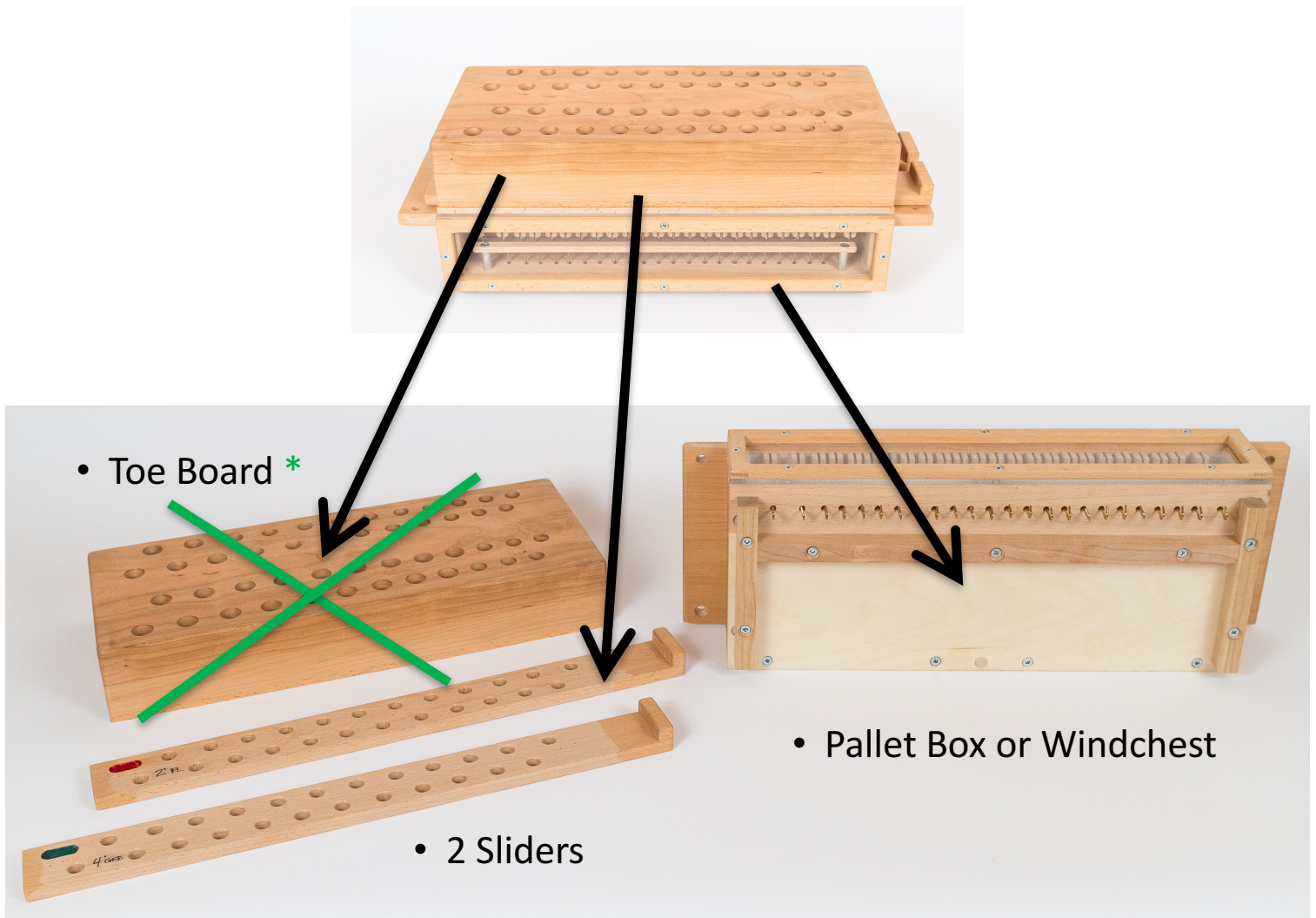


Step 1c: Tracker Action Assembly

While the frame is being assembled, this team can start on the TRACKER ACTION.

