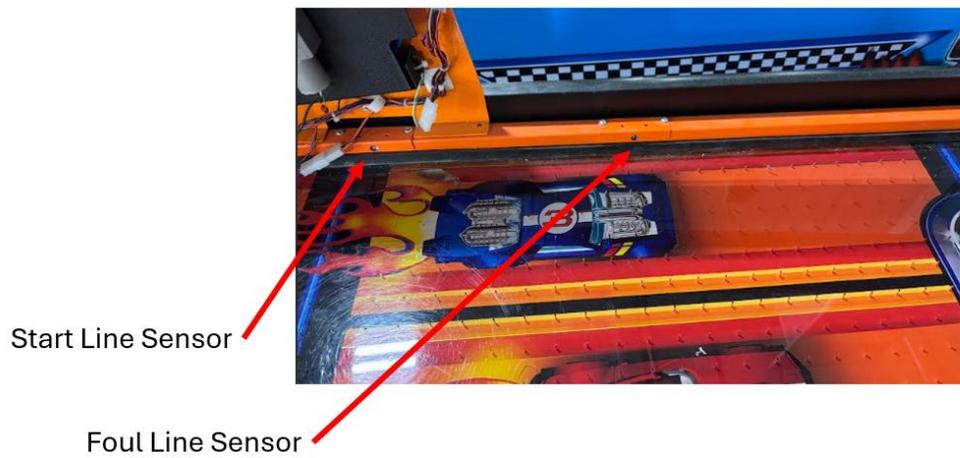
## Issue: Start and/or Foul Line Playfield Sensors are not functioning.

### Possible Cause:

- Defective sensor (transmitter or receiver)
- Misaligned sensors

### Solution:

1. **Locate the sensors:**
  - Identify the **transmitter** and **receiver** on the playfield as shown in the reference image.
2. **Check alignment:**
  - Visually inspect both sensors to ensure they are positioned correctly.
  - Adjust the alignment as needed so that the transmitter and receiver face each other properly.
3. **Test the sensors:**
  - Enter **Diagnostic mode** from the game menu.
  - Verify that both sensors are responding correctly.
4. **If the problem persists:**
  - Replace the defective sensor(s) as needed.



Receivers are on the opposite side of the playfield.

# Puck Rebound Shield Installation Instructions

Follow this guide to properly install your puck rebound shield.

Install puck rebound shield from front.



1. Remove hardware for right side plex.
2. Lift and remove right side plex.



1. Remove hardware from left side plex.
2. Gently separate the side plex from the puck dispenser plex
3. Lift up and remove left side plex.



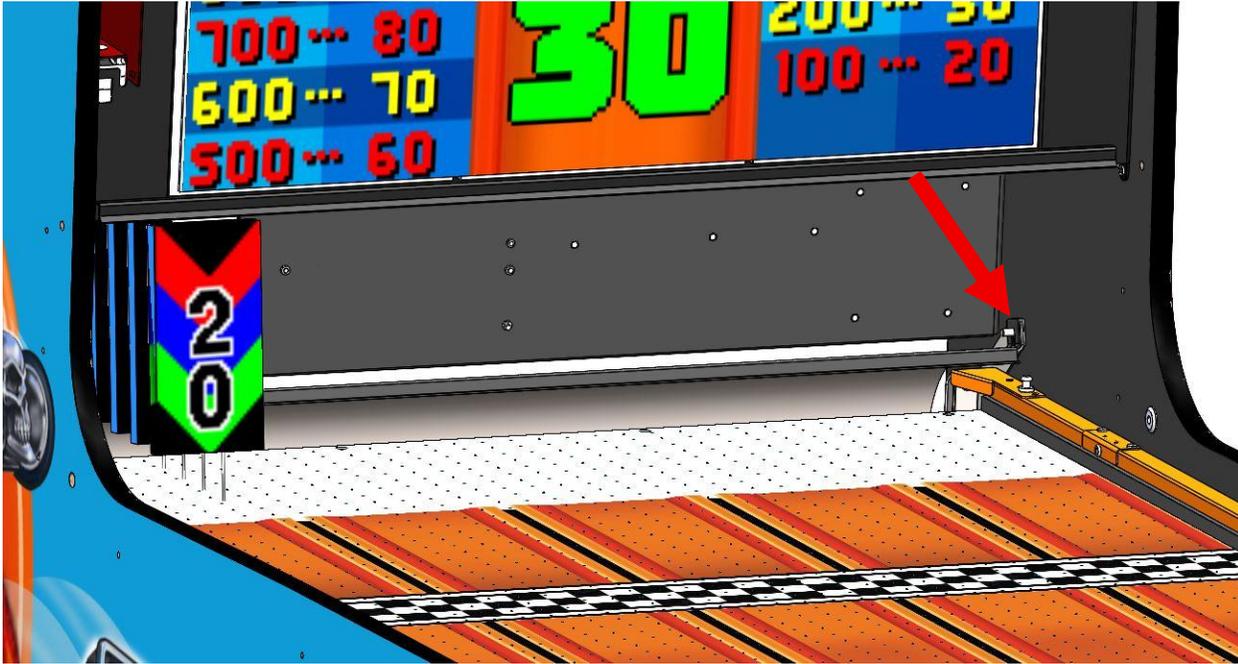
1. Remove 4X Screws from front plex.
2. Drop front plex down and pull out of game.



1. Remove 1/4-20 nuts from top of puck catcher on both sides.



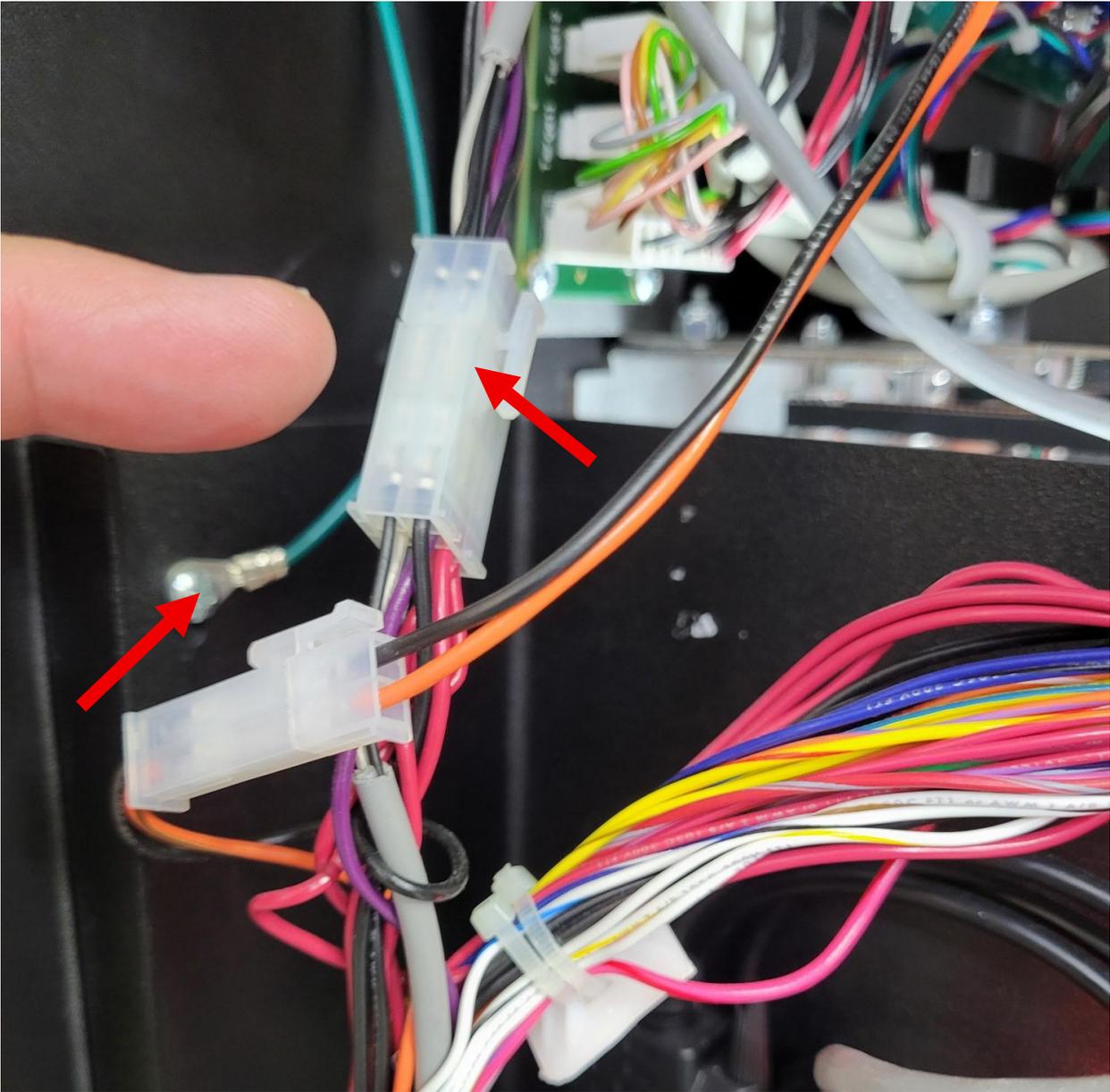
1. Position puck rebound shield behind targets and above puck catcher.



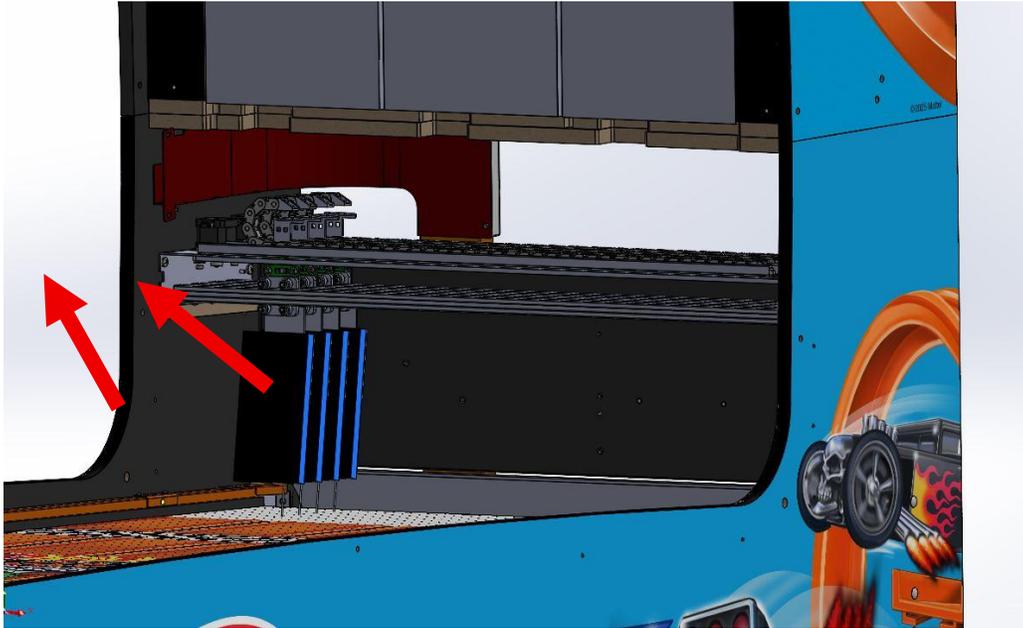
1. Drop down puck rebound shield over studs.
2. Reinstall ¼-20 Nuts on studs.
3. Reinstall side plex.

