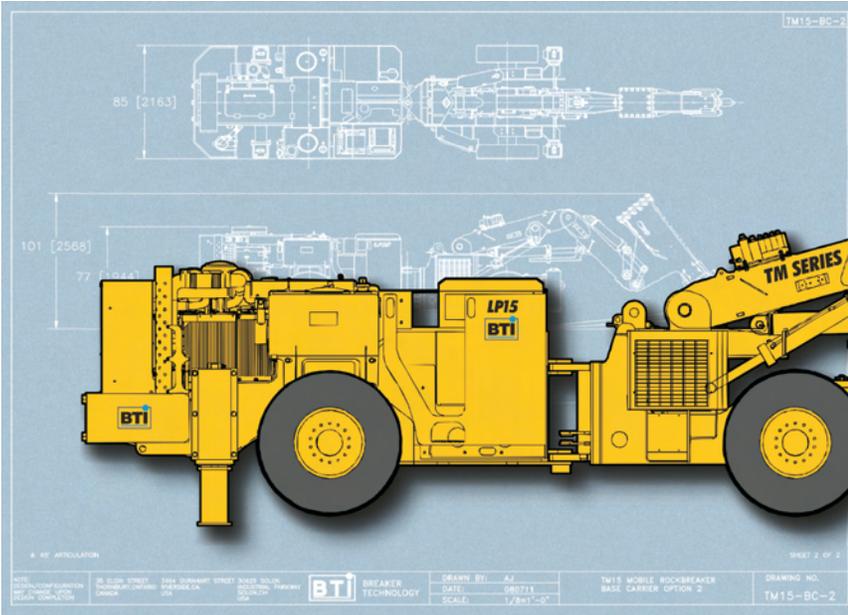




BREAKER TECHNOLOGY
an Astec company

TM15 - LP15

Mobile Rockbreaker



FEATURES & BENEFITS

High speed / high mobility underground rockbreaking.

+/-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 both tramming and breaking functions

Four heavy duty tube-in-tube self-leveling stabilizers provide quick set up times and stable operation.

Purpose-built heavy duty, large cross-section boom provides excellent dexterity and strength when raking and breaking oversize material.

Powerful hydraulic breaker quickly reduces oversize at grizzlies and draw points without explosives.

Low profile side mounted breaker provides low tram and operating heights.

AT A GLANCE

Weights & Dimensions:

Operating Weight 45,100 lb (20,500 kg)	Overall Trimming Length 32'-0" (9.7 m)	Overall Width 7'-1" (2.16 m)
Tramming Height 8'-6" (2.6 m)	Carrier Articulation +/- 45°	Inside Turning Radius 10'-9" (3.3 m)
Outside Turning Radius 20'-4" (6.2 m)	Boom Swing +/- 45°	Maximum Breaker Reach TB1280XCS: 20'-3" (6.2 m) VZ50S: 19'-6" (5.9 m)

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

Engine Configurations:

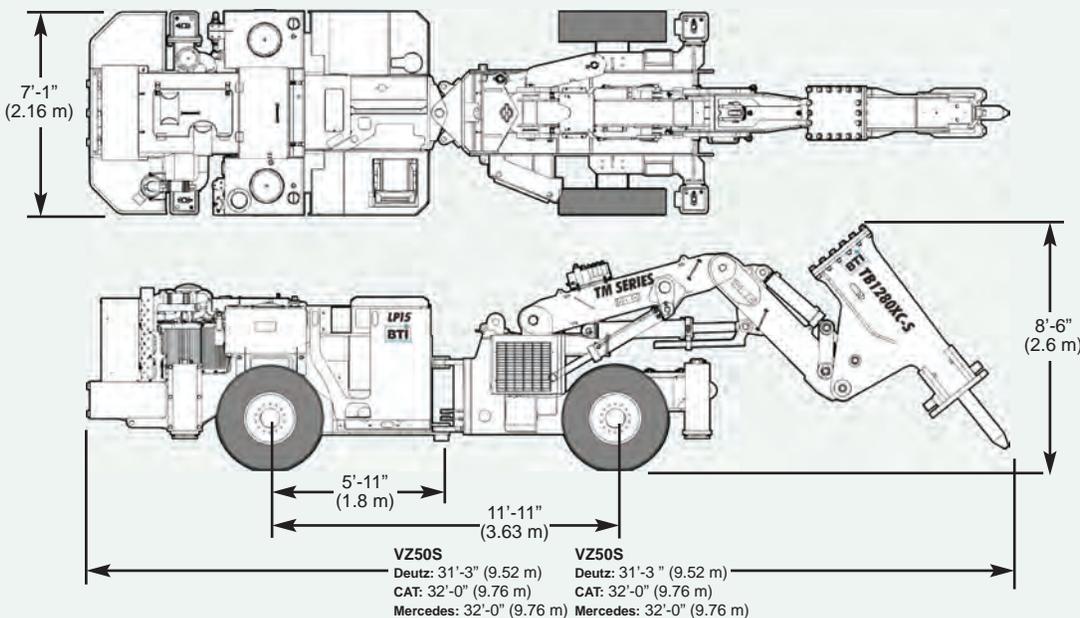
● Deutz BF4M1013C 122 hp (91 kW) @ 2300 rpm MSHA/Tier II	▲ Caterpillar C4.4 ACERT 127 hp (95 kW) @ 2200 rpm Tier III	● Standard ▲ Optional ▲ Mercedes 904 174 hp (130 kW) @ 2200 rpm Tier III
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Breaker

