



SKID STEER LOADER VOLUNTEER GUIDE

Skid Steer Loader introduces students to the importance and value of trades careers within their communities. Your role is to lead the group in a simulation that teaches students how a Skid Steer Loader operates and the steps involved in using it safely and effectively on a job site. You will introduce the activity, demonstrate each stage of the machine's operation, and help them understand how these skills connect to careers in the construction and equipment trades.

Before the session begins, **please review:**

- **Skid Steer Loader Volunteer Guide**
- **Skid Steer Loader Training PowerPoint**
- **Practice Skid Steer tasks using joysticks**

To turn on the simulators, log in to each computer (if not already)

- **Username:** Trades
- **Password:** simlog (all lowercase)
- Check that the sound is turned on to the correct level
- **Double-click:** Simlog Skid Steer Loader
- **Click:** Proceed without login
- Select the category "Positioning" and launch the module

Instructions to Read Aloud (Bolded Sections)

Welcome to Skid Steer Loader! Today you are going to learn how a Skid Steer Loader works and what makes it such an important machine on a job site. By the end, you will be able to explain the basic steps of operating it safely and understand how different skilled tradespeople use this equipment to get work done.

Skid Steer Loaders work in many places. Can you think of some examples? (landscaping, construction, farming, roadwork, forestry, demolition, and warehousing)

What would our community look like if there were no Skid Steer Loaders? (A lot of construction and landscaping work would take much longer and would have to be done by hand or with less efficient equipment)

How do you think they are helpful during emergencies? (Help clean up debris, move heavy materials, snow and ice removal, rescue and recovery, etc.)

Now we're going to do a hands-on simulation to practice four key skid steer tasks. Before we start, has anyone seen a skid steer loader before?

Show and demonstrate the mini skid steer loader.

The simulators you're using today are the same simulators adults use to earn their heavy-equipment certifications. In fact, adults must complete more than 140 hours on these simulators and pass tests on precision, safety, and speed to become certified.

Each of you has a map at your workstation that shows what your joysticks do. The left joystick controls your driving, and the right joystick controls the arm. For today's demonstration, you will only need to move your joysticks forward, backward, and side to side. You will also use the trigger button on the back of the left joystick. No other joystick functions will be needed.

Make sure the students know where the map is located at their station.

The four tasks the students will be experiencing during the session are as follows:

- Controls Familiarization
- Positioning
- Stock Piling 1 – Level Ground
- Load Handling 1 – Level Ground

Controls Familiarization Activity

Let's start by getting familiar with our joysticks. On your screen, use your computer mouse to highlight the 'Controls Familiarization' text and then select 'Launch Module' below or double click 'Controls Familiarization'.

You'll see a command appear at the top of the screen. The system measures how quickly and accurately you follow that command. Once you complete it, your score will pop up. To get a new command, squeeze the trigger on your left joystick.

Give students a few minutes to practice.

Positioning Activity

Now we're going to learn how to drive the skid steer loader. Please use your computer mouse to close this window and then close the Session List that appears. Now select 'Positioning' from your list and then choose 'Launch Module'. Once it loads, take your hands off the joystick and wait for everyone else.

When the module loads, you'll see a bird's-eye view of an obstacle course. You're going to drive your skid steer through the course using only the left joystick. So please use only your left hand to operate the left joystick, even if you're right-handed.

Your goal is to complete the course quickly and safely. The cones and obstacles represent people or objects on a real job site, so avoiding them is very important.

Drive over the arrows in the obstacle course until each one turns green. If an arrow doesn't turn green, you've missed one! Go back and look for it, including alcoves. When you're ready, squeeze the trigger to begin.

Give the students a few minutes to complete the course.

Stockpiling 1 – Level Ground (Loading Rocks) Activity

So, driving the skid steer loader is fun, right? BUT that's not what this equipment is really designed to do. Now it's time to get some actual work done. Please close this window, close the Session List, and then select 'Stockpiling 1 – Level Ground.'

In this module, your skid steer loader now has a bucket, and your job is to move rocks. While looking at the bird's eye view, notice the rocks on the left and the square on the right. You are going to move rocks from the left side of the construction site to the right.

When you're moving rocks, keep your bucket low and level before curling your bucket.

Demonstrate with the mini skid steer loader.

Also, travel with your bucket low and level so that you can see where you're driving. Traveling with rocks above your head can be dangerous.

Give them a few minutes to move some rocks.

Has everyone moved some rocks? If someone says no, assist them.

Load Handling 1 – Level Ground (Moving Pallets) Activity

Okay, let's try something new. Close the window, close the Session List, and select 'Load Handling 1 – Level Ground.' In this module, instead of a bucket, your skid steer loader is equipped with forks like a forklift.

Your job is to move pallets of materials from place to place, matching colors like blue boxes to blue squares. Because a forklift uses two narrow points instead of a wide scoop, it can be more challenging to pick things up.

Give them time to try this module.

If time allows or if students seem bored with the level, you can let them choose which module they want to try next, such as Slope Driving. Some students may want to run the obstacle course again. You can let them explore, have fun, and enjoy the experience.

More Information

At some point, one of your students may run into a ‘fatal error,’ such as dropping a rock on the skid steer or losing a load off the forks. This is a great teaching moment. Call everyone’s attention to the message.

What does fatal error mean? Emphasize the importance of safety when operating this equipment.

You can say something like, *‘It’s okay, that’s why we practice on simulators and not in real skid steers’. The good news is that if you squeeze your trigger, you can try again!’*

Wrap-Up Discussion

- **What skills do you think are needed to drive a skid steer loader safely?**
 - Hand-eye coordination
 - Spatial awareness
 - Basic problem-solving
 - Focus and stamina
 - Teamwork and communication
- **What part of this experience was easier than you expected and what part was harder than you expected?**

Trades careers play a crucial role in our communities. Skid steer loaders and the skilled tradespeople who operate them help keep our homes, schools, and workplaces running safely every day. These careers make a real difference and help our communities grow and thrive.