1. What you will need:



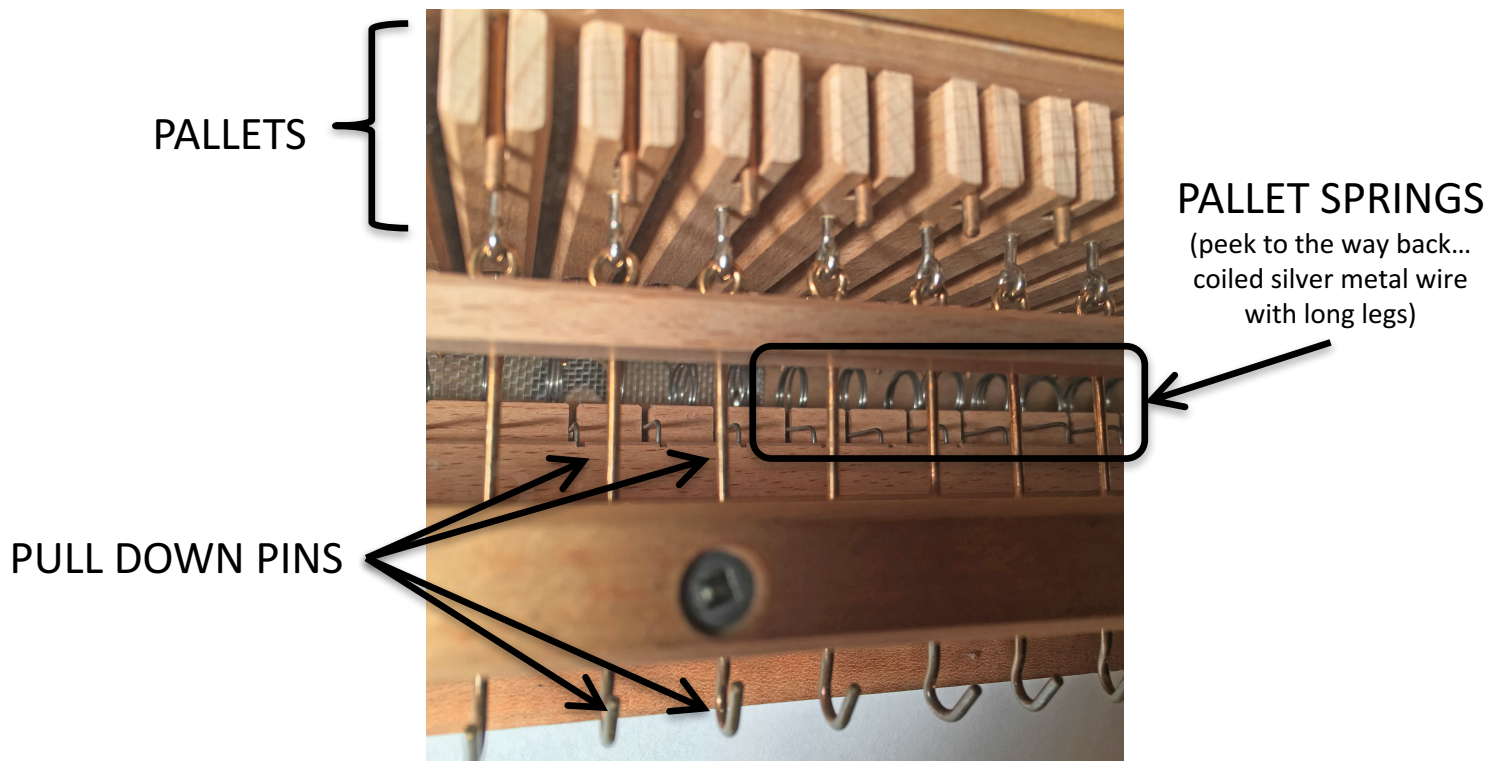
*Give the TOE BOARD
to the PIPE group



- 24 trackers
(leave the extra IN the bag)

2. What you need to know:

Before you start to assemble your parts, figure out **how** the PALLET BOX (or WINDCHEST) works. **What is its FUNCTION?**



- Take a **look** inside the windchest **through the front** Plexiglas window. While looking inside, someone can gently pull down on one of the central PULL DOWN PINS. What happens inside?
- Next, watch the windchest **from above** while gently pulling down on 1 pull down pin. What do you see happening?
- What does this allow to happen when the organ is assembled and wind is being pumped?
- What do you think the PALLET SPRINGS do? What do they counteract?
- Add the SLIDERS to the top of the windchest. How do they move? What do they allow you to control?

The TRACKERS you will be attaching next connect the KEYS to the PALLET BOX in the pallet box.

You may get to SHARE and SHOW this mechanism to your classmates later when you are ready for **ALL EYES** to come take a look.

3. How you will proceed:

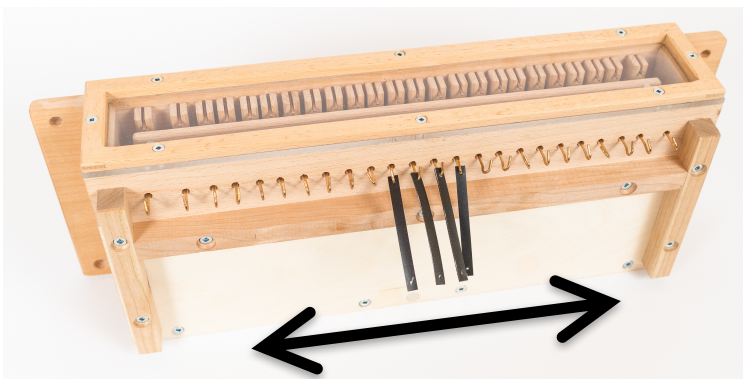
While the frame is being assembled, your team can start attaching the TRACKERS to the PULL DOWN PINS on the PALLET BOX, also called the WINDCHEST:



- Set the PALLET BOX onto its back side (hole facing down)



- Using BOTH hands, use 1 finger to support the pin while the other hand holds the tracker



- 2 people can put on the trackers at a time: start in the center and work out to the sides
- Take turns, each doing a few



- Your next step must wait until the frame is built and the keys installed...



