

LX, LS, or L (1995 – 2012) Model New Holland Skid Loader Will Not Start

Probably the most common skid loader related problem I hear is “my loader will not start”. Just like any machine with an engine there could be many causes. Following a simple procedure can shorten the time required to find the fault.

The first question is, does the starter crank? We will deal with engines with starters that do not crank.

Do you hear a rapid clicking sound from the engine compartment when the key is in the start position?

If yes, then the battery is low on charge or you have a bad connection at the battery or the starter. Rapid clicking of the starter relay is caused by low voltage. Remove battery cables and clean the cable ends and the battery posts. Have the battery load checked to see if it is just low on charge or defective.

To check the operator restraint system, seat switch and seat belt switch, follow this procedure.

Have the ignition key in the off position. Before sitting in the seat, look at the instrument panel. While watching the instrument panel sit in the seat. The instrument panel should light up and go through a self test. If the instrument panel lights up the seat switch circuit is working. After the instrument panel goes through the self test there will be two lights still illuminated, the park brake light and the seat belt light. Fastening the seat belt should put the seat belt light out. If the seat belt light goes out the seat belt circuit is working. If the seat belt light does not go out, then the seat belt switch in the buckle is bad or the seat harness is defective. Check that you have 12v at the seat belt connector when sitting in the seat. If you do not have 12v then the seat harness is bad. If 12v is present and the seat belt light does not go out when the seat belt is fastened, then the seat belt buckle is bad.

If the instrument panel lights do not light up you either have a bad seat switch, seat harness, or you do not have power to the seat switch. The lack of power may be from a low battery or an open in the operator restraint circuit. The power to the seat switch originates at a 5A fuse in the engine fuse compartment. There are two fuse blocks in the fuse compartment. The 5A fuse is in the block closest to the engine and is the second from the bottom. The 15A fuse in that fuse block is for the key switch. From the fuse the power goes to the connector behind the seat and then to the seat switch.

With the seat switch and seat belt circuits working, the starter should crank. If the starter does not crank and you have an LX or LS model there is a service/run switch. With the service/run switch in the run position all the procedures to start the engine must be followed for the starter to crank. The operator restraint system needs to see things done in the proper order. Sit in the seat, fasten the seat belt and turn the key to the start position. With the service/run switch in the service position, the engine will crank just by turning the key to the start position. The engine will start, but the hydraulics will be locked out. The rocker switches, which the LX models used, were prone to corrosion and flipping the service/run switch to the service position may not work. The toggle switch in the LS machines is more reliable. The service/run switch bypasses all the safety switches and the instrument panel when in the service position.

A common complaint is the loader was running fine and I shut the engine off to do something else and when I came back the engine would not start. This is an indication the battery has shorted out internally. A shorted battery cannot be jump started. Use a volt meter to check the battery voltage. It will probably show in excess of 12v. While holding the probes on the battery, have someone attempt to crank the engine. If the voltage drops below 9v the battery is bad or you have a bad connection at the battery.

If the battery is bad the loader will need to be raised and locked so the battery can be removed. Remove the battery cables from the defective battery and attach two 3/8" bolts to the battery cable ends. Jump to these two bolts to start the engine so the boom can be raised and locked.

If you do not have a voltage drop at the battery, then you will need to check the start solenoid. The start solenoid is under the engine fuse compartment. There are two solenoids with covers over them. The start solenoid is the one towards the outside. Remove the cover. There are four terminals, two large and two small. You should have 12v at one of the large terminal. Place your probe on the other large terminal and have someone attempt to crank the engine. If 12v is present at the second large post, then the problem lays with the starter. If you do not have 12v then put your probe on one of the small terminals and attempt to start. There should be power at one of the small terminals when the key is in the start position. If there is power, then the start solenoid is bad. If there is no power, then you could have a problem with the instrument panel or wire harness. If the service run switch is working in the service position then the problem lies with the harness.

Depending on the model there could be some other rare problem, but the vast majority of problems can be found from the above information.