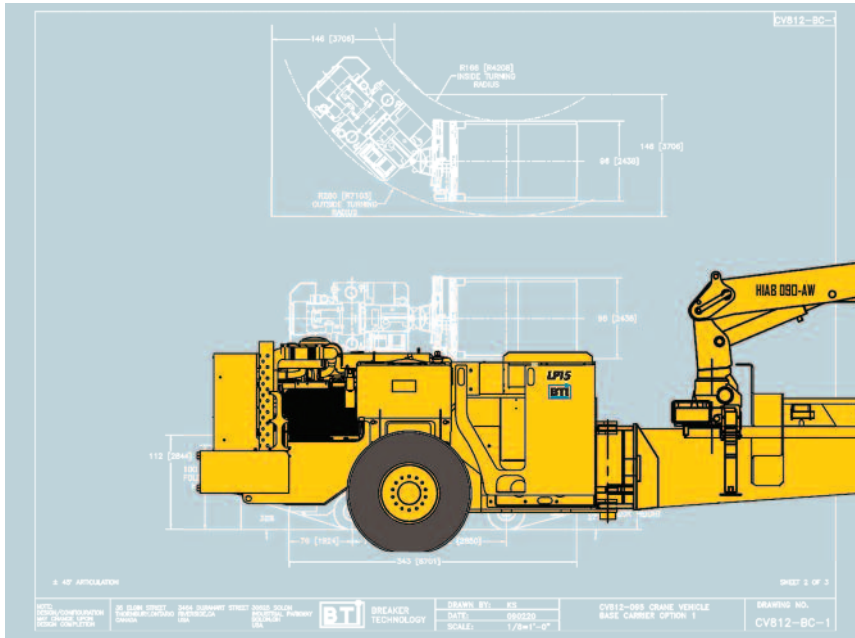


# CV SERIES - LP15

## Crane Utility Vehicle



### AT A GLANCE

#### Weights & Dimensions:

<b>Operating Weight</b> 32,000 lbs (14,545 kg)	<b>Overall Trimming Length</b> 28'-7" (8.7m)	<b>Overall Width</b> 8' (2.44m)
<b>Trimming Height</b> 9'-4" (2.8m)	<b>Carrier Articulation</b> +/- 45°	<b>Inside Turning Radius</b> 13'-10" (4.21m)
<b>Outside Turning Radius</b> 23'-8" (7.22m)		

Note: weights & dimensions are nominal and vary depending on final engine, operator's enclosure & option configuration.

#### Engine Configurations:

- Deutz BF4M1013C
  - ▲ Caterpillar C4.4 ACERT
  - ▲ Mercedes 906
- Legend: ● Standard ▲ Optional

#### Crane Configuration:

HIAB 090-AW low profile crane c/w retractable outrigger legs, 400 degrees of rotation, and lift capacities of:  
 2,580 lbs (1,173 kg) at 23'-0" (7.0 m)  
 8,820 lbs (4,009 kg) at 6'-6" (1.98m)      Two hydraulic stages, plus one manual extension

### FEATURES & BENEFITS

High speed / high mobility underground crane utility vehicle.

+/-45° vehicle articulation for tight turning radius.

Separate torque converter / transmission package provides low profile engine shroud height for improved operator visibility.

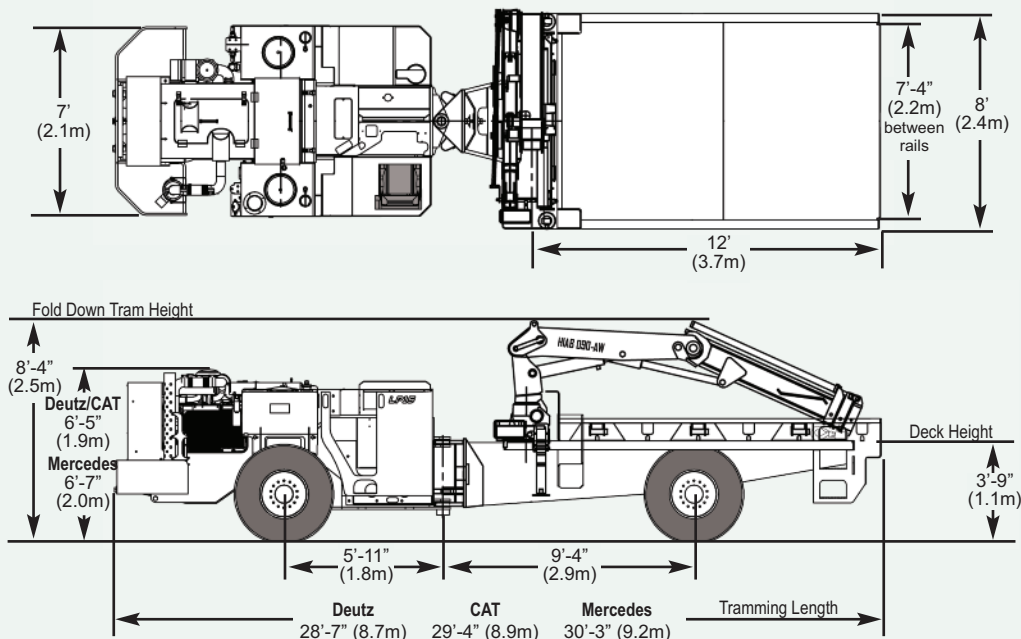
Mid-ship operator compartment provides good visibility for trimming in both directions.