- TWO PEOPLE can insert the pallet box with the dangling trackers into the top of the frame. The window of the pallet box faces the front.
- Make sure it is seated securely on the pegs on both the right and left sides

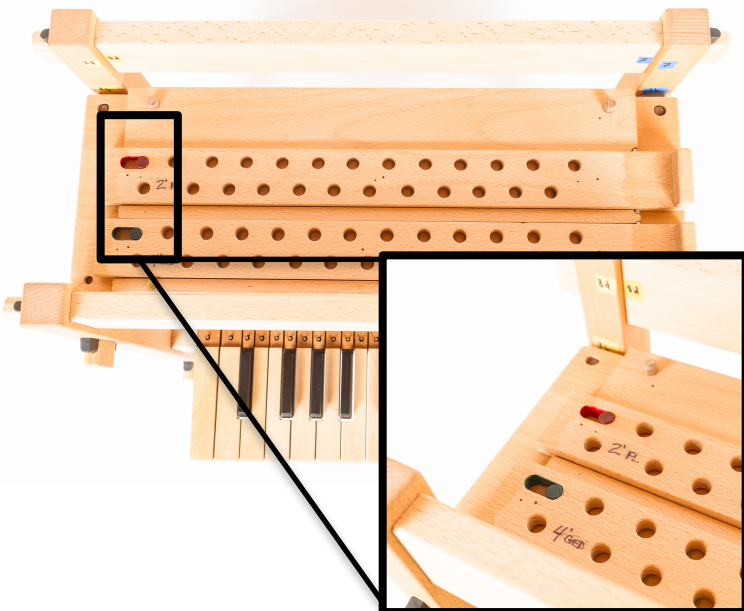


- When you've installed the windchest & before you add sliders, **call All Eyes** to come & look at how the mechanism works. Show your classmates what you explored on the previous page.

After you've demonstrated how the WINDCHEST functions, you may finish assembling your parts & exploring the function of the SLIDERS.



- Now for the SLIDERS. Sliders allow the organist to select which rank of pipes is playing



- Insert the sliders into the grooves on top of the windchest. The 2' slider inserts in the 2' groove. ' = foot, specifying the RANK or kind of pipes.
- Move the sliders back and forth. Which position would allow the pipes that will be above to play?



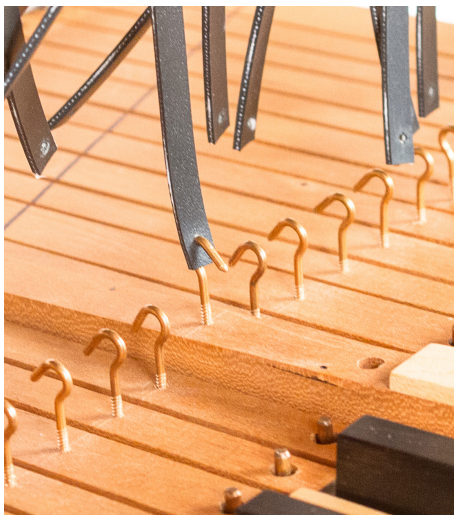
- Next is a heavy, adult job. Lay the TOE BOARD over the sliders. There are pegs on which it needs to set securely. Make sure the 'front' side faces the front.
(The PIPES group may have the toe board)

Attaching trackers to the keys

- This is a good activity to share between groups, with everyone attaching a few trackers and taking turns.
- Two people can be attaching trackers at a time if they start in the middle and work outwards



- Make sure the **keyboard retainer** is in place, holding down the back of the keyboard *before* proceeding with trackers
- Attaching the lower part of the tracker to the key is a **TWO PERSON JOB**. A friend will **LIFT** the front of the key just a little bit while another person uses **TWO HANDS** to slide the key hook through the lower end of the tracker
- Do not twist or turn the hooks
- Make sure the tracker rests at the top of the hook so that the keyboard is even



