

### Start Here — Before You Begin

#### 1 About This Document

Each Furio SE dolly has one drive wheel unit and three passive wheel units. This document describes how to remove and disassemble passive wheel units to replace only their wheels (using kit **FRO-SP-WHPAS-U**). For information about replacing all four wheel units (using kit **FRO-SP-WHKIT-U**), see **Replacing All Furio SE Wheel Units (5100DR-078-xx)**.

#### Required Tools and Materials

The passive wheel replacement kit includes:

- Six wheels
- Two 5 mm hex keys (also known as hexagonal wrenches or Allen keys).
- Three 5 ml tubes of Loctite 243 Threadlocker adhesive

The following additional tools and materials are required:

- One 17 mm open-end wrench, one 4 mm hex key, and two large slot screwdrivers
- Prop support (prop blocks or a small jack) to lift the end of the dolly to a height of 4" (10 cm) higher than the top of the rails. (see diagram).

**IMPORTANT:** Do not stack prop blocks on top of the rails. Use prop blocks only between the two rails of the track. Placing anything except dolly wheels on the rails may damage them.

#### Prepare the Dolly

- Move the dolly close to the end of the track where its wiredraw unit is located.
- Lower the lift completely and then disconnect the dolly power cable.
- Using a 5 mm hex key, detach the wiredraw cable from the wiredraw post on the dolly and then gently guide the wiredraw cable into the wiredraw unit. See diagram.
 

**IMPORTANT:** Handle the wiredraw cable with care to avoid permanently damaging the cable and the wiredraw unit:

  - Grasp the cable end tightly, but do not wrap it around your hand or bend it.
  - **NEVER** allow the cable to snap back into the wiredraw unit. If you release the cable and it snaps back into the wiredraw unit, the unit may be irreparably damaged.
  - Hold the cable close to the floor and parallel to the track. This reduces any rubbing of the steel cable against the wiredraw enclosure box, thus protecting the cable from damage.

### Removing Stability Wheels

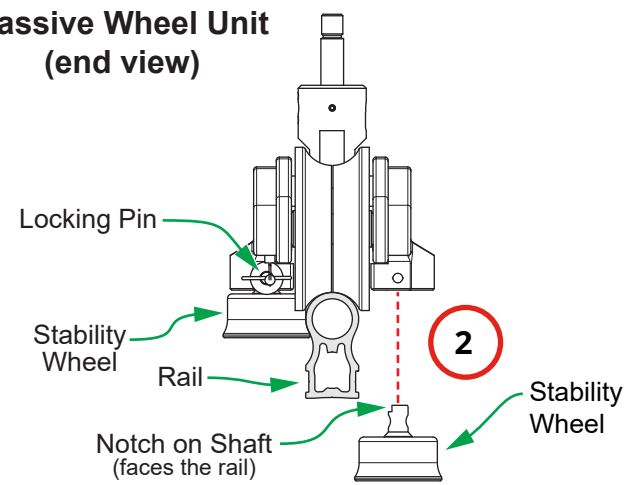
#### 2 About Stability Wheels

Two of the three passive wheel units have anti-tip stability wheels that hug the track if the dolly starts to lean due to excessive speed in a turn. Remove both sets of stability wheels (four wheels total).

