

# Independent Link Suspension System

## Task Description: **Riding tractor**

Tractor drivers undergo whole body vibrations on the road and on the field.

### Comments of the employee:

- 'No comfortable sitting posture'
- 'Vibrations (seat, quality floor, hand/arm machinery...)'
- 'Opportunity to have a break or change activity'

### MSD risks:

- Posture
- Duration
- Vibrations (whole body or hand/arm)

### Exposed areas:

- Lower back

### Solutions:

- John Deere –Independent Link Suspension System  
Mechanical, hydraulic and electrical systems work together to maintain a level, vertically centered position of the front differential case in relation to the outboard hubs and planetaries, independent of tractor weight or dynamic loading. The system's ability to maintain a vertically centered position provides for full suspension travel of ten inches. The axle is able to accomplish this through electronic and computer controls that monitor tractor functions and axle position. Based on those inputs, the electrical system triggers hydraulic functions that can raise, lower, or do nothing.