**END -> Puck Rebound Shield Installation Instructions**

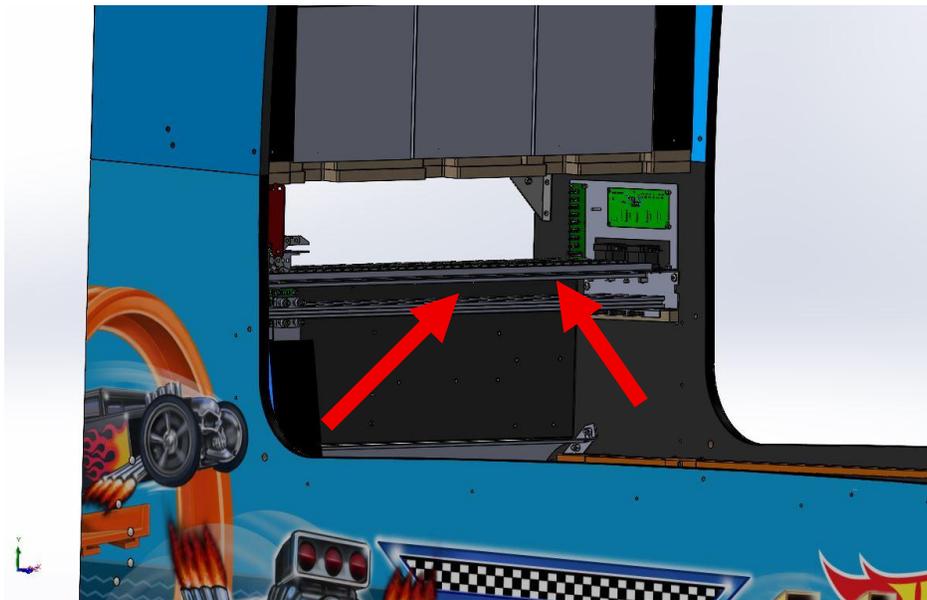
# Target Belt Adjustment Instructions



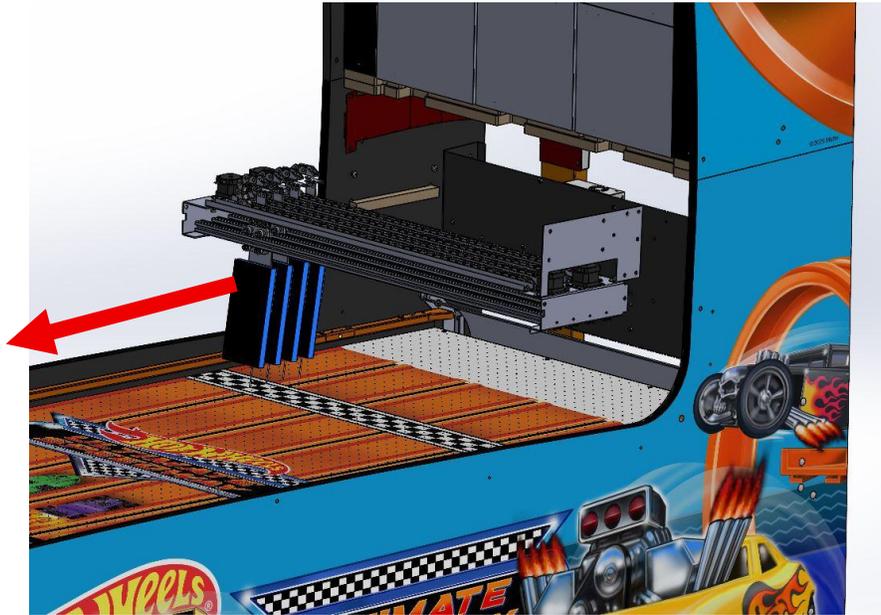
1. Disconnect 8 pin harness on left side as shown.
2. Disconnect ground wire.
3. Disconnect two 4 pin connectors that say, "car home" and "car stepper". These connectors may be in back box.



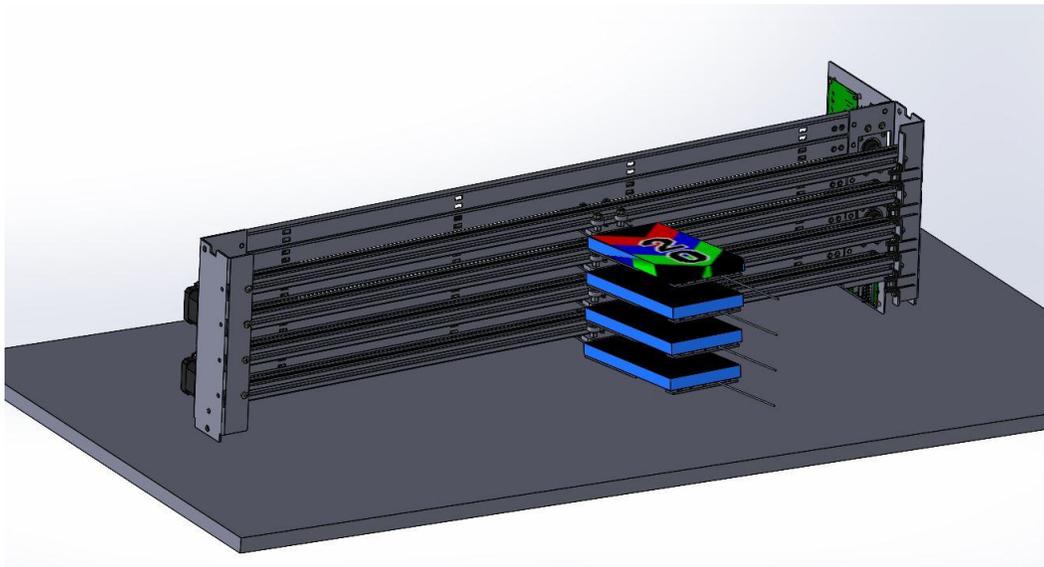
1. Remove screws from target carrier into side wall. (Note, screw toward rear of game will require a #3 screwdriver with 10-to-12-inch extension.)



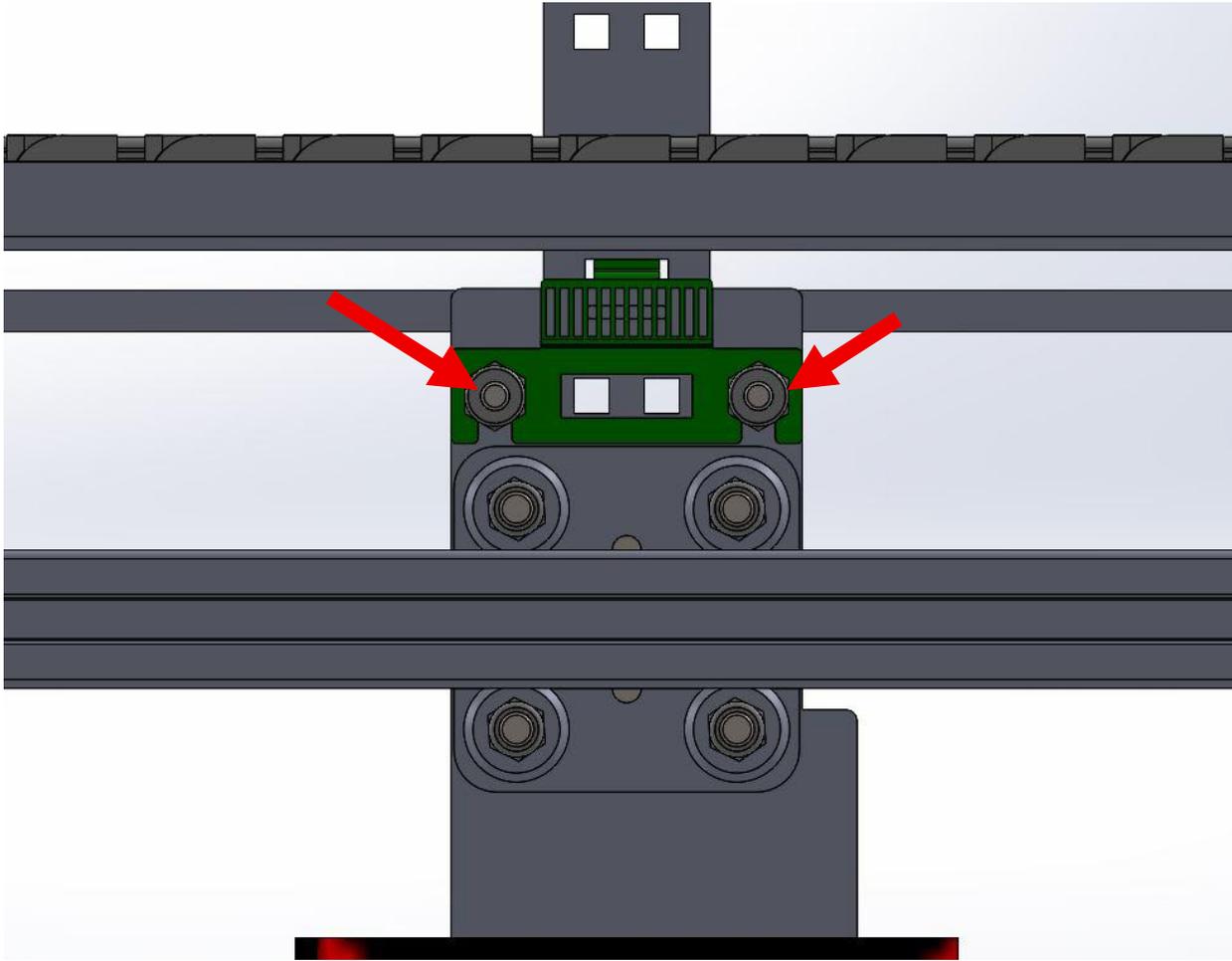
1. Remove screws from target carrier into side wall. (Note, screw toward rear of game will require a #3 screwdriver with 10-to-12-inch extension.)