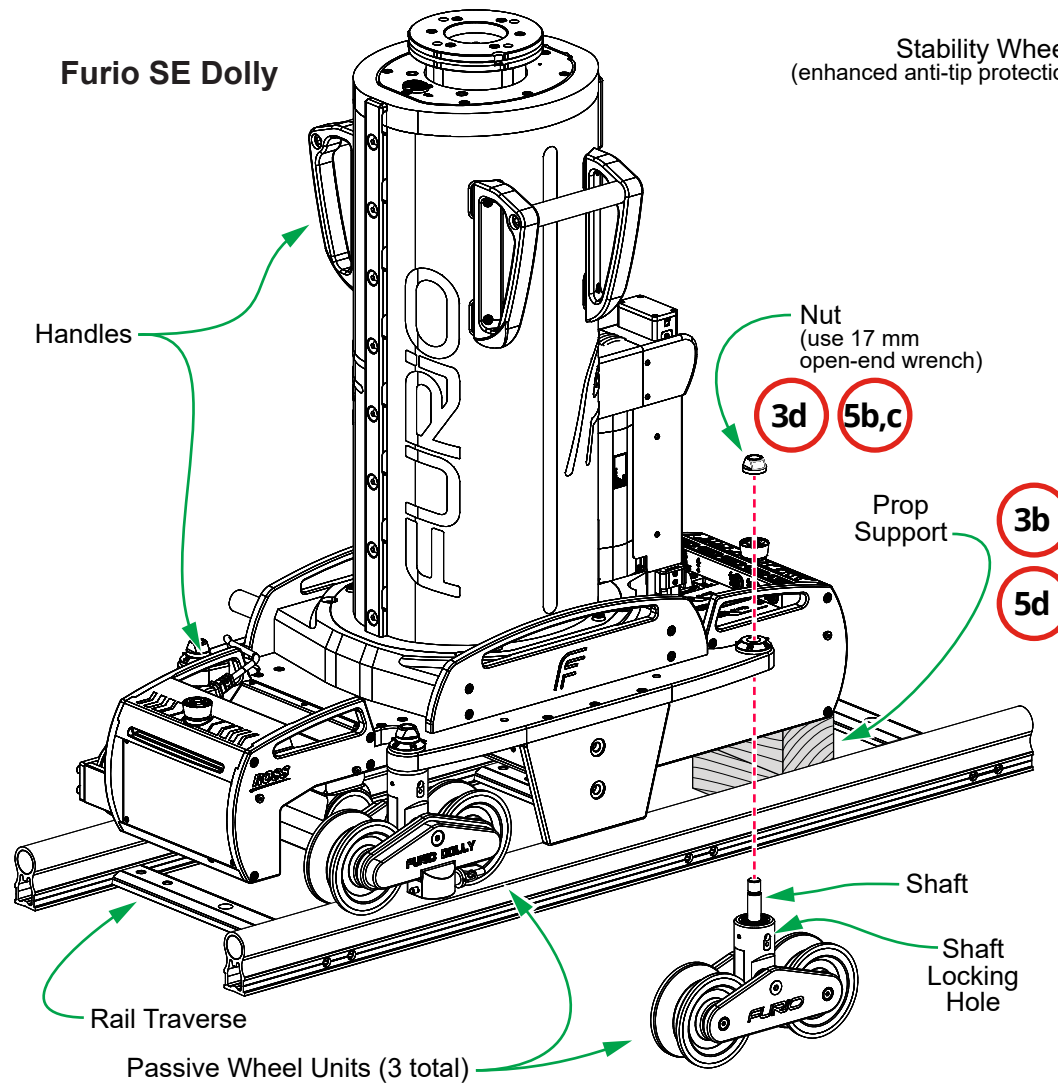
#### Remove Stability Wheels

- For each stability wheel, remove the locking pin by pressing and holding the pin lock button while sliding the locking pin out, and then remove the stability wheel. See diagram.