#### Deck:

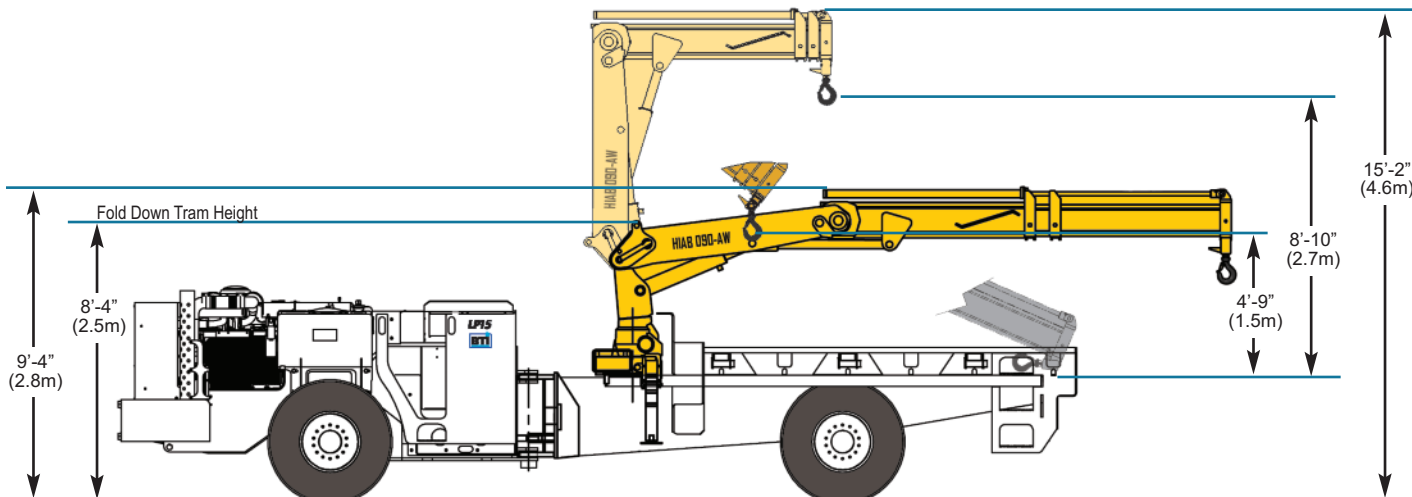
8'-0" (2.4m) wide x 12'-0" (3.7m) long  
 6" high kick rail, winch tie-downs  
 Maximum load on deck of 30,000 lbs (13,636 kg)

### OPTIONS

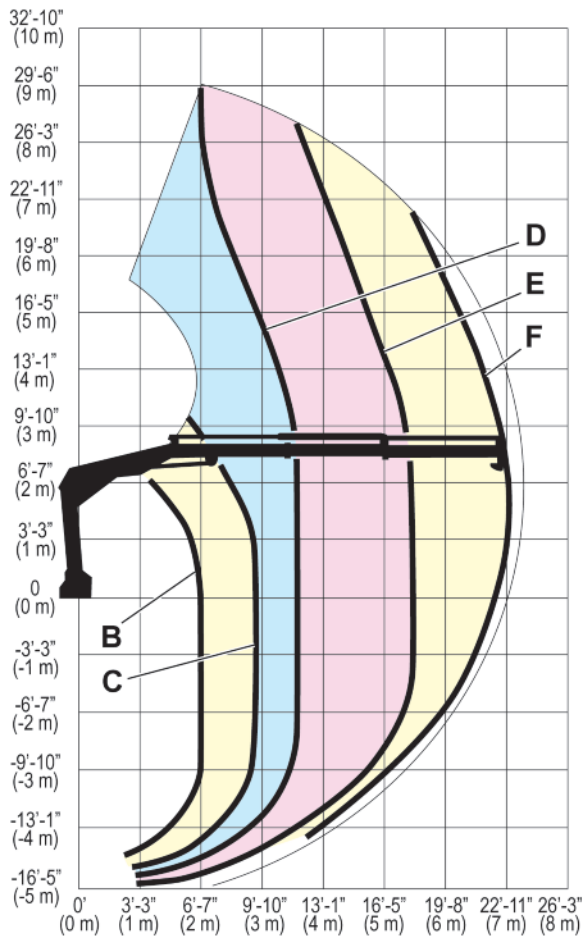
- Protective operator structure
- Seating configurations
- Air intake system
- Exhaust system
- Fuel filling system
- Hydraulic filling system
- Tires
- Fire suppression system
- Wheel chocks
- Tailgate configurations
- Deck lighting
- Storage boxes