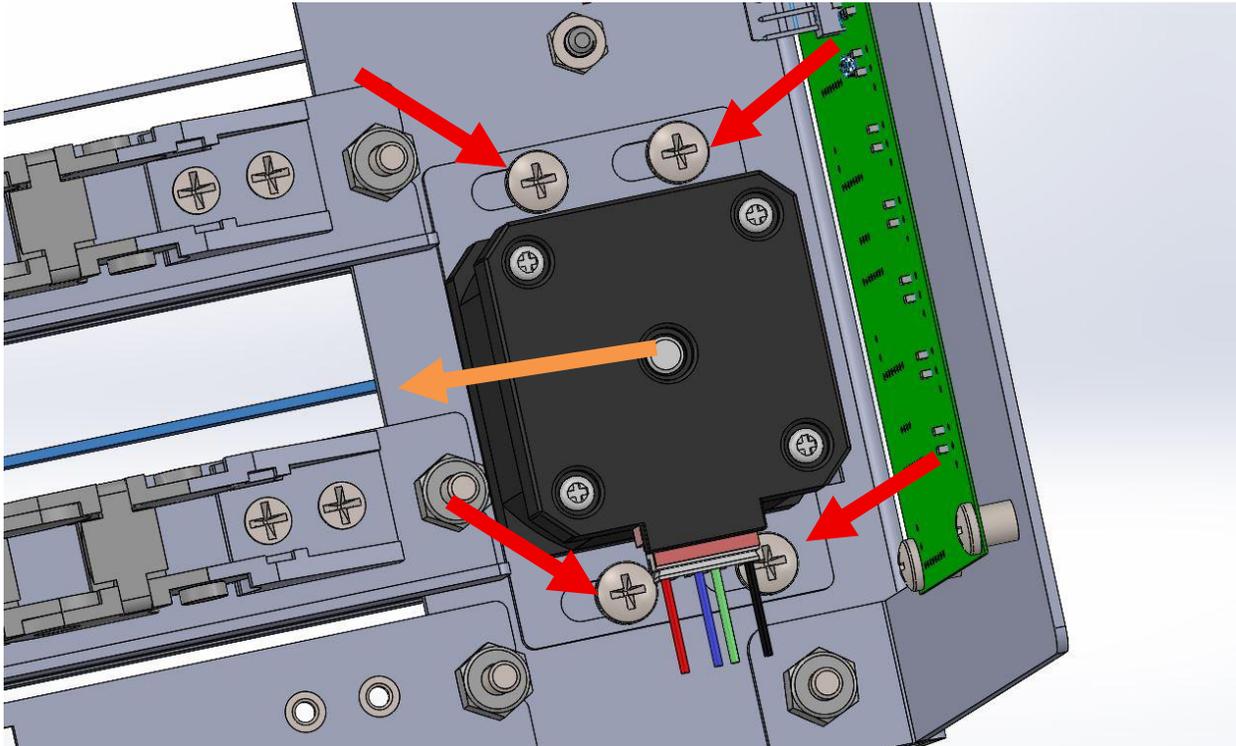
1. Pull carrier out.



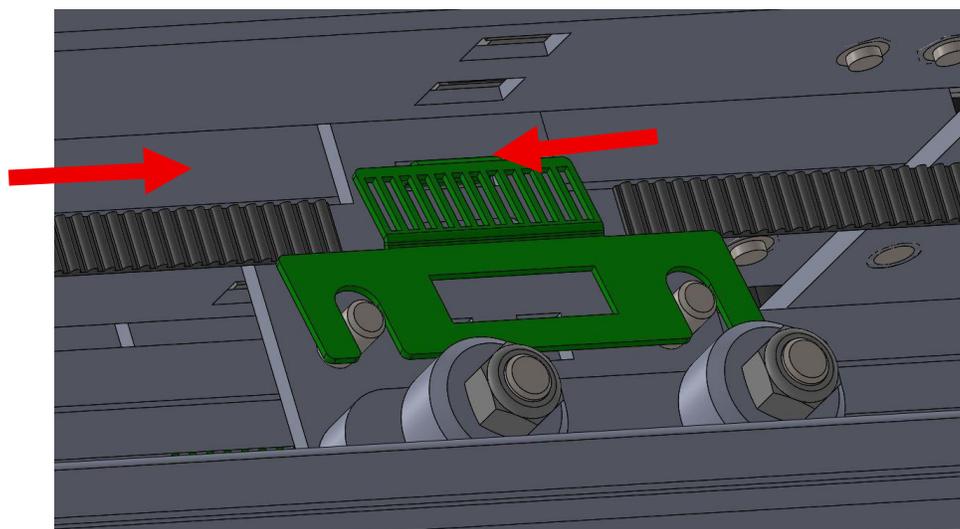
1. Place target carrier down on its back. Use an elevated surface if possible.



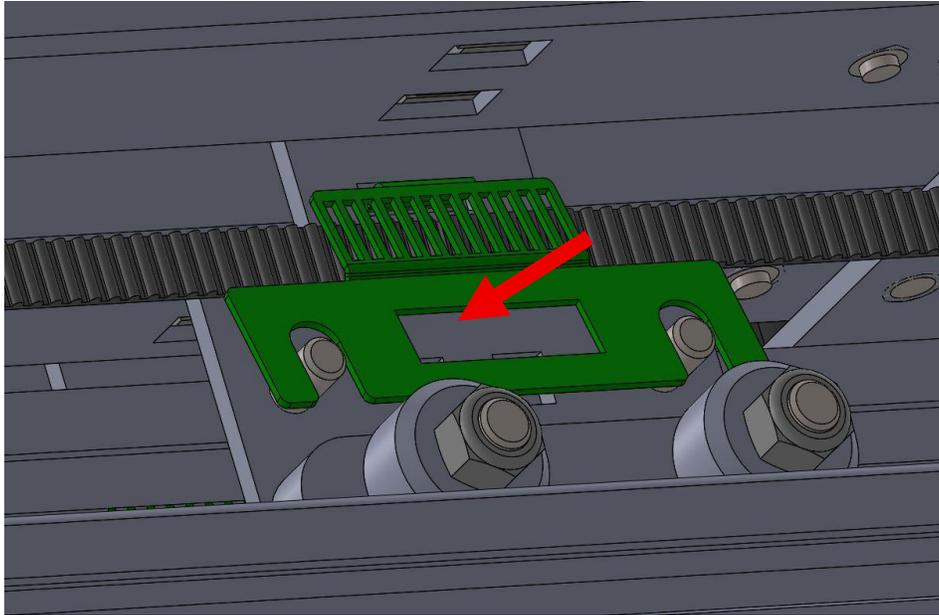
1. Check each target for belt misalignment, follow steps if either side of the belt is being held in by two teeth or less.
2. Remove belt pinch plate nuts.
3. Lift up on belt pinch plate



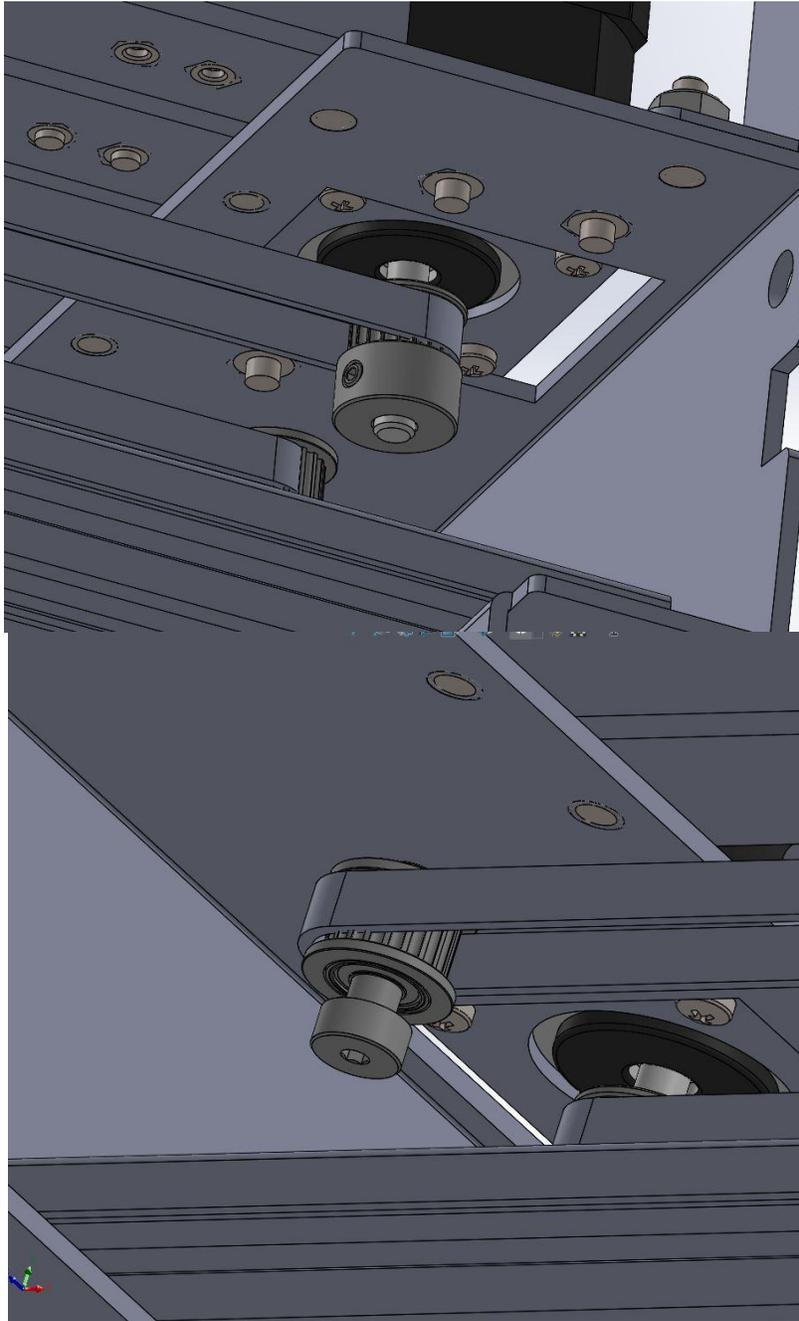
1. Loosen 4 screws and slide corresponding motor towards the target.