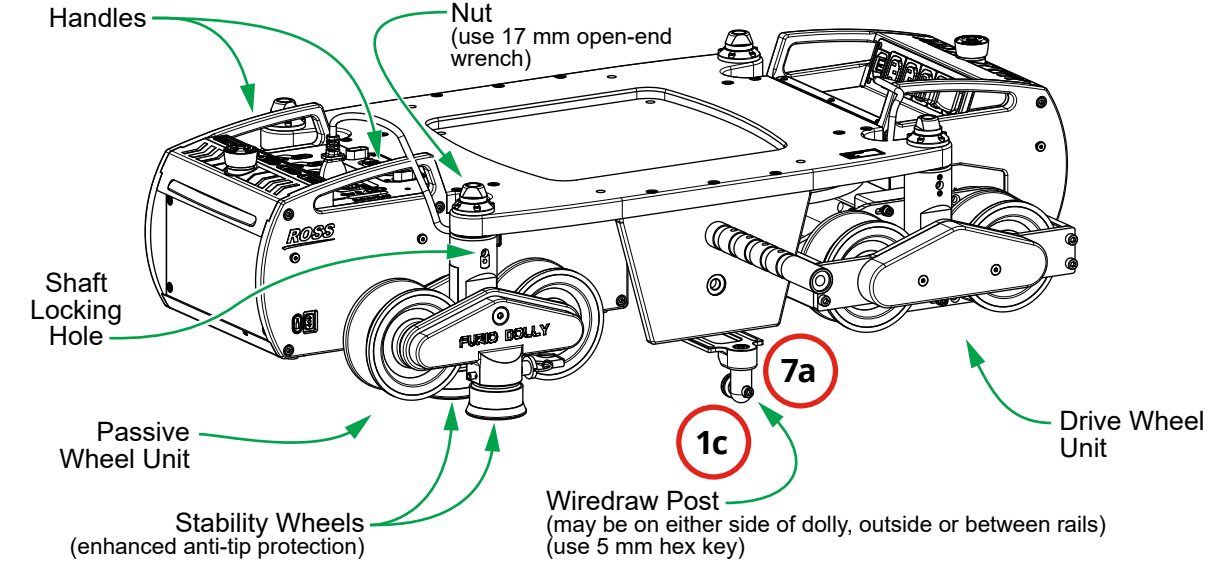
#### Passive Wheel Unit (end view)



#### Furio SE Dolly



#### Furio SE Dolly - Showing one Passive Wheel Unit and Drive Wheel Unit



### Removing Passive Wheel Units

#### 3 Remove a Passive Wheel Unit

- Move the dolly to a location on the track where there is ample working space. Ensure that the end with the wheel unit is between rail traverses (cross pieces), so nothing is between the end of the dolly and the floor.
- Prepare the prop support so it's available to suspend the end of the dolly at a height of 4" (10 cm) above the top of the rails.
- Have two people lift and hold up the end of the dolly while another person positions the prop support beneath it.
 

**IMPORTANT:** Lift only by handles on the dolly and lift. Never lift the payload or the top section of the lift! Improper lifting may damage the payload and/or dolly!

**IMPORTANT:** The dolly is heavy. Get help, and follow workplace safety rules. Be careful not to tip or drop the dolly.

**IMPORTANT:** Ensure that the dolly rests in a stable position. Do not allow the dolly to roll away or slip off the prop support.
- Use a 17 mm open-end wrench to remove the nut above the wheel unit. See diagram.
 

**Tip:** If the nut spins without coming off, insert a narrow tool into the locking hole in the side of the shaft as you turn the wrench. The tool engages with the shaft and locks it, enabling you to remove the nut.

### Replacing the Wheels of a Passive Wheel Unit

#### 4 Replace the Wheels

Each passive wheel unit consists of two wheels and a shaft, sandwiched between two plates. Two screws attach the plates to the shaft. Removing one screw and the associated plate allows access to both wheels.