# CV SERIES (LP15) CRANE DIMENSIONS



# HIAB 090-AW CRANE LOAD CAPACITY



## Load Diagram

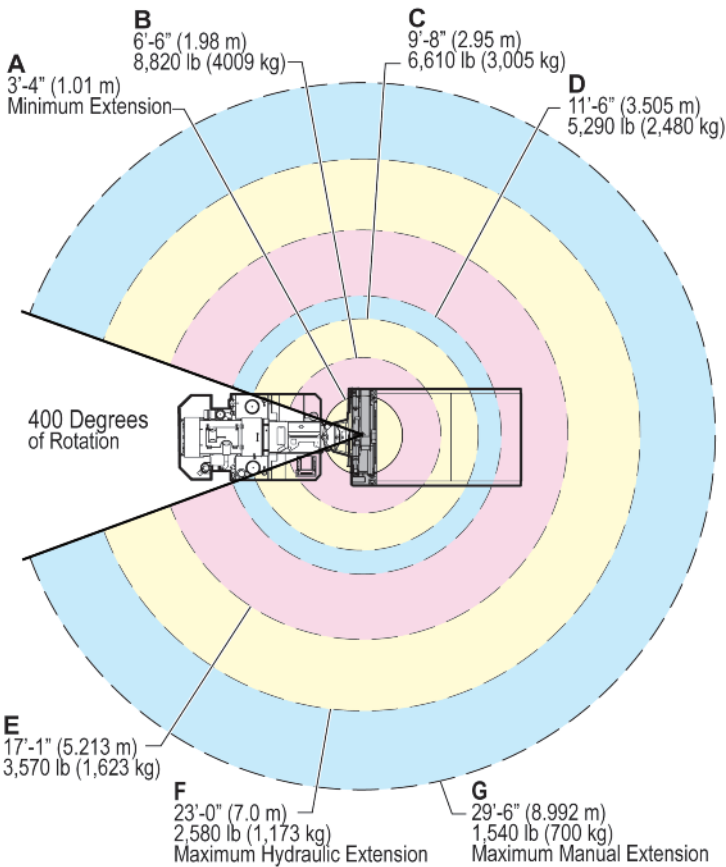
To the left of the curves, the indicated loads can be handled with any loader function provided that the positions of the booms are optimized from a force point of view.

	Extension	Weight
<b>Minimum Extension</b>	3'-4" (1.01m)	n/a
<b>B</b>	6'-6" (1.98m)	8,820 lbs (4,009 kg)
<b>C</b>	9'-8" (2.95m)	6,810 lbs (3,005 kg)
<b>D</b>	11'-6" (3.51m)	5,290 lbs (2,480 kg)
<b>E</b>	17'-1" (5.21m)	3,570 lbs (1,623 kg)
<b>F</b> <b>Maximum Hydraulic Extension</b>	23'-0" (7.00m)	2,580 lbs (1,173 kg)
<b>Manual Extension</b>	29'-6" (8.99m)	1,540 lbs (700 kg)

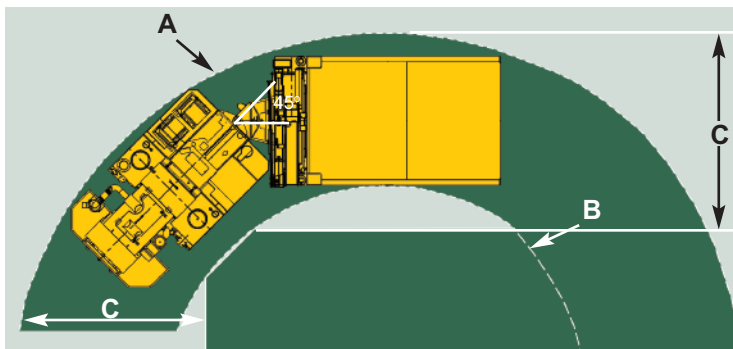
# CV SERIES (LP15) HIAB 090-AW CRANE ROTATION

## Crane Rotation

Crane rotation of 400 degrees with the following capacities:



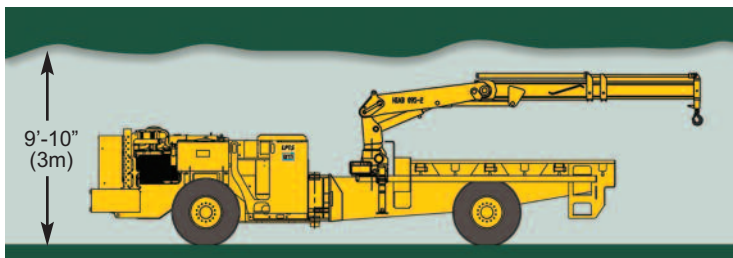
## DRIVING SPECIFICATIONS



## Turning Radius

Turning radius: +/- 45° articulation

		Deutz	Caterpillar	Mercedes
<b>A</b>	Outside Turning Radius	23'-4" (7.10m)	23'-5" (7.14m)	23'-8" (7.22m)
<b>B</b>	Inside Turning Radius	13'-10" (4.21m)		
<b>C</b>	Minimum Mine Tunnel Width	12'-2" (3.71m)	12'-3" (3.74m)	12'-6" (3.81m)



## Recommended Drift Height

BTI recommends a minimum drift height with cab: 9'-10" (3m)

# LP15 CARRIER - COMMON FEATURES

- Standard - common to all engine combinations
- ▲ Optional

Notes: \_\_\_\_\_

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- **CHASSIS**  
LP15 articulated 4-wheel drive, all welded construction
- **ENGINE END OSCILLATION**  
+/- 8° c/w heavy framed external walking beam
- **CARRIER ARTICULATION**  
+/- 45° by two opposing 4" (100mm) bore x 2" (50mm) rod steering cylinders complete with stick steering control
- **HYDRAULIC CIRCUIT**  
50 gallon (189 liter) hydraulic tank  
Hydraulic piston pump with load sense control  
In-line hydraulic pressure filter / In-line return filter
- **ELECTRICAL CIRCUIT**  
24 VDC start/run 100 amp alternator  
Murphy Power Vu instrument cluster for electronic engines  
Two LED red tram marker lights & two 70 watt halogen head lights on engine end  
Two LED red tram marker lights & two 70 watt halogen head lights on deck end
- **STABILIZERS**  
Qty two retractable outrigger legs
- **CRANE**  
Hiab 090-AW low profile crane with lift capacities of:  
2,580 lb (1,173 kg) at 23'-0" (7.00 m)  
8,820 lb (4,009 kg) at 6'-6" (1.98 m)  
Two hydraulic stages, plus one manual extension  
400 degree rotation
- **DECK**  
Anti-slip deck material with 6" high kick rail  
Winch tie-downs to secure loads  
Maximum load on deck of 30,000 lbs (13,636 kg)

# CV (LP15) CARRIER CONFIGURATIONS

- Choose one per group
- Standard
  - ▲ Optional

Notes: \_\_\_\_\_

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- POWERTRAIN GROUPS**
  - Deutz BF4M1013C
  - ▲ Caterpillar C4.4 ACERT
  - ▲ Mercedes 906 Series
- PROTECTIVE STRUCTURE**
  - Dual compartments for operator and passenger, no protective enclosure
  - ▲ ROPS/FOPS certified canopy - open air
  - ▲ ROPS/FOPS certified fully enclosed cab full width. Engine belt driven HVAC heat/air conditioner for engine driven applications
- OPERATOR SEAT**
  - Suspension Seat, fixed
  - ▲ Air Ride Seat, fixed
- PASSENGER SEAT**
  - No passenger seat
  - ▲ Suspension Seat, fixed
  - ▲ Air Ride Seat, fixed

# CV (LP15) CARRIER CONFIGURATIONS

Choose one per group

- Standard
- ▲ Optional

Notes: \_\_\_\_\_

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## AIR INTAKE SYSTEM

- Air Intake Filter
- ▲ Air Intake Precleaner

## EXHAUST SYSTEM

- Catalytic exhaust
- ▲ Exhaust Manifold and Turbo Coating
- ▲ Exhaust System Wrap

## FUEL SYSTEM

- Fuel Tank - 50 gallon (189 liter)
- ▲ Fuel Tank with fast fill - 50 gallon (189 liter)

## HYDRAULIC TANK

- Hydraulic Tank - 50 gallon (189 liter)
- ▲ Hydraulic Tank with fast fill - 50 gallon (189 liter)

## TIRES

- Pneumatic 12:00 x 20; 20 ply mine lug
- ▲ Solid: 12:00 x 20
- ▲ Foam Filled: 12:00 x 20
- ▲ Solid: 10:00 x 20

## FIRE SUPPRESSION SYSTEM

- No fire suppression
- ▲ Fire Extinguisher, 1 x 20 lb (9kg)
- ▲ Ansul Fire Suppression System
- ▲ Ansul Fire Suppression with Auto Detection

