

Application of Rotary & Linear Sensors in Scissor Lift Machine Platform

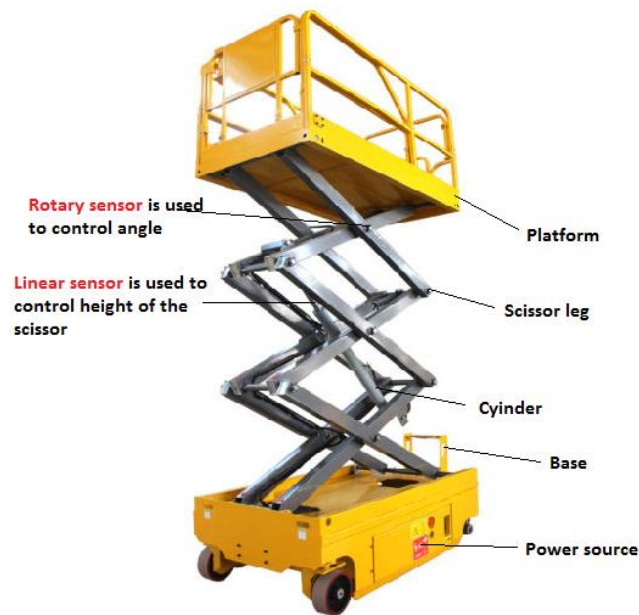
A scissor lift is a mechanical lifting platform used to provide temporary access for people and equipment to be elevated in inaccessible areas. The device achieves vertical movement through the use of linked folding supports arranged in a crisscross or scissors-like pattern. When moving upward, pressure is applied to the lowest set of supports, causing the remainder of the structure to elongate. Conversely, for downward movement, pressure is released from the lower supports, causing the other supports to retract.

Working Principle:

The hydraulic scissor lift table is one of the most commonly used pieces of industrial equipment. Found in factories all over the world, hydraulic lift tables are simple to use, and provide ergonomic benefits to the operator. The scissor lift table design is divided into 5 parts.

1. **Platform** – The products being lifted will rest on the top of the table, commonly referred to as the platform.
2. **Base** – The base of the table is comprised of very rigid angle iron. Besides being the foundation for the unit, the base is engineered with tracks to guide the rollers at the bottom of the scissor legs.
3. **Scissor Legs** – Bridging the gap between the base and the platform are the vertical scissor legs.
4. **Hydraulic Cylinders** – The raising and lowering of the unit is actuated by high pressure hydraulic cylinders.
5. **Motor / Power Pack / Power Source** – Hydraulic lift tables are commonly powered by an electric motor. They can also be powered pneumatically via a high pressure industrial air compressor.

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Linear sensor is used to control the height during the scissor lift and alert the operator when it is in close proximity to a potentially hazardous object. This sensor can help prevent crushing accidents.

Rotary sensor is used to control the angle between the scissor legs.