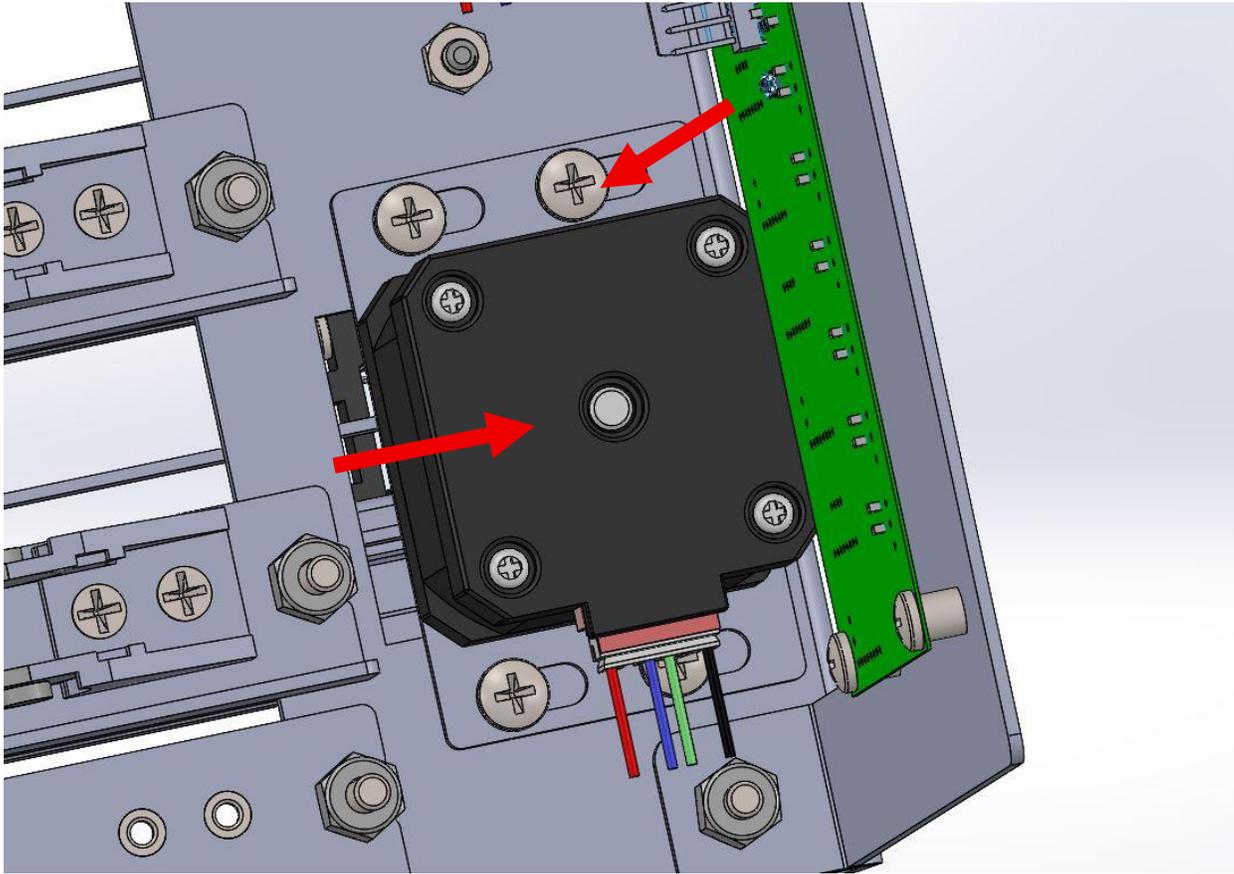
1. Position end of belt at side of pinch plate and push under pinch plate with a flat head screwdriver.



1. Drop pinch plate down over both ends of belt engaging belt teeth, six teeth per belt end is ideal, **5 teeth per belt end is the minimum.**
2. Reinstall nuts.



1. Loop belt around idler and motor pulley



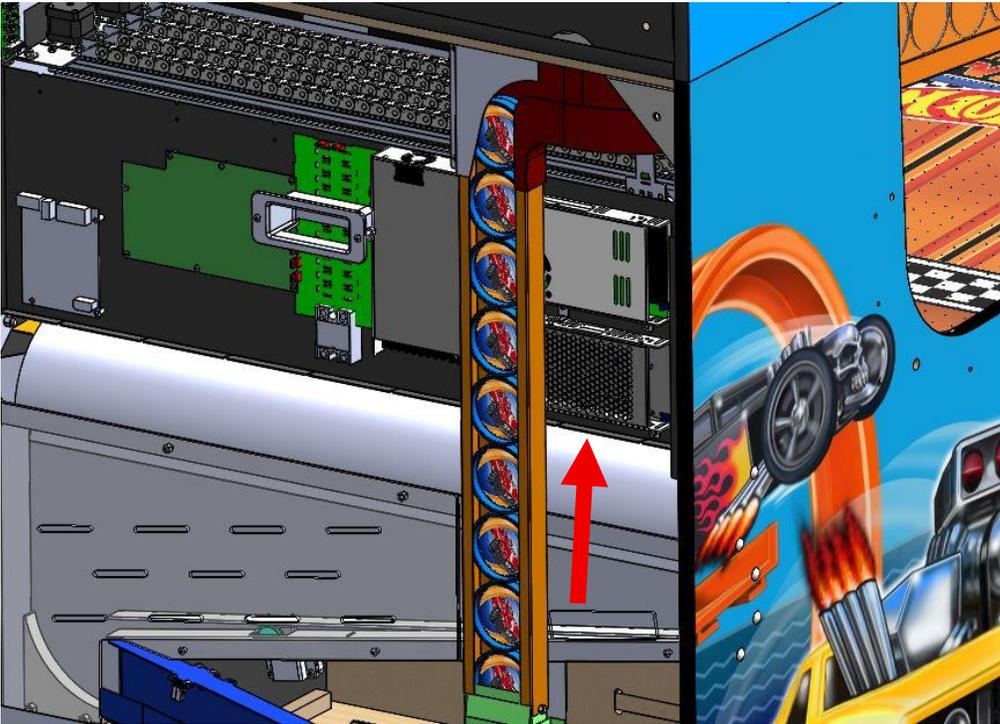
1. Tension belt by sliding motor away from target.
2. Tighten down motor screws.
3. Reverse order of disassembly steps to reassemble.

END -> **Target Belt** Adjustment Instructions

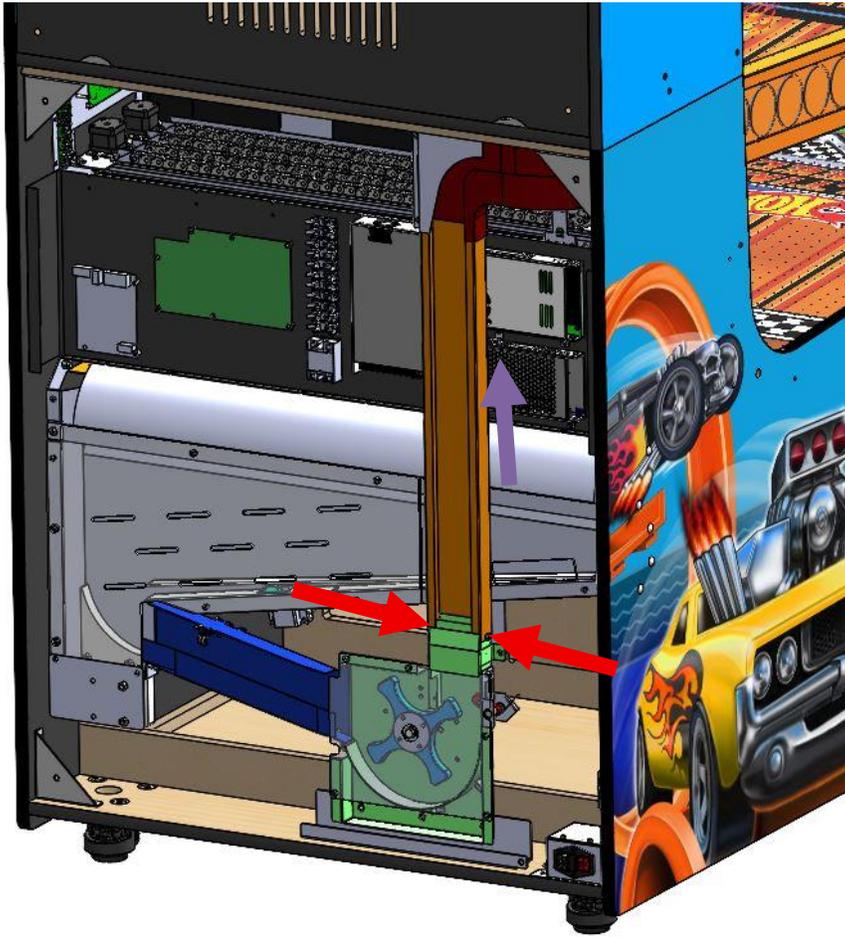
# Lower Puck Scoop Adjustment Instructions