## WHEEL CHOCKS

- No wheel chocks
- ▲ Aluminum Wheel Chocks

## TAILGATE

- No tailgate
- ▲ Manual Fold-down
- ▲ Hydraulic Fold-down

## DECK LIGHTING

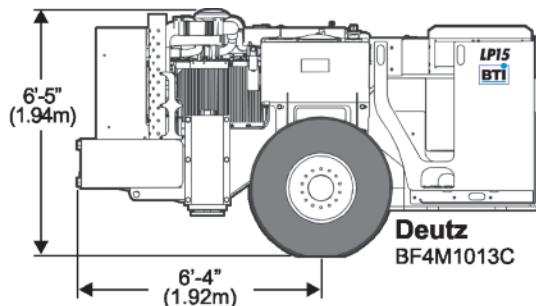
- No deck lights
- ▲ Qty 2 x 70W Deck Lights - Halogen lamp 24V 70 watt

## STORAGE BOX

- No storage box
- ▲ Right Hand Box - Jumbo under bed steel box  
Height: 2' (.61m) Width: 2' (.61m) Length: 3'-.625" (.93m)
- ▲ Left Hand Box - Jumbo under bed steel box  
Height: 2' (.61m) Width: 2' (.61m) Length: 3'-.625" (.93m)

## POWERTRAIN GROUP OPTIONS

- Standard
- ▲ Optional



- **Engine:** Deutz BF4M1013C, four cylinder, turbocharged, intercooled Diesel, MSHA/Tier II, 122 HP @ 2300 RPM c/w fuel filter and water separator

**Torque Converter:** Clark C2000 series

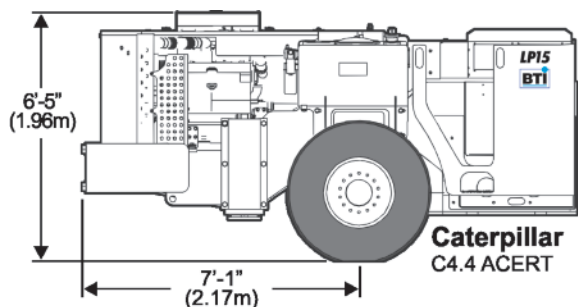
**Transmission:** Clark 20,000 series, long drop, remote mounted, electric shift  
Three forward and three reverse speeds

Vehicle speeds with 12:00.x 20 tires @ 2200 rpm with standard axle ratio:  
1st gear: 2.4mph (3.9kph) - 2nd gear: 6.2mph (10.9 kph) - 3rd gear: 11.4mph (18.3 kph)

**Engine end axle:** New Holland D65I no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes, complete with external walking beam, +/- 8 degrees oscillation

**Boom end axle:** New Holland D65I no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes

**Drivelines:** Mechanics 6C and 7C



- ▲ **Engine:** Caterpillar C4.4 ACERT electronic four cylinder, turbocharged, intercooled Diesel, Tier III, 127 HP @ 2200 RPM c/w fuel filter and water separator.

**Torque Converter:** Clark C2000 series

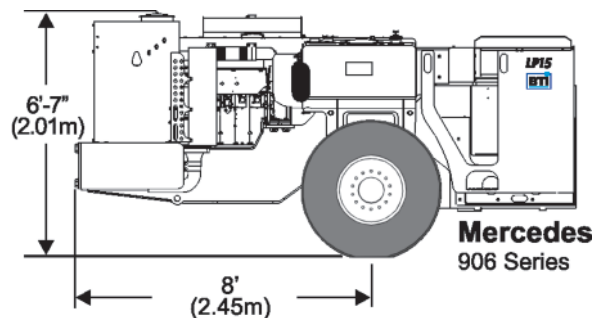
**Transmission:** Clark 20,000 series, long drop, remote mounted, electric shift  
Three forward and three reverse speeds

Vehicle speeds with 12:00.x 20 tires @ 2200 rpm with standard axle ratio:  
1st gear: 2.4mph (3.9kph) - 2nd gear: 6.2mph (10.9 kph) - 3rd gear: 11.4mph (18.3 kph)

**Engine end axle:** New Holland D65I no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes, complete with external walking beam, +/- 8 degrees oscillation

**Boom end axle:** New Holland D65I no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes

**Drivelines:** Mechanics 6C and 7C



- ▲ **Engine:** Mercedes 906 Series, six cylinder, turbocharged, intercooled Diesel, Tier II, 201 HP @ 2200 RPM c/w fuel filter and water separator.