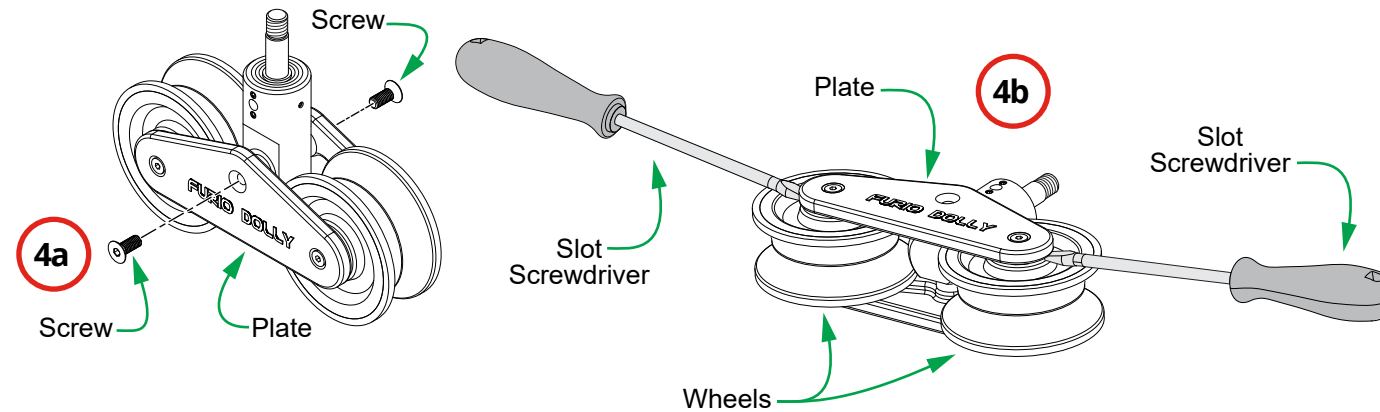
- Using two 5 mm hex keys in opposition to each other, remove one of the two screws that hold the wheel unit together. See diagram.  
**Tip:** Screws are secured with thread-locking adhesive. As you turn both hex keys counter-clockwise, one of the screws will come loose. Remove it, leaving the other one in place. Use a wire brush to remove any adhesive residue from the screw.
- Remove the plate previously secured by the screw you removed.  
**Tip:** If the plate is too tight to remove by hand, use two slot screwdrivers to gently pry it off. Lift each end of the plate evenly to avoid binding. See diagram.
- Remove both wheels and replace them with new ones.
- Reinstall the plate, ensuring that the wheel axles are properly seated in the axle holes of both plates.
- Test fit the screw, using two 5 mm hex keys in opposition to tighten it completely, to ensure that any remaining adhesive residue will not prevent assembly. Remove the screw. If the screw did not seat completely, remove residue from the screw hole.
- Open a new bottle of Loctite® 243 Threadlocker adhesive and apply a few drops of it to the threaded portion of the screw.
- Insert the screw and then use two 5 mm hex keys in opposition to tighten it.

### Reinstalling Passive Wheel Units

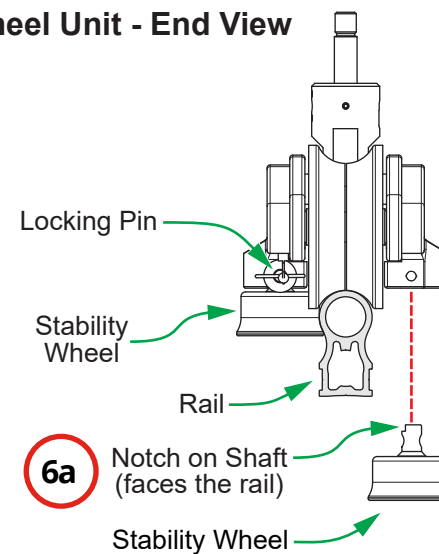
#### 5 Reinstall Wheel Units

- If you removed multiple wheel units, determine where each is to be reinstalled. There are two types of passive wheel units; with stability wheels (2 units) and without stability wheels (1 unit). The passive wheel units with stability wheels must be installed diagonally opposite to each other. See diagram.
- Reattach a passive wheel unit by sliding its shaft through the hole in the dolly base, and then loosely attaching the nut. See diagram labeled, "Furio SE Dolly" on page 1.
- Use the 17 mm open-end wrench to tighten the nut at the top of the shaft.  
**Tip:** Insert a narrow tool into the locking hole in the side of the shaft as you turn the wrench. The tool engages with the shaft and locks it, enabling you to tighten the nut.
- Have two people lift the end of the dolly, while another removes the prop support.  
**IMPORTANT:** Lift only by handles on the dolly and lift. Never lift the payload or the top section of the lift! Improper lifting may damage the payload and/or dolly!  
**IMPORTANT:** The dolly is heavy. Get help, and follow workplace safety rules. Be careful not to tip or drop the dolly.
- Gently lower the dolly onto the track, ensuring that all wheels are properly seated on the track.