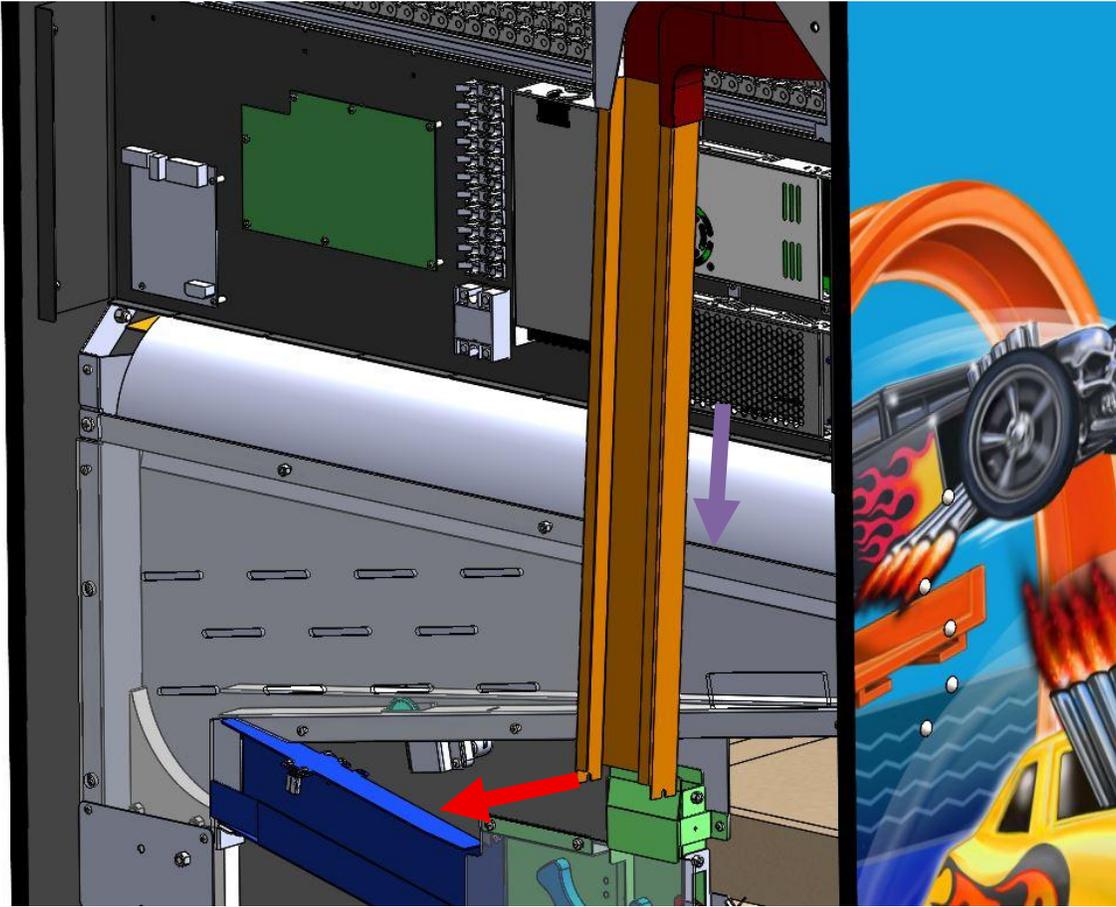
1. Using the diagnostic menu to release pucks, empty the puck track until it is half empty. Keep dispensed pucks on the table and out of the back of the game.



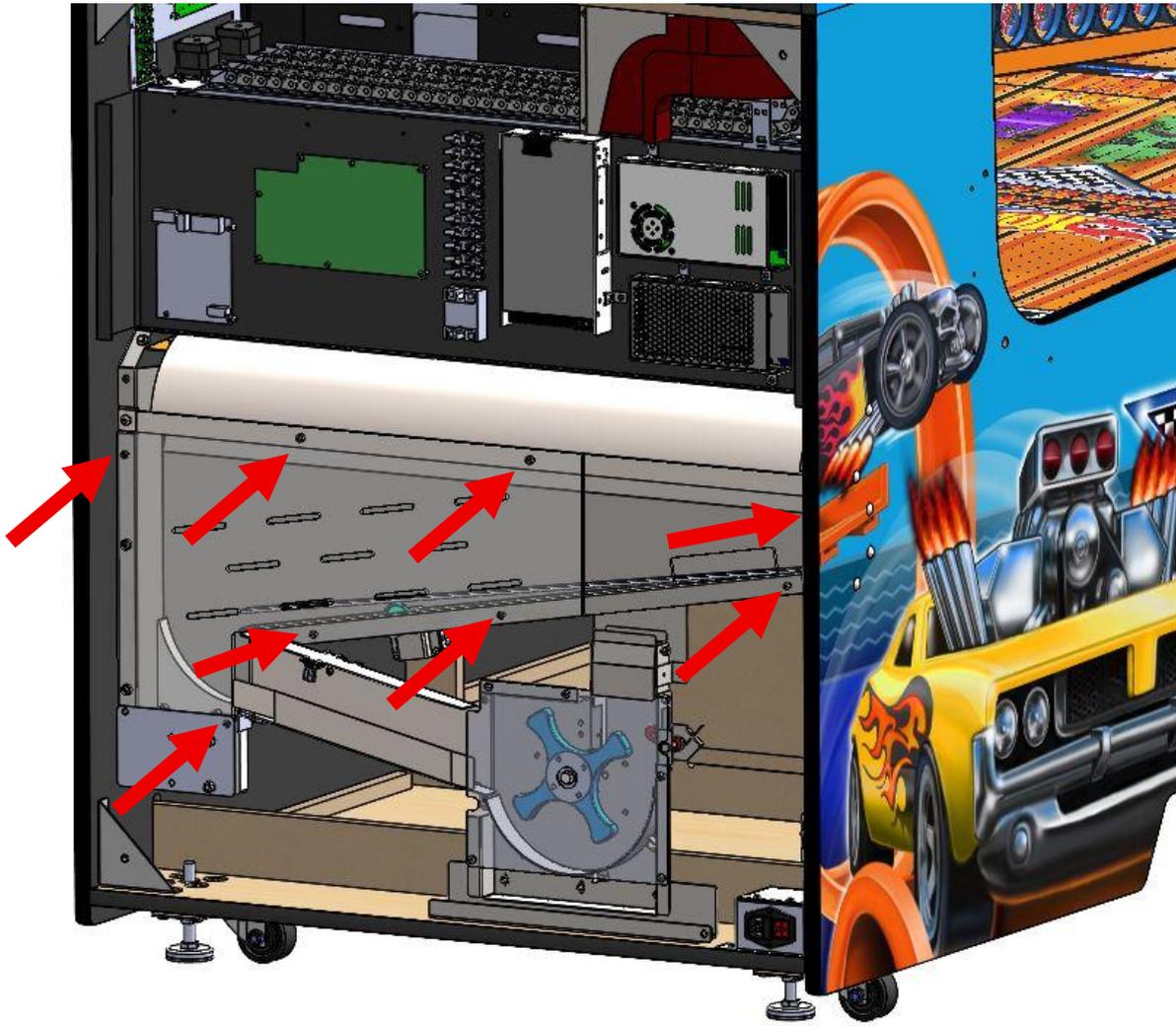
1. Manually raise pucks up to move them to the empty space in the puck track.



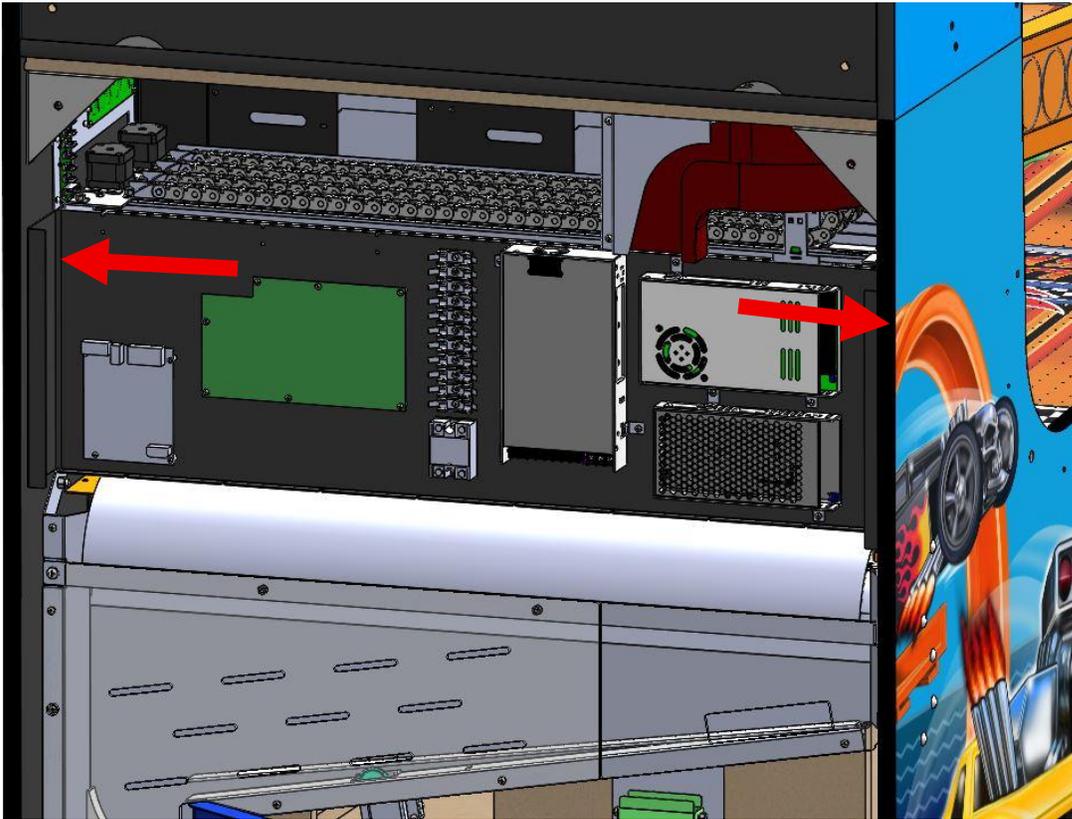
1. Remove #8-32 nuts from bottom of puck lifting track.
2. Lift "Puck lifting track" up so the bottom of the track is able to pivot forward.