**Torque Converter:** Clark C320 series, with lock up

**Transmission:** Clark 32,000 series, long drop, remote mounted, electric shift  
Three forward and three reverse speeds

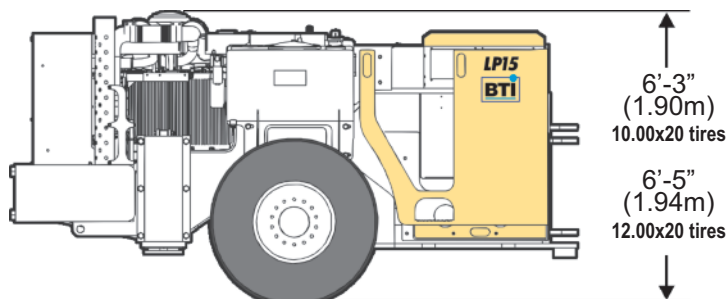
Vehicle speeds with 12:00.x 20 tires @ 2200 rpm with standard axle ratio:  
1st gear: 2.8mph (4.5kph) - 2nd gear: 5.8mph (9.3 kph) - 3rd gear: 14.8mph (23.8 kph)

**Engine end axle:** New Holland D65I no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes, complete with external walking beam, +/- 8 degrees oscillation

**Boom end axle:** New Holland D65I no spin differential wet disk SAHR emergency brakes, wet disk HASR service brakes

**Drivelines:** Mechanics 6C and 7C

## PROTECTIVE STRUCTURES OPTIONS

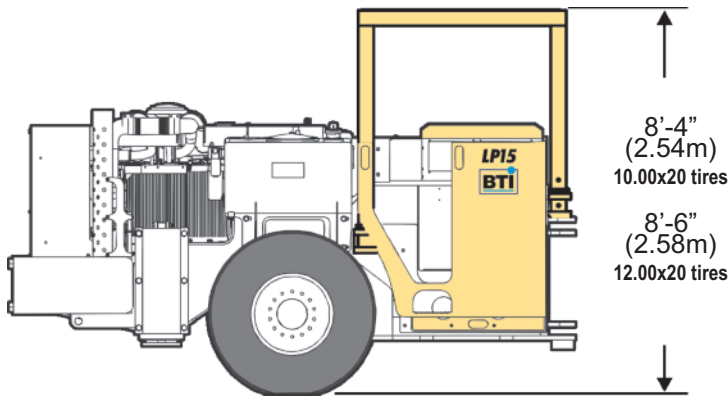


- **Standard Operator Compartment**

Standard dual compartments for operator and passenger.

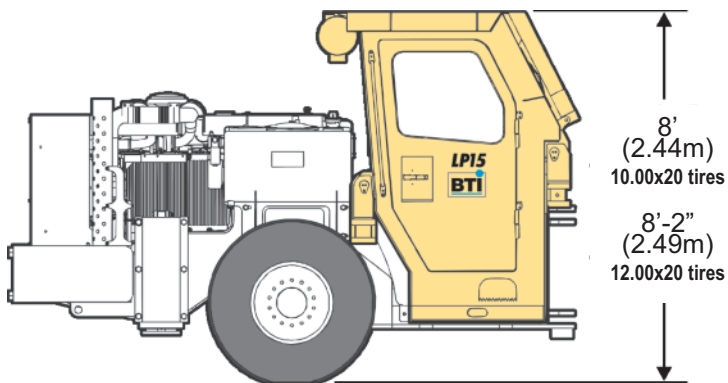
## PROTECTIVE STRUCTURES OPTIONS

● Standard    ▲ Optional



### ▲ ROPS/FOPS Canopy

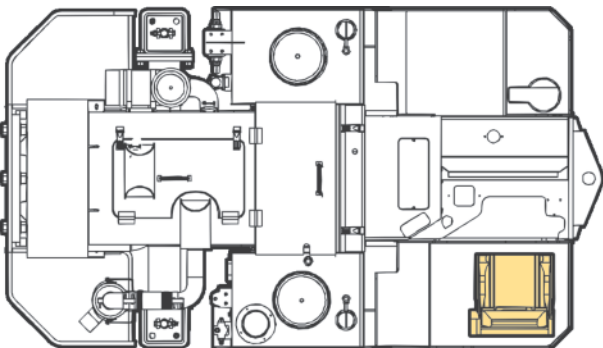
ROPS/FOPS certified 100" configuration, open air.



### ▲ ROPS/FOPS Cab

Full cab; covers operator, controls and passenger. Tested and certified ROPS/FOPS cab, complete with guard bars to help protect operator and passenger from dangerous fly-rock. Includes heavy-duty safety glass, wiper/washers, HVAC heat / air conditioning system, air pressurization system.

## OPERATOR SEAT OPTIONS

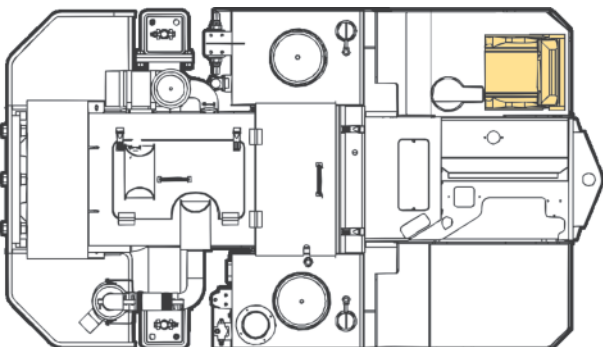


### Operator Seat Options

● Suspension Seat, fixed    ▲ Air Ride Seat, fixed

Mine duty operator seat options available in fixed suspension and fixed air ride variations.