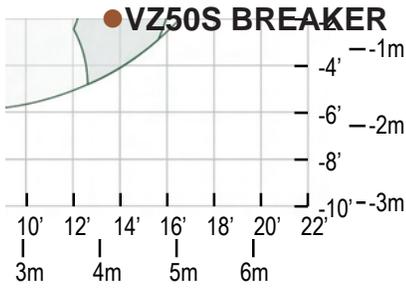
● TB1280XCS	VZ50S
Energy Class: 5,500 ft-lb (7,457 joule)	Energy Class: 5,000 ft-lb (6,779 joule)
Operating Weight: 5,100 lb (2,312 kg)	Operating Weight: 4,800 lb (2,176 kg)
Blows/minute: 470 - 610	Blows/minute: 480 - 720

OPTIONS

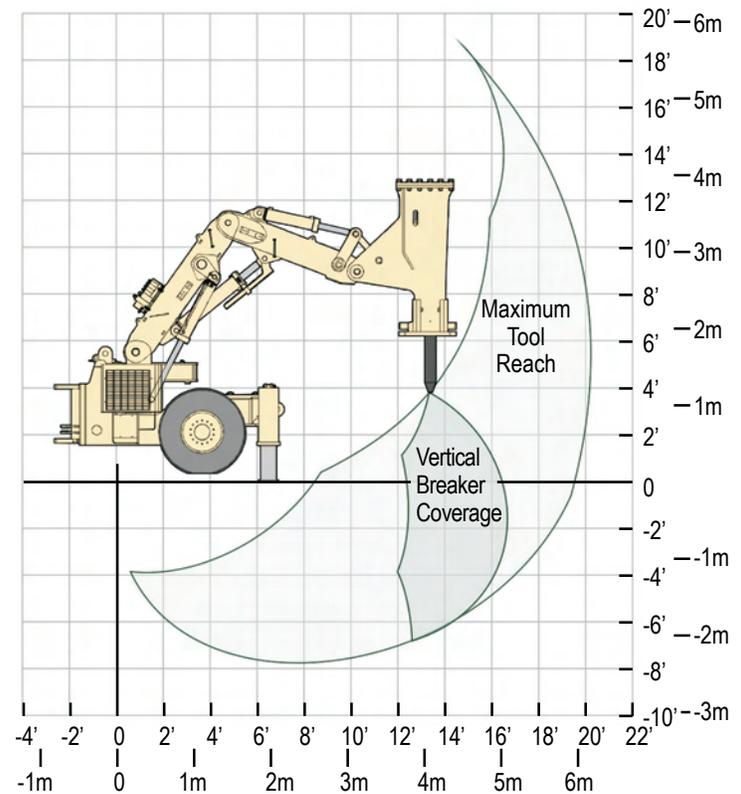
- Protective operator structure
- Seating configurations
- Air intake system
- Exhaust system
- Fuel filling system
- Hydraulic filling system
- Tires
- Fire suppression systems
- Electric power pack
- Wheel chocks
- Boom greasing system
- Breaker greasing system
- Dust suppression system
- Breakers
- Breaker tools



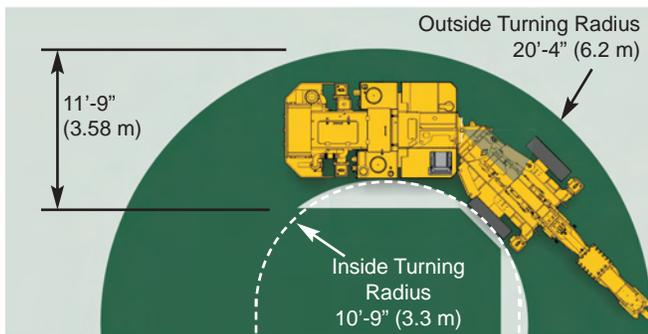
BREAKER COVERAGE



▲ TB825XCS BREAKER



TRAMMING & ROCKBREAKING SPECIFICATIONS



Turning Radius

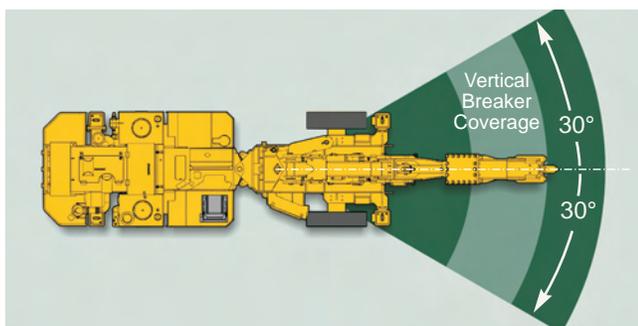
Turning radius: +/- 45° articulation

Boom should remain in-line with the carrier during tramming for optimum stability.



Recommended Drift Height

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



Boom Swing

Boom Swing: +/- 45°

Maximum Vertical Breaker Reach:

TB1280XCS: 20'-3" (6.2 m)

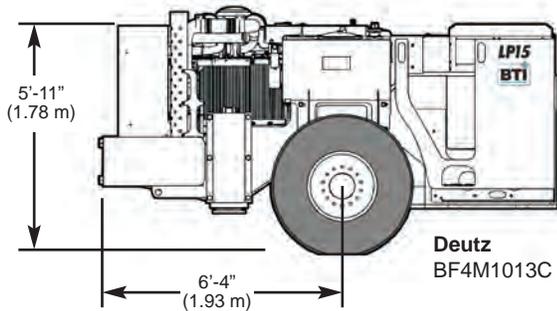
VZ50S: 19'-6" (5.9 m)

Optimum breaker coverage is attained within the vertical breaking coverage area.