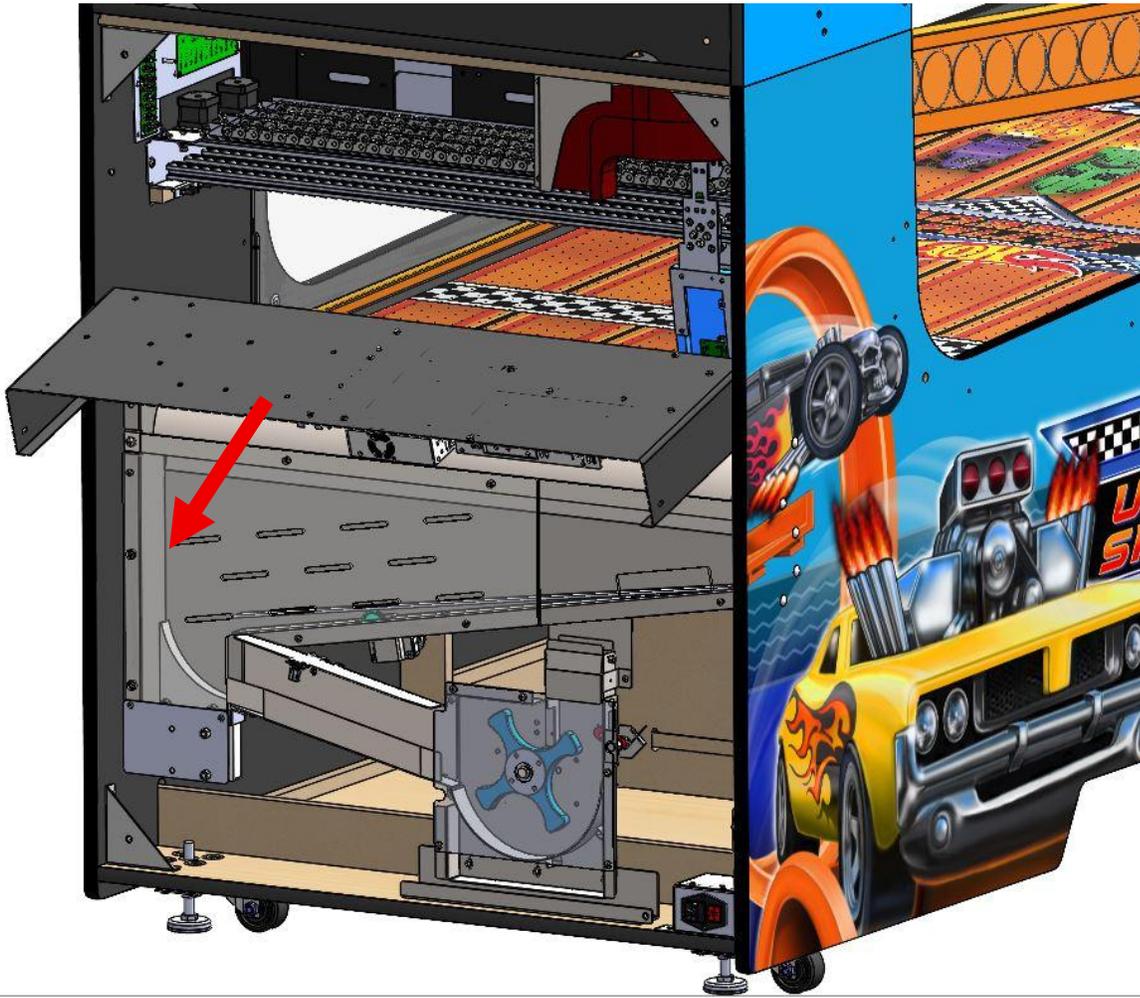
1. Pivot base of puck lifting track forward.
2. Pull puck lifting track down to remove it.



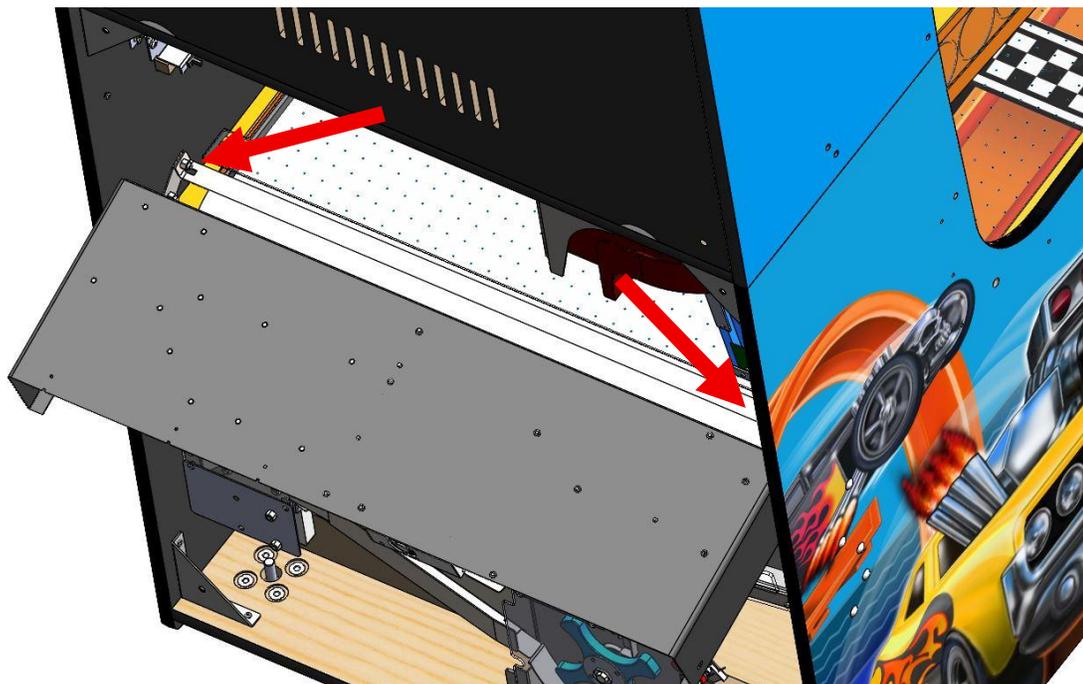
1. Remove hardware for plastic covers on puck catcher.



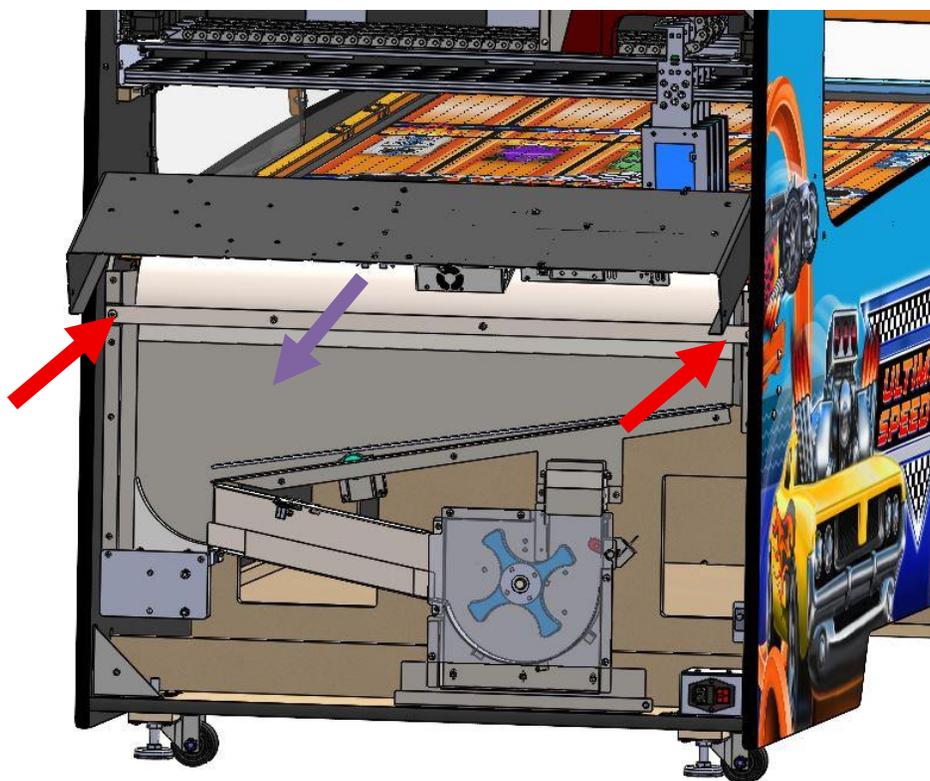
1. Disconnect harnesses and ground wires from electronics plates.
2. Remove two screws from electronics plate.



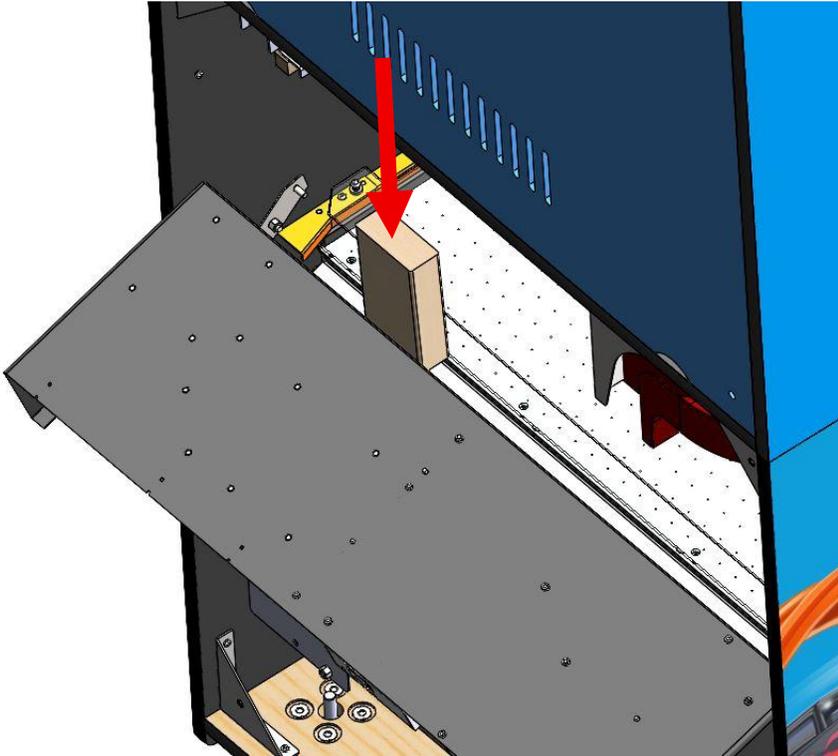
1. Fold down electronics plate, be careful of wires that may be pinched or pulled.
2. Support electronics plate with a stool or second set of hands.



1. Remove two 1/4-20 nuts from top of puck catcher.



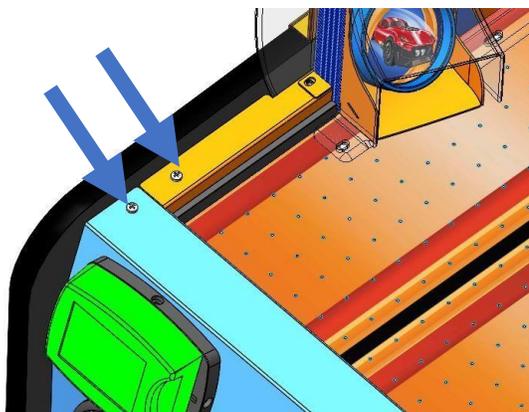
1. Remove two screws.
2. Remove Upper pack catcher scoop.