## PASSENGER SEAT OPTIONS



### ● No Passenger Seat

### Passenger Seat Options

▲ Suspension Seat, fixed (facing front)    ▲ Air Ride Seat, fixed (facing front)

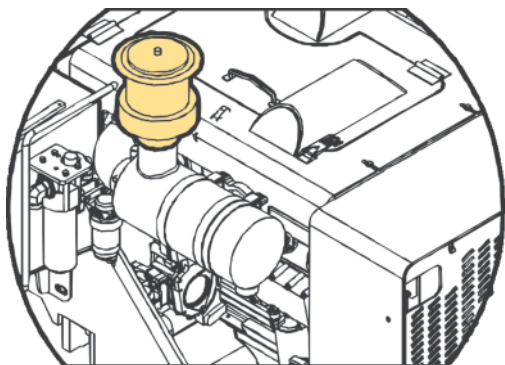
Mine duty passenger seat options available in fixed suspension and fixed air ride variations.

## AIR INTAKE SYSTEM OPTIONS

● Standard    ▲ Optional

### ● Air Intake Filter

A dry element filter with safety element and replacement indicator.



### ▲ Air Intake Precleaner

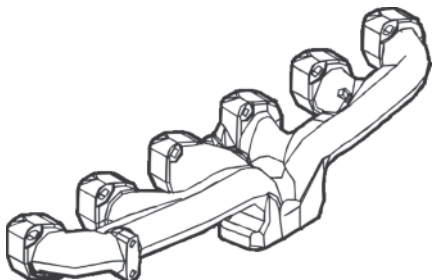
A dry element filter with safety element and replacement indicator, complete with a cyclone Pre-cleaner.

A pre-cleaner extends the life of your air filter by removing dirt and contaminants before they reach the filter and ejecting them automatically via the exhaust.

## EXHAUST SYSTEM OPTIONS

### ● Catalytic Exhaust

A catalytic exhaust, purifier/silencer. No exhaust blanket.

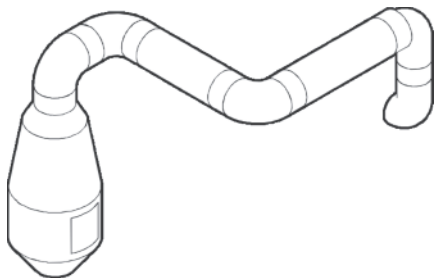


### ▲ Exhaust Manifold and Turbo Coating

Prevents fluids from igniting on hot engine and exhaust parts. High temperature performance: ideal for engine compartment components requiring long-term exposure to high temperatures.

Non-flammable. Protects personnel from burns.

Lowers ambient temperature; cooler engine compartment, less heat stress on operators and maintenance personnel.



### ▲ Exhaust System Wrap

Prevents fluids from igniting on exhaust parts. High temperature performance.

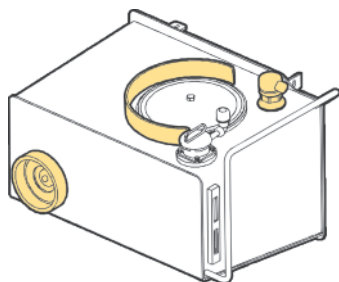
Non-flammable. Protects personnel from burns.

Lowers ambient temperature; cooler engine compartment, less heat stress on operators and maintenance personnel.

## FUEL TANK OPTIONS

### ● Fuel Tank

50 gallon (189 liter) fuel tank, top fill.



### ▲ Fuel Tank with fast fill

50 gallon (189 liter) fuel tank complete with fast filling system. Designed for on-site fast fluid transfer.

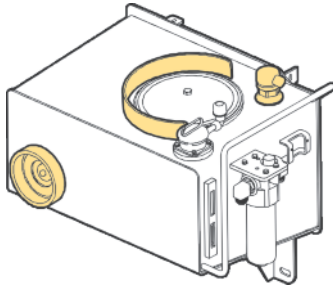


## HYDRAULIC TANK OPTIONS

- Standard    ▲ Optional

### ● Hydraulic Tank

50 gallon (189 liter) hydraulic tank, top fill, 4 psi pressurized cap.



### ▲ Hydraulic Tank with fast fill

50 gallon (189 liter) hydraulic tank complete with fast filling system. Designed for on-site fast fluid transfer.

