

FRONT-END TRACTOR ATTACHMENTS

WHAT'S AT STAKE?

One of the most popular and versatile attachments for any tractor is a front-end loader. For farmers in particular, who tend to tackle a wide variety of tasks from time to time, a front-mounted bucket is perfect many tasks, including:

- moving compost and manure
- digging and shifting dirt
- clearing snow
- transporting materials
- grading driveways

WHAT'S THE DANGER?

The hydraulics that power the front loader can do a lot to make you work easier.

You can install many other useful attachments on the front of your tractor. They further expand its capabilities while making your farm chores easier and faster.

Some attachments can be installed directly on the bucket of your front-end loader. Others are installed in place of the bucket.

Here are four:

1. Bucket teeth

Adding a row of teeth to the bucket of your front-end loader can increase its capacity and—more importantly—its versatility as a digging tool. It literally gives it the teeth it needs to take powerful bites out of tough ground.

The shape of the teeth can be an art form in and of itself. Varying sizes and shapes offer ideal performance for working with rocks, clay soils, soft soils and more.

2. Forks

Forks can be installed on the bucket or in place of the bucket to quickly turn your tractor into a forklift. This offers you the ability to transport pallets of supplies, hay bales, logs, large branches and more.

As with a front-end loader, how much your forks can handle depends on the strength of your tractor. But even a utility tractor of modest size can handle a lot of material. I've moved multiple 8-foot pine logs at once with forks installed on a 40-horsepower diesel tractor.

In many cases, forklift attachments are adjustable, allowing you to change the width between the two forks. This is an important feature if you wind up working with pallets of different sizes, or if you're moving something more obscure and need the forks to be set a specific distance apart.

3. Bale spear

A hay bale spear is a lot like a forklift attachment, except it's specifically designed for transporting round hay bales.

Designs vary, but a typical bale spear uses a handful of tapered spears to penetrate a round bale in multiple locations. This provides a secure means for the tractor to lift and transport the bale to wherever it's needed.

Since round hay bales are large and heavy, a bale spear is a must-have attachment for farmers feeding these bales.

4. Grapple

A grapple installs in place of the bucket and is the perfect tool for dealing with logs, branches, brush and more.

The hydraulic-powered jaws allow you to secure a tight grip on your load and lift it up

for transportation to a more appropriate location, whether that's a brush pile, a wagon or a sawmill.

A large grapple mounted on a strong tractor will significantly speed up your efforts to clean up tree debris on your farm. In turn, you will save a lot of time and manual labor.

But there are **Dangers/Risks**

Front-end tractor attachments change the tractor's centre of gravity. The higher the load is lifted, the more unstable the tractor becomes and this can result in the tractor tipping over onto its side. Mounted tractor attachments make the tractor longer and this changes the amount of room needed when maneuvering.

HOW TO PROTECT YOURSELF

MAKE SURE ALL ATTACHMENTS ARE SECURE

Front-end loader attachments can become unattached if they are not properly secured. Clear any debris from the coupling system and make sure that all locking mechanisms are engaged. Visually inspect the coupling system to verify that the attachment is secure, all locks are fully engaged and the centre of the attachment matches up to the coupler. Quick attach systems are quick, but they are not foolproof!

THE BUCKET SHOULD BE KEPT AS LOW AS POSSIBLE WHEN TURNING AND TRANSPORTING

It is important that you make sure you have enough clearance when driving that the bucket doesn't touch or catch on the ground but carrying loads higher than needed can cause centre of gravity of the tractor to shift. If the tractor becomes unstable due to the gravity shift this can cause the tractor to tip or roll.

NEVER WALK OR WORK UNDER A RAISED LOADER

The loaders are attachments, and even though we make sure that they are properly attached, at times, mechanical or hydraulic issues can cause the loader to drop. Make sure that no one walks or works under the loader at any time.

A FRONT-END LOADER CHANGES THE CLEARANCE

A front-end attachment changes the amount of room the tractor needs to turn corners, maneuver through the yard and to park. Adjust for this and make sure you have enough clearance when operating a tractor with a front-end attachment.

FRONT-END LOADERS AREN'T PEOPLE TRANSPORTERS

Front-end loaders can haul many things, but never people. A sudden stop, lurch or bump can cause the rider to lose their footing and fall off.

FRONT-END LOADERS AREN'T REPLACEMENTS FOR POSTDRIVERS OR OTHER TOOLS

Even though front-end loaders are handy, please make sure you are using the proper tool for the job.

Here are some additional safety tips for working with front-end tractor loaders:

1. Loader controls should only be operated from the operator's platform when the operator has a clear sight of what is around the machinery or is being guided by a spotter.
2. Never exceed the lifting capacity of the loader.
3. When handling large bales, make sure the bale is speared through the centre. Never

lift the bale by sliding the fork under the bale as it might fall off.

FINAL WORD

Front-end tractor loaders and other attachments are used to transport bales, rocks and other objects, move debris and snow on yards and lanes, and are essential on the farm. However, there are safety considerations when it comes to using these attachments.

QUIZ

1. **Some attachments can be installed directly on the bucket of a front-end loader while others are installed in place of the bucket.**
 - ☐ True
 - ☐ False
2. **In times of emergencies, front-end loaders can carry or haul people for short distances.**
 - ☐ True
 - ☐ False
3. **Loaders are attachments but mechanical or hydraulic issues may cause the loader to drop and endanger anyone who walks or works under loader.**
 - ☐ True
 - ☐ False
4. **Never, exceed the lifting capacity of the loader.**
 - ☐ True
 - ☐ False

WHAT WOULD YOU DO?

There is a written policy of the agri-business where you work that front-end loaders are prohibited to carry passengers. You see the front-line supervisor on several occasions hauling or transporting his friends on the loaders. You are not particularly friendly with the supervisors and you value your job. You do not want to go to his immediate superior for fear of retaliation from your boss.

What would you do?

BEFORE THE TALK - TIPS

Before the Meeting Preparation Tips

- Pass around the attendance sheets.

Be prepared to discuss:

- Safe work practices and policies passed around pertaining to Front-end Tractor Attachments protocols and programs industry - wide and at your location.
- Proper reporting procedures relating to accidents, injuries, illnesses, fatalities, near misses / close calls including hazards and concerns at your location.

Other:

- Conduct a "walk-around" the agri-farm business to get a first-hand look related to the operation of front-end loader and attachment activity.
- Invite an HR specialist to the meeting for the purpose of explaining why it is critical to report immediately near misses/close call with respect to front-end loader work.
- Ask participants coupled with a Q and A session what safety problems/concerns they have noticed on the worksite since the last safety meeting.
- As a result of this safety talk, what recommendations would participants like to implement.

AFTER THE TALK- CHECKLIST

PROVIDED FOLLOW-UP TO WORKERS THAT DID

POORLY ON THE QUIZ

NAME: _____

DATE: _____

OBSERVED WORKERS

TASK(S): _____

DATE: _____

REFRESHER TRAINING

TOPIC(S): _____

DATE: _____

OTHER (DESCRIBE): _____

MEETING DATE: _____

LOCATION: _____

NOTES

ANSWERS:

1. True

2. False

3. True

4. True

ATTENDANCE

[illegible]

INSTRUCTOR: _____ **DATE:** _____

SAFETY TALK: _____