Cat® FH110

Face Hauler

Major Features:

- Electric Drive Control System
- Payload Capacity
- Simple Hydraulics
- True Tracking
- Tire and Battery Options

Specifications

General Data

Payload Capacity	9 tonnes	10 tons
Power Type	Battery	

Wheelbase

Empty Weights		
Without Battery	23 995 kg	52,900 lb
With 64-SS85-25 Battery	30 844 kg	68,000 lb
With 64-SS100-25 Battery	31 524 kg	69,500 lb

Design Gross Vehicle Weight

Cubic Feet Capacity: (Maximum Payload – Calculated)		
Heaped with No Sideboards	12.34 m^3	436 ft^3
Struck Capacity	6.25 m^3	221 ft^3

Turning Radius

Steering Articulation	120 degrees total	
Tram Speed (Speed will vary depending on floor conditions)	0-8.04 km/h	0-5 mph
Discharge Time	24 seconds	
Terrain Compensation Articulation	(+) 15 degree/(–) 10 degree	

Hydraulics and Controls

- Open Loop with gear pump hydraulic system
- Hydraulic component design and placement for ease of service and/or maintenance and fewer hydraulic components and hoses
- Battery lift load-locking counterbalance valves for safety
- Battery tuned battery-lift shock absorption for ride comfort

Hydraulics

Pump Motor	Mine duty laminated frame; alternating current motor: MSHA totally enclosed, explosion-proof, non-ventilated cooling, and foot-mounted.
Pump	Main hydraulic system, gear type pump directly splined to pump motor at 16 054 kPa (2,300 psi) and monitored by a glycerin-filled main system pressure gauge.
Reservoir	189.27 L (50 gal) capacity reservoir equipped with breather and removable suction strainer.
Valve Bank	Five-section parallel type equipped with glycerin-filled pressure-monitoring gauge for the following functions: ■ Eject/Retract ■ Vertical Articulation (Terrain Compensation) ■ Battery Lift (Changer) ■ P.T.O. ■ Steering
Steering Cylinder	Two (2) double-acting cylinders with 63.5 mm (2.5 in) forged rods. Equipped with integrated shock-absorption relief system.
Battery Changer Cylinder	Two (2) double-acting cylinders with 63.5 mm (2.5 in) shock-absorption relief system.

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Drive Train

Two proprietary design, double-reduction parallel primary reducers equipped with integral multiple wet disc brakes and axle shaft, mounted to a proprietary design planetary wheel end.

Electric Drive Train

- Variable-frequency traction drive
- 56 kW (75 hp) AC inductance traction motor
- 36 kW (48 hp) inverter duty AC inductance pump motor
- Operator interface diagnostic and information display
- Control system with operator interface accelerator and operator interface control handle
- Lead acid battery DC power source

Brakes

Service	Two (2) hydraulic actuated, multiple wet disc brakes
Automatic Brake	Spring-applied, hydraulic-released braking system controlled by electrical/ hydraulic solenoid and equipped with totally enclosed multiple wet disc brake in each drive unit, manual hand pump brake release, and glycerin-filled pressure monitoring gauge.

Frame

Heavy-duty, with bends utilized where applicable to reduce the number of indeterminate stresses introduced by welding.

Center Section

Heavy-duty, dual-articulation joint, welded steel construction with steel pivot pins, complete with horizontal self-aligning pivot thrust bearings on the articulation and ball bearing on secondary articulation with an axial load rating of 261 269 kg (576,000 lb).

Battery Changer

Ground Level Battery Changer System. Hydraulically operated integral system that includes two (2) independent battery lift arms that work simultaneously during operation.

No battery stands are required.