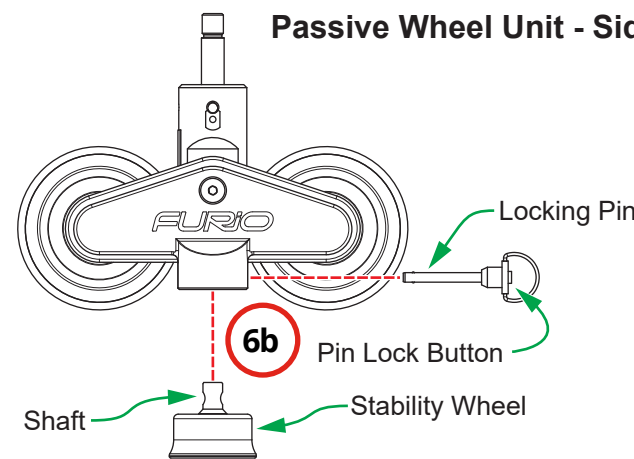
### Passive Wheel Unit - Disassembly



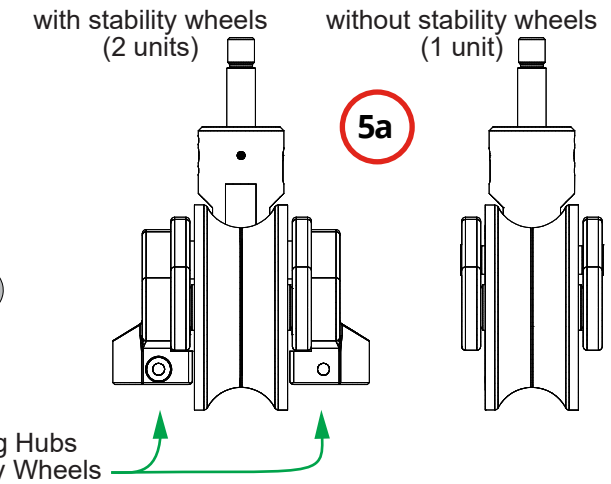
### Passive Wheel Unit - End View



### Passive Wheel Unit - Side View



### Two Types of Passive Wheel Units



### Reinstalling Stability Wheels

#### 6 About Stability Wheels

Two of the three passive wheel units each have a pair of stability wheels (4 total). These two wheel units are installed on diagonally opposite corners of the dolly.

#### Reinstall Stability Wheels

- Rotate the stability wheel shaft so the notch on the shaft faces the rail. See diagram.
- Insert the shaft of the stability wheel into its hole, then press and hold the pin lock button while sliding the locking pin into its hole. See diagram.
- Repeat steps 6a to 6c until all four stability wheels have been installed.

### Reattaching the Wiredraw Cable and Restoring Power

#### 7 Reattach the Wiredraw Cable and Restore Power

- Gently pull the wiredraw cable out from the wiredraw unit and then attach it to the wiredraw post on the dolly, using a 4 mm hex key. See diagram on page 1.  
**IMPORTANT:** Handle the wiredraw cable with care to avoid permanently damaging the cable and wiredraw unit:
  - Grasp the cable end tightly, but do not wrap it around your hand or bend it.
  - NEVER** allow the cable to snap back into the wiredraw unit. If you release the cable and it snaps back into the wiredraw unit, the unit may be irreparably damaged.
  - Hold the cable close to the floor and parallel to the track. This reduces any rubbing of the steel cable against the wiredraw enclosure box, thus protecting the cable from damage.
- When you have finished servicing the dolly, reconnect its power cable.