

Service Call:

Emergency outrigger interlock over-ride

Tools Required:

None

Model(s):

All Digger Derricks or Aerial Devices
with an outrigger interlock system

Tech Tip Safety Rules



Danger

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury. Many of the hazards identified in the operator's manual are also safety hazards when maintenance and repair procedures are performed.

Do Not Perform Maintenance Unless:

- You are trained and qualified to perform maintenance on this machine.
- You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations
- You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this tech tip is a supplement to the service manual. Consult the appropriate service manual of your machine for safety rules and hazards.

Overview

If the outrigger interlock on a digger derrick or aerial device malfunctions, the boom may become inoperable and remain in the air. This emergency procedure can be used to override the interlock to stow the booms for transport and repairs.

Precautions

Determine if the aerial device or digger derrick is energized or in close proximity to energized power lines. If it is, precautions must be followed before ground personnel can approach or make contact with the vehicle. The use of insulating mats, shoes, or gloves may be required. Follow your company's procedures before approaching or touching the vehicle.



Contacting an energized vehicle and ground at the same time or approaching an energized vehicle will cause electrocution.

Verify that the outriggers are extended and contacting the ground to provide stability before moving booms. Plan the movements required to move the platform and boom out of the work area and into the stowed position without contacting any obstructions.

Step 1

Determine what is preventing the booms from operating.

- Is the engine running or the auxiliary pump operating (if equipped)?
- Is the parking brake applied?
- Is the PTO operating? Can you hear the sound of the pump?
- Check the unit/outrigger selector to verify it is in the unit position
- Evaluate the outrigger set-up to make sure the outriggers are deployed far enough to close the outrigger switches (boom interlock).

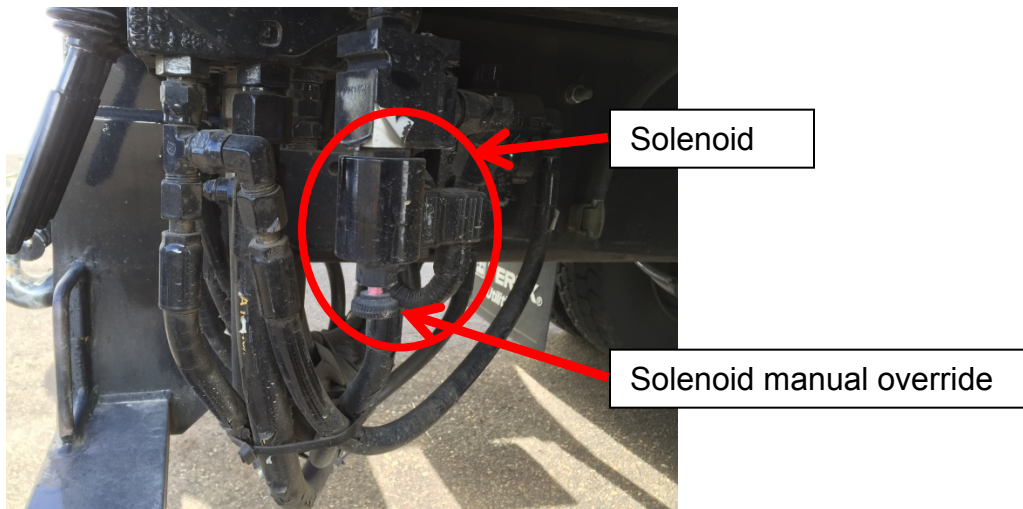
If any of the above conditions are found, remedy the situation and retest the unit.

Step 2

Determine if the interlock solenoid is powered for boom operation by holding a metal object near the end of the solenoid. If metal is attracted to the solenoid, it is energized and the interlock is functioning properly.

Step 3

If the unit solenoid valve is not energized, manual override may be required. The unit solenoid valve is typically located near the curb side outrigger control valve connected to the unit selector port. It can be identified by the manual knob on the valve.



Typical solenoid location, actual location will vary

Step 4

To override the interlock a ground person must hold the manual override button on the solenoid valve while the operator moves the booms out of the work area and stores the booms.

Step 5

If the booms operated when the interlock solenoid valve was manually operated, then the unit must be repaired before further use.

Step 6

If the interlock system operated properly and did not need repair, instruct the operator(s) to follow the procedure in the manual for proper set up before further use.

The outriggers must be extended beyond the interlock switch location or firmly planted to hold pressure on the outrigger cylinders.

Failure to set up the outriggers properly can cause instability and possible overturning.



Failure to set up the outriggers properly can cause instability and possible overturning.

Step 7

Units equipped with an optional boom interlock that require the boom to be in the rest to operate the outriggers will have a similar solenoid valve with manual override.

It will be connected to the center port of the first outrigger valve section after the unit/outrigger selector. If the outriggers do not operate when the boom is in the boom rest the manual override can be used to stow the outriggers. Repair before further use.

Always read and follow instructions in the unit specific manual.