

# UC-2 Underground Scissor Lifts

UC-2 is a trackless device specially designed for underground mines, suitable for 3.5×3.5 meter mine tunnels. The trackless equipment is used for lifting and transporting personnel or equipment underground. Through special design, the lifting platform has large load capacity and high lifting height. The underground scissor lift is especially suitable for difficult working conditions, and the narrow low and muddy working ground.

Superior stability and simple handling can improve the safety of underground lifts. The hydro brakes are more suitable for the complicated and difficult working environment of the underground to ensure safety. The cab is framed to ensure stability, and all walking surfaces are non-slip to minimize the possibility of slips and falls.

The lifting platform adopts single-screw structure and has stronger carrying capacity. The design of the four-legged cylinder makes the operator more convenient to adjust the stability of the rear frame, which is conducive to the stability of the lifting platform as a whole, and the use of dual control systems on the platform and the rear frame to make users more flexible for operating platform.





# **Technical Specification**

Maximum lifting height	3480mm
Maximum lifting weight	2000kg
Operating Weight	9400Kg
Dimensions(mm)	7610×1900×2150

#### **Speed Forward and Reverse**

1st Gear	4.8 km/h
2nd Gear	10.5 km/h
3ird Gear	23.6 km/h

#### **Trafficability Specifications**

Front Frame Swing Angle	<u>+</u> 7 °
Max. Steering Angle	<u>+</u> 40 °
Min. Off-ground Clearance	235mm
Max. Grade-ability	14°(25%)
Approach Angle	13 °



# **Lion One Mining Service (Pty) Ltd**

# Operating conditions and restrictions

Working temperature	-15 ℃~+50 ℃
Design Standards	
GB21500-2008 Underground mine trackless tire type mining vehicle Safety requirements	
JB / T 13429-2018 underground service vehicle	

# **Power Transmission System**

# **Power System**

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Diesel Engine	DEUTZ TCD2013L04
Rated Power	120 kW @ 2300 rpm
Cylinder	4
Cooling	Water cooling
combustion	4-stroke direct injection engine
Intake air filter	Dry air filtration, pre- filtration + two-stage filtration
Electrical System	24 V
Emission Standards	Euro Tier III
Exhaust system purifier	DOC+POC+Silencer
Fuel tank volume	120 L

#### Torque converter gearbox

DANA 1201FT20321	Electronically controlled shifting with buffer
	function Single-stage three-element with hydraulic pump drive
	Forward and Reverse 3 Gears

# Axles(Front)

DANA	Working brake is hydraulic brake,	
112	spring release; parking brake is spring brake, hydraulic release Rigid axle	
Axles(Rear)		
DANA	Working brake is hydraulic brake,	
112	spring release; parking brake is spring brake, hydraulic release Rigid axle	

#### **Tyre**

Tyre	Model	10.00-20

# **Hydraulic System**

Components	Working system, steering system, braking system, oil filling system
Joint standard	JIC
Hose standard	GB3683
Hydraulic tank volume	140L
Oil absorption filtration accuracy	80μm
Oil return filtration accuracy	20μm

# Steering hydraulic system

Full hydraulic steering gear	Steering wheel operation
Steering hydraulic cylinder	Two pcs double-acting steering cylinders
Steering pump	Gear type quantitative pump

# **Braking hydraulic system**

Components	Working brake, parking brake and emergency brake
Features	The working brake is hydraulic brake and spring release; Parking brake is spring brake, hydraulic release;
Brake system performance meets EN ISO 3450, AS2958.1 and SABS 1589 standards.	



#### **Driver operation**

UC-2 cab provides a spacious ergonomic operating space with ergonomic console layout for better comfort and productivity.

UC-2 cab has passed ROPS/FOPS certification to protect operator safety.

#### Cab

ROPS certification in accordance with ISO 3471

FOPS certification in accordance with ISO 3449

#### **Electrical System**

#### Main configuration

Battery	2×12 V, 100Ah
	LED
Light	4 pcs on front frame
	2 pcs on rear frame
	Diesel, hydraulic oil level
Sensor	sensor
	Steering and braking system
	pressure sensor
Dual horn	standard
Monitor	IFM CR1083 7" LED
Controller	IFM CR2532 CPU 50 MHz

# Safety

#### **Fire Safety**

Portable fire extinguisher	2kg 2pcs
Energy isolation	
Main power switch can be locked standard	
Trailer connecting device	standard

#### Documents Standard manual

Spare parts manual	English
Instruction manual and	
maintenance manual	English
Label	English

# Optional configuration of the electrical system

Imaging system