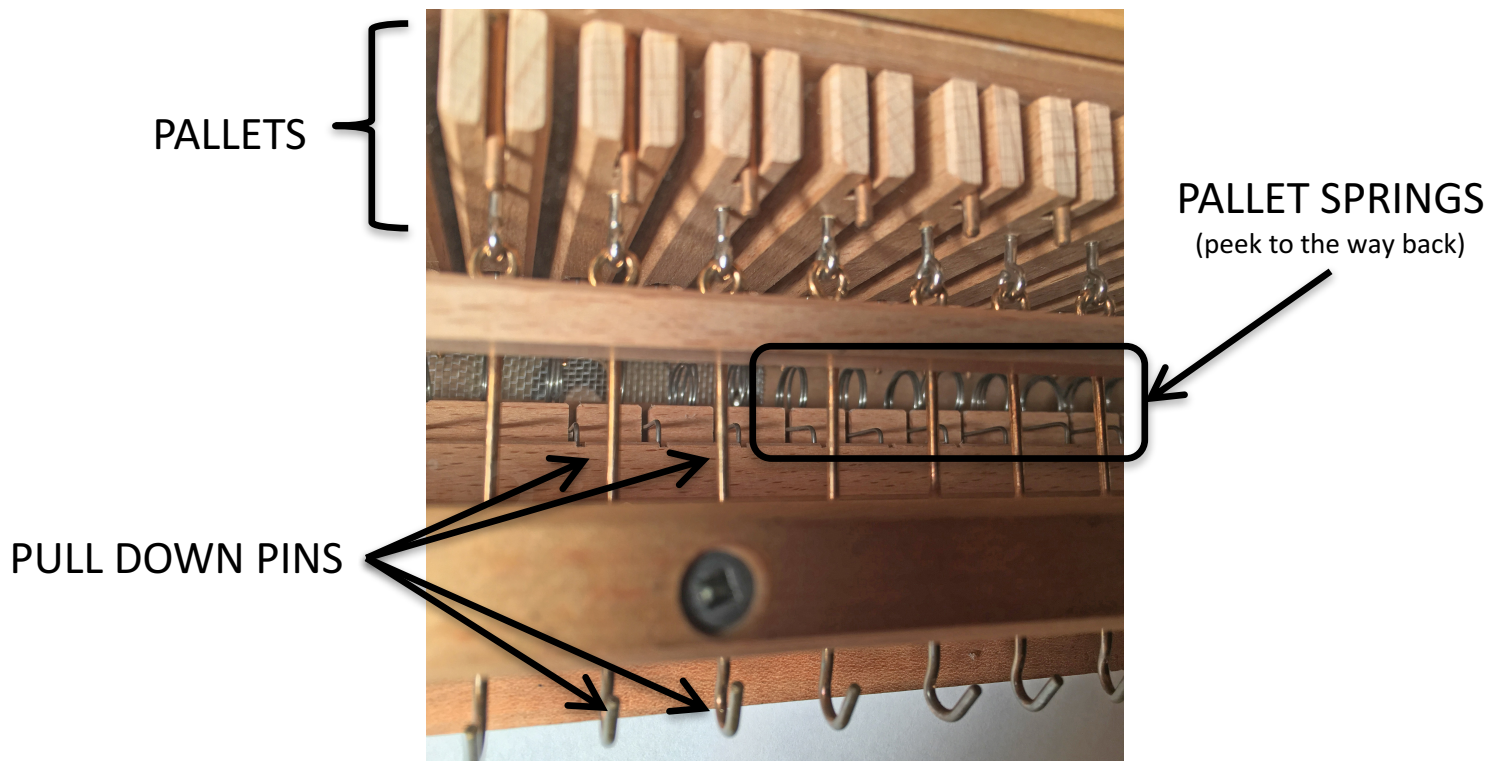
- The organ should now look like this:



2. What you need to know:

Teacher's guide to Tracker Action Assembly questions

Before you start to assemble your parts, figure out **how** the PALLET BOX (or WINDCHEST) works. **What is its FUNCTION?**



- Take a **look** inside the windchest **through the front** Plexiglas window. While looking inside, someone can gently pull down on one of the central PULL DOWN PINS. What happens inside? **Corresponding pallet lowers. The pallet normally covers a groove and prevents the flow of air to the pipes above.**
- Next, watch the windchest **from above** while gently pulling down on 1 pull down pin. What do you see happening? **TWO holes are opening up, one for each group, or RANK, of pipes.**
- What does this allow to happen when the organ is assembled and wind is being pumped? **When the pallet is lowered, the wind passes through to the pipes above and that NOTE is played.**
- What do you think the PALLETS SPRINGS do? **Push and hold the pallets up**
- Add the SLIDERS to the top of the windchest. How do they move? What do they allow you to control? **The sliders move right and left and allow the organist to select which combination of ranks of pipes will play**

The TRACKERS you will be attaching next connect the KEYS to the PALLETS in the pallet box.

You may get to SHARE and SHOW this mechanism to your classmates later when you are ready for **ALL EYES** to come take a look.