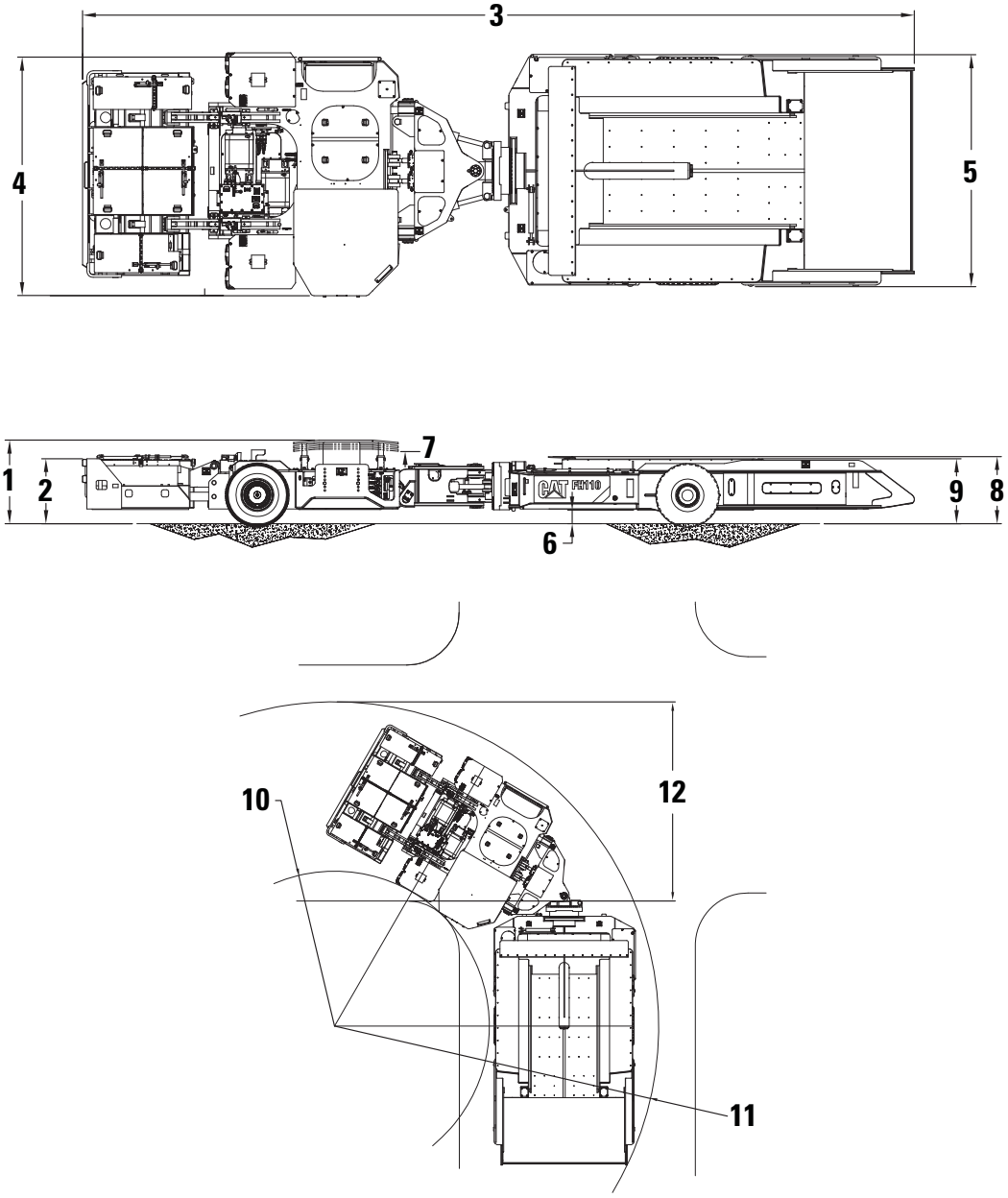
Operator's Compartment

Features

- Full height back and head protection
- Side egress, access
- Heavy-duty, adjustable, ergonomically designed operator's seat
- Ergonomically designed control stick, for one-hand control of pump motor, park brake, travel direction, traction assist, stop/shutdown and headlight controls
- Right-foot-operated accelerator switch pedal
- Dual panic tape switches that de-energize electrical system and apply automatic brake
- Warning gong
- Left-handed mechanical steering handle
- Right-hand vertical articulation handle (terrain compensation)
- Right hand battery changer handle
- Right-hand battery lock/unlock handle
- Right-handle battery float handle (independently located separate from valve bank)
- Left-foot brake pedal
- Easily visible glycerin-filled gauges
- Manual breaker lever reset

Handle Manuals

- Two parts manuals
- Two operation and preventive maintenance manuals
- Two electrical troubleshooting guides
- Two battery maintenance manuals
- Two battery maintenance charts
- One Linkone CD, which includes all above manuals in electronic format



Dimensions (All dimensions are approximate.)

1	Operating Height	1066-1524 mm	42-60 in
2	Frame Height	914-990 mm	36-39 in
3	Overall Length	11 850 mm	38 ft 11 in
4	Width – Extended Deck	3395 mm	11 ft 2 in
5	Trailer	3302 mm	10 ft 8 in
6	Ground Clearance – with 35" Tires	194 mm	8 in
7	Minimum Canopy Height – with 35" Tires	1092 mm	43 in
8	Trailer Height – with 35" Tires at Top of False Bottom	954 mm	38 in
9	Trailer Frame Height – with 35" Tires	914 mm	36 in
10	Inside Turning Radius	3.60 m	11 ft 10 in
11	Outside Turning Radius	7.51 m	24 ft 8 in
12	Minimum Entry Width	4.62 m	15 ft 2 in