



# SKID STEER LOADER



## NEED FOR SKID STEER LOADER

Normally the Front End Loaders and Backhoe Loaders used for carrying the loosen materials from one place to another. But the same cannot be used in all circumstances. By the use of Skid Steer loader we can grab the loosen materials even in the smaller areas where the normal loader vehicles can't be used.

## SKID STEER LOADER

A skid loader, skid-steer loader or skidsteer is a small, rigid-frame, engine-powered machine with lift arms that can attach to a wide variety of buckets and other labor-saving tools or attachments

## MAIN COMPONENTS

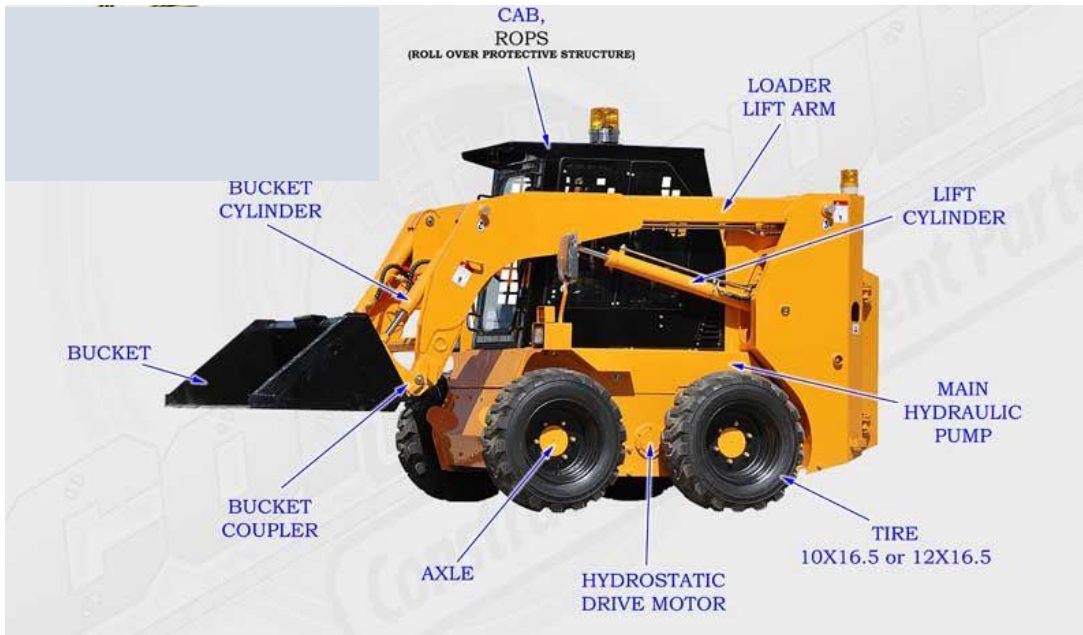
- Engine and Hydrostatic Transmission unit
- Hydraulic Assembly
- Main control valve
- Front Bucket
- Loader Lift Arm
- ROPS
- Differential Steering system

## CONSTRUCTION DETAILS

Skid-steer loaders are typically four-wheeled or tracked vehicles with the front and back wheels on each side mechanically linked together to turn at the same speed, and where the left-side drive wheels can be driven independently of the right-side drive wheels. This is accomplished by having two separate and independent transmissions; one for the left side wheels and one for the right side wheels. Earliest versions of skid steer loaders used forward and reverse clutch drives. The wheels typically have no separate steering mechanism and hold a fixed straight alignment on the body of the machine. Turning is accomplished by differential steering, in which the left and right wheel pairs are operated at different speeds, and the machine turns by skidding or dragging its fixed-orientation wheels across the ground. Skid-steer loaders are capable of zero-radius, turning, by driving one set of wheels forward while simultaneously driving the opposite set of wheels in reverse.



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The extremely rigid frame and strong wheel bearings prevent the torsional forces caused by this dragging motion from damaging the machine. Unlike in a conventional front loader, the lift arms in these machines are alongside the driver with the pivot points behind the driver's shoulders. Because of the operator's proximity to moving booms, early skid loaders were not as safe as conventional front loaders, particularly due to the lack of a rollover protection structure. Modern skid loaders have cabs, open or fully enclosed and other features to protect the operator. Like other front loaders, they can push material from one location to another, carry material in the bucket, load material into a truck or trailer and perform a variety of digging and grading operations.

## APPLICATION

- ❖ In construction areas loaders are also used to transport building materials.
- ❖ Transporting the loosen materials to the dump truck.
- ❖ Front loaders are commonly used to remove snow.
- ❖ Levelling the ground surface

## MANUFACTURING COMPANIES

- ❖ Bobcat
- ❖ Caterpillar
- ❖ Kubota
- ❖ JCB