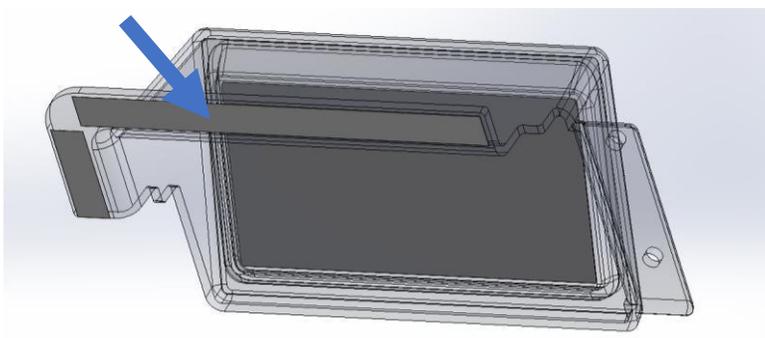
1. Use a 6-inch 2x4 to tap down any place where the lower puck scoop is above playfield level.
2. Re-assemble the game in reverse order.

END -> **Lower Puck Scoop** Adjustment Instructions

## Install Card Holder



1. Remove two screws.



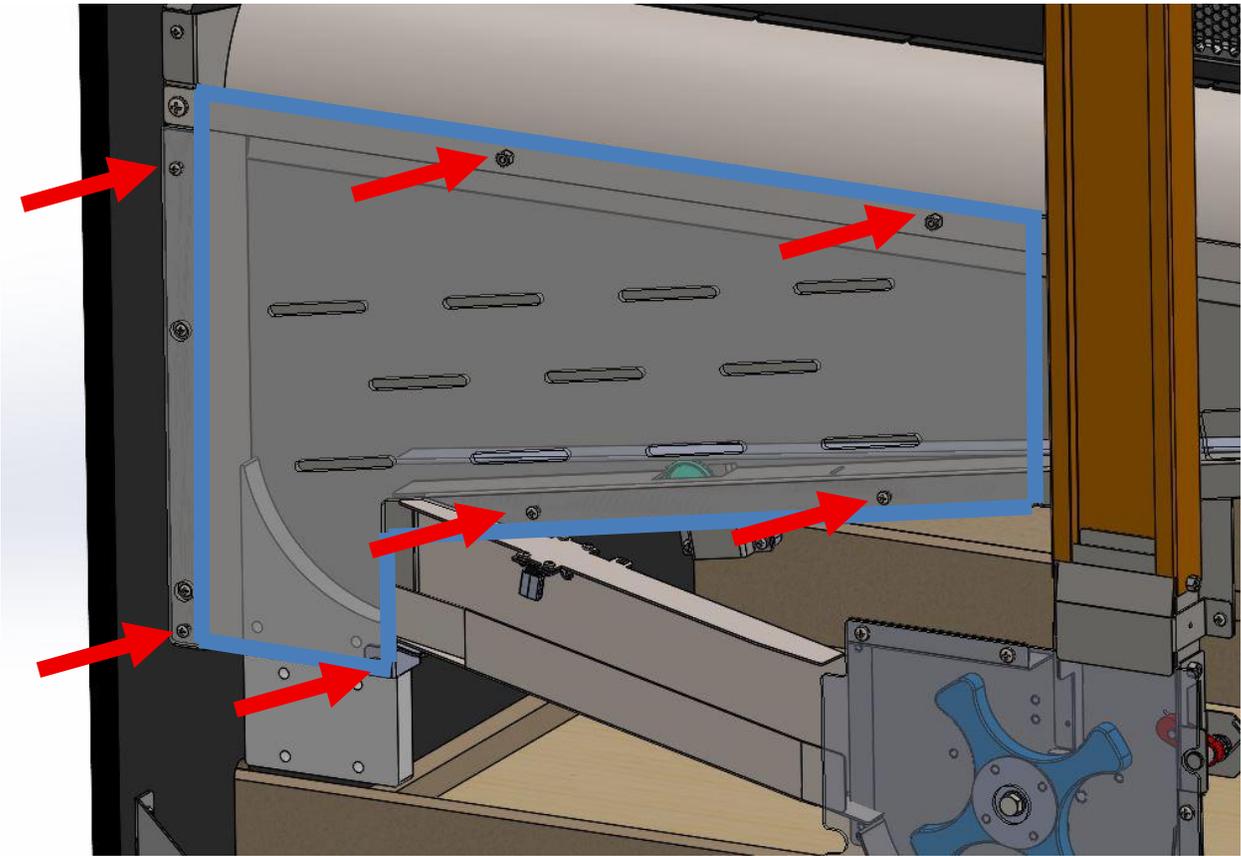
2. Remove backer from adhesive strip.



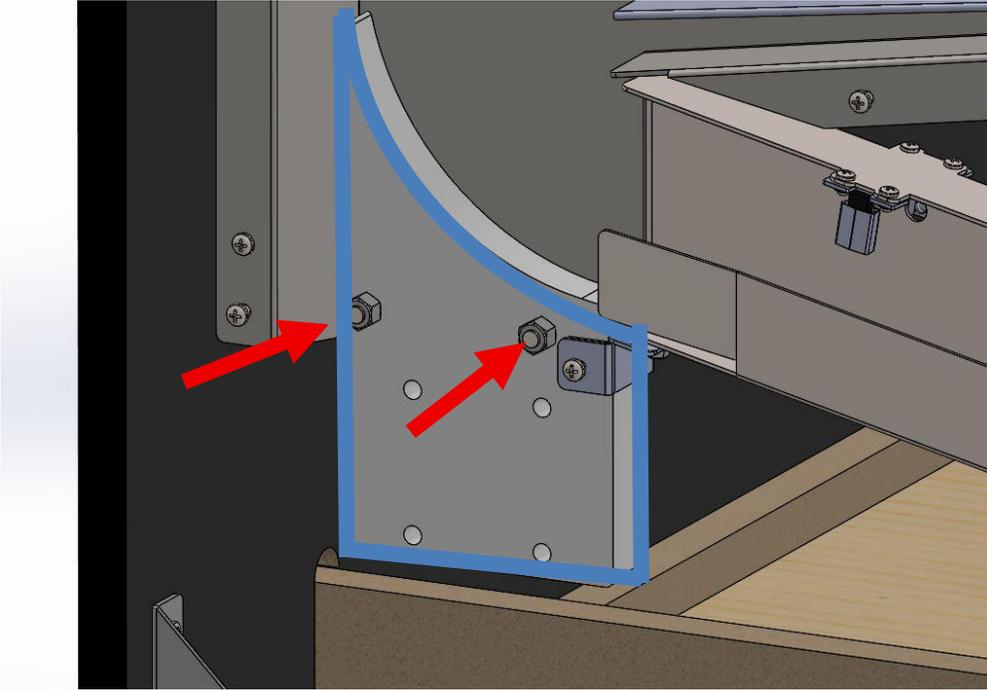
3. Install two #8-32 X .500 long machine screws included with kit.

END -> INSTALL CARD HOLDER

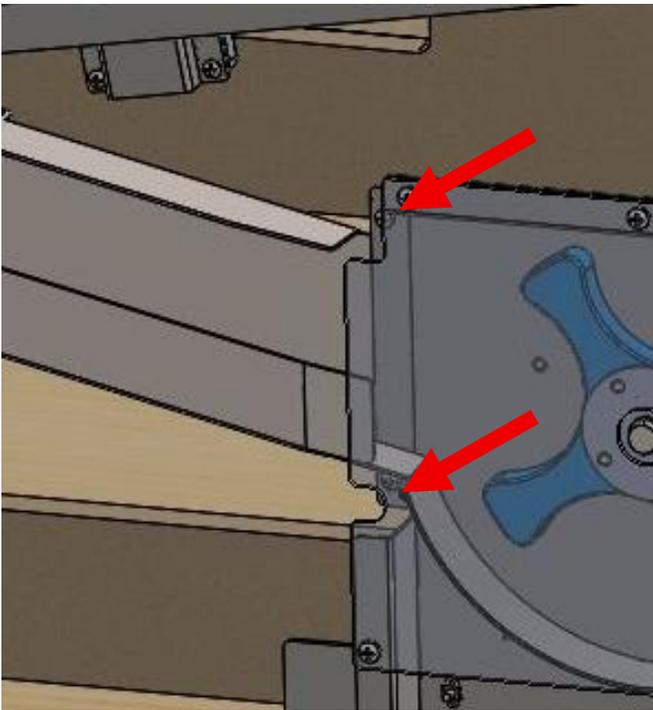
# Correcting Bracket Assembly of The Puck Catcher Funnel