## TIRE OPTIONS

### ● Pneumatic Tires

12:00 x 20; 20 ply mine lug pneumatic tires

### ▲ Solid Tires

12:00 x 20 solid tires

### ▲ Foam Filled Tires

12:00 x 20 foam filled tires

### ▲ Solid Tires

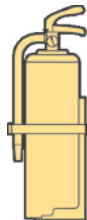
10:00 x 20 solid tires

## FIRE SUPPRESSION SYSTEM OPTIONS

### ● No Fire Suppression System

### ▲ Fire Extinguisher

1 x 20 lb (9 kg) fire extinguisher.

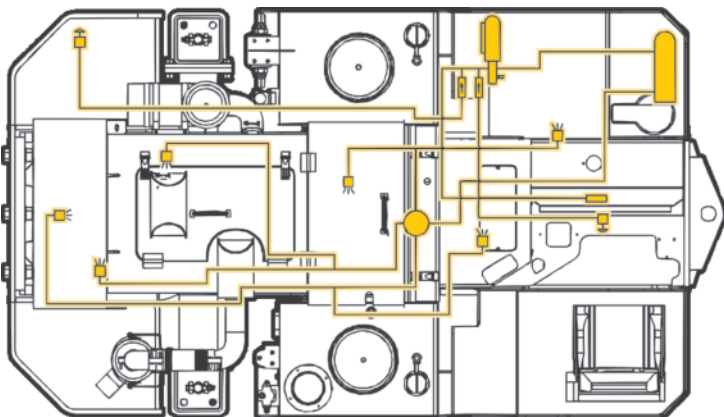


### ▲ Ansul Fire Suppression

Ansul fire suppression system, 6 nozzle, complete with 2 actuators. Complete with 20lb (9 kg) fire extinguisher.

### ▲ Ansul Fire Suppression with Detection

Ansul fire suppression system, 6 nozzle, complete with 2 actuators. Includes a check fire detection and activation system. Complete with 20lb (9 kg) fire extinguisher.



## WHEEL CHOCK OPTIONS

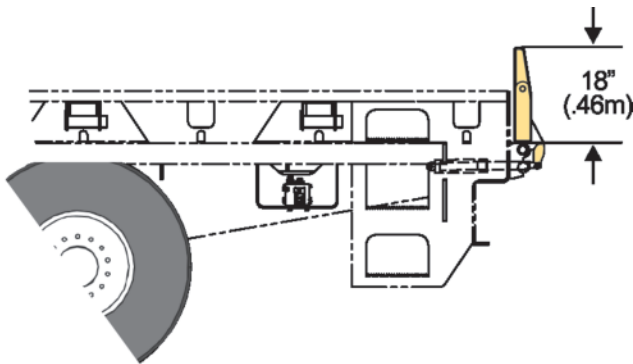
- Standard    ▲ Optional



- No Wheel Chocks

- ▲ Wheel Chocks - aluminum  
complete with holder

## TAILGATE OPTIONS

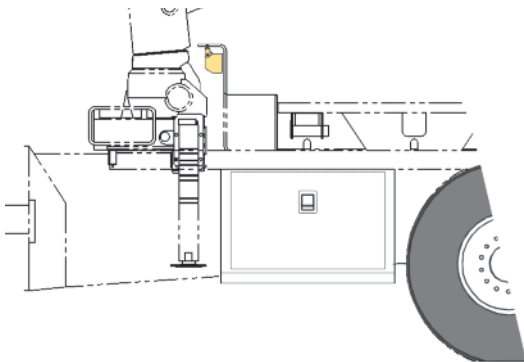


- No Tailgate

- ▲ Manual Fold Down  
Manual fold down tailgate

- ▲ Hydraulic Fold Down  
Hydraulic tailgate actuated via valve at rear end.

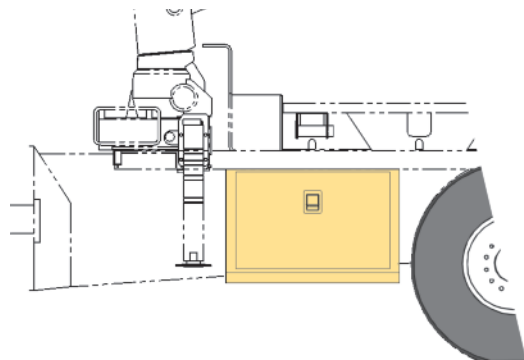
## DECK LIGHTING OPTIONS



- No Deck Lighting

- ▲ Qty 2 - 70W Deck Lights  
Halogen lamp 24V 70 watt

## STORAGE BOX OPTIONS



- No Storage Box

### Storage Box Options

- ▲ Right Hand Box      ▲ Left Hand Box

Jumbo under bed steel storage box  
Height: 2' (.61m) Width: 2' (.61m) Length: 3'-.625" (.93m)



10474-ENG-1109

All dimensions and specifications are subject to change without notice.