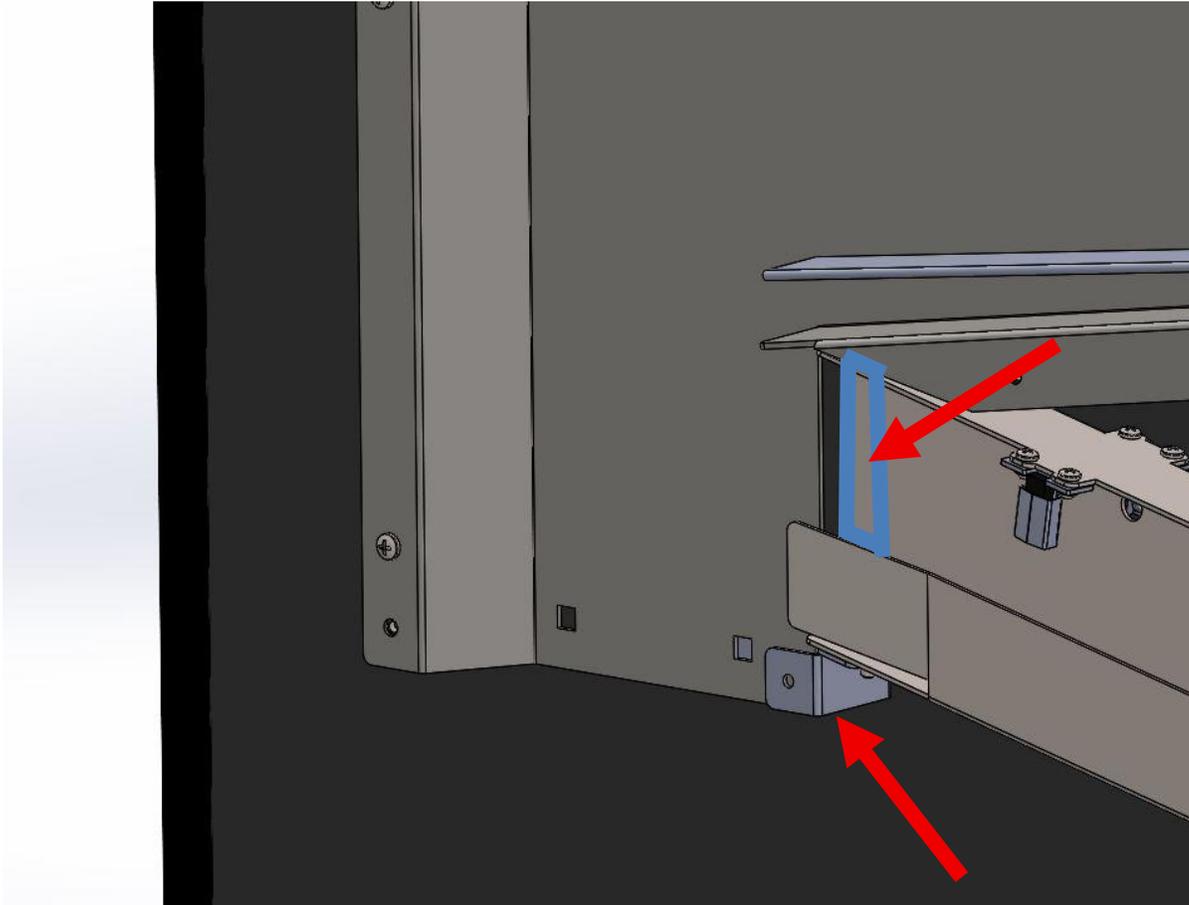
- 1. Remove puck catcher plastic cover.



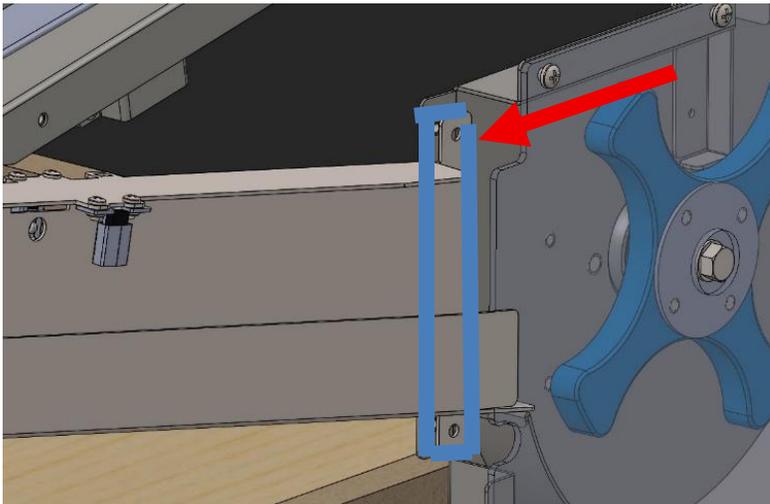
1. Remove puck funnel.



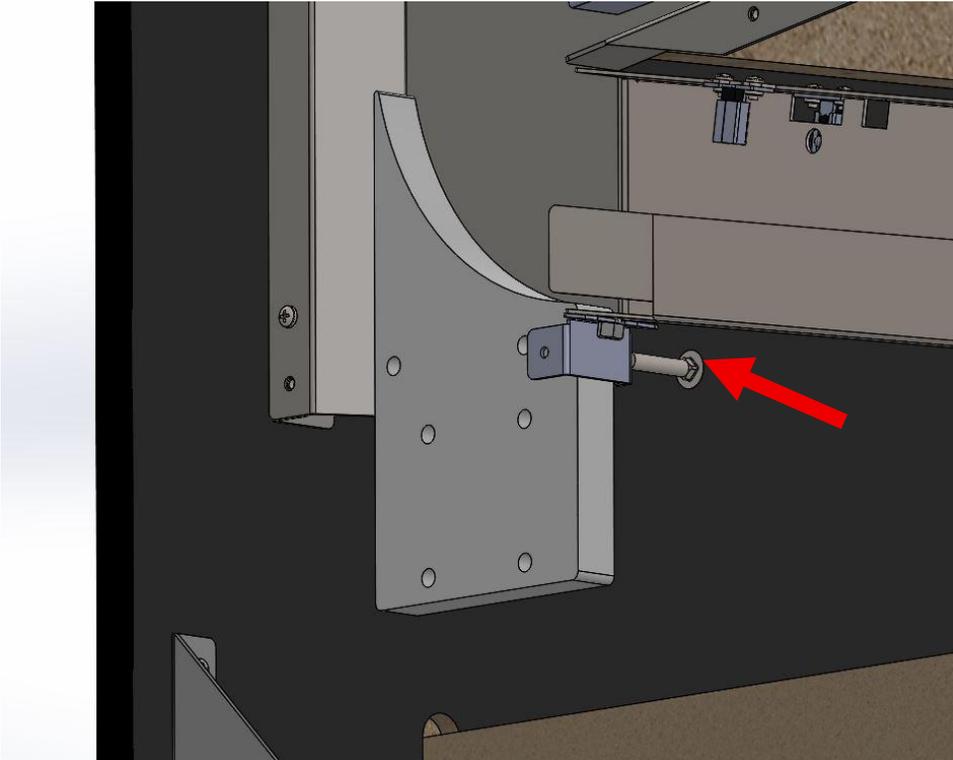
2. Remove screws from right side of puck transition.



1. Position flange on puck transition and corner support bracket behind puck catcher plate.
2. Be mindful of wire harness connected to optos on puck transition when moving.



3. Right side flange of puck transition will stay in front of puck lifter plate.



1. Reinstall Carriage Bolts and nuts while holding puck funnel in place against puck catcher.
2. Reinstall screws on right side of puck transition.
3. Reinstall screws and nuts on puck catcher plastic cover.

END -> Correcting Bracket Assembly of The Puck Catcher Funnel

## SOFTWARE CHANGES

### Software Update Version: HW v1.3

Coastal Amusements always strives to provide operators and players with the best gaming experience. To ensure the quality of our games, several updates to Hot Wheels Ultimate Speedway have been created to give more robust player experience. The software updates are listed below:

- A delay was added to the timing for when the car returns home at the end of the game. When the game ends, the car stays in its end game position for 3 seconds and flashes the lights under the car before returning to the bottom of the screen.
- Added diagnostic for low ticket input in the I/O screen.
- Added menu setting for “Low Ticket Warning” (defaulted OFF) and added a function to the attract mode to monitor this input and display a warning (when enabled in the menu)
- Added menu setting for “Target Tables” to allow the operator to select 1 of 5 different tables. The purpose of this is to influence the average points.
- Added “GO” to the track after the traffic light disappears. Also added new audio “GO! SLIDE THE PUCK!”
- Release the first puck a second earlier so that puck is in the player’s hand when GO command is called out in audio.
- Add “Turbo Boost” phrase when a hot target is available.
- Blink the car and play a new SFX when the hot target is scored.

## Steps to request a software upgrade.

### Hot Wheels Game – Software Update Instructions

To ensure your Hot Wheels game is running the latest software, please follow the steps below:

#### 1. Connect Your Game to Wi-Fi

Make sure all Hot Wheels units at your location (both **Master and Slave machines**) are connected to a reliable Wi-Fi network.

This allows our team to remotely access your system and perform the update.

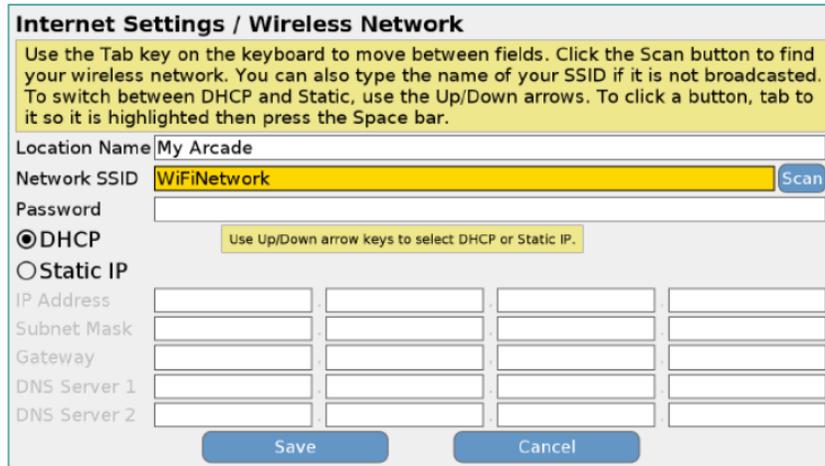
#### 2. Contact Technical Support

Once your game is connected to Wi-Fi, please contact our Technical Support Team at:

 **+1-732-905-6662 (Extension 2)**

#### 3. Provide Your Location Name

When calling, please provide the Location Name as shown in the sample below:



**Internet Settings / Wireless Network**

Use the Tab key on the keyboard to move between fields. Click the Scan button to find your wireless network. You can also type the name of your SSID if it is not broadcasted. To switch between DHCP and Static, use the Up/Down arrows. To click a button, tab to it so it is highlighted then press the Space bar.

Location Name

Network SSID

Password

DHCP  Static IP

Use Up/Down arrow keys to select DHCP or Static IP.

IP Address

Subnet Mask

Gateway

DNS Server 1

DNS Server 2

#### 4. Request the Software Update

Ask the support representative to **initiate a software upgrade** for your Hot Wheels game system.

#### Important:

Your game must remain connected to Wi-Fi during the update process to ensure a successful installation.

## **After Your Software Update is Complete**

Once your Hot Wheels game has been successfully updated, please complete the following:

### **1. Verify Game Operation**

Play a few test games to ensure everything is operating normally, including both Master and Slave units.

### **2. Confirm Features and Functionality**

Check that all game features, displays, sounds, and controls are working as expected.

### **3. Keep Wi-Fi Connected**

Leave your game connected to Wi-Fi to allow for future updates and remote support if needed.

### **4. Report Any Issues**

If you notice any problems after the update, contact Technical Support at:

 **+1-732-905-6662 (Extension 2)**

### **Note:**

Keeping your game updated ensures optimal performance, reliability, and access to the latest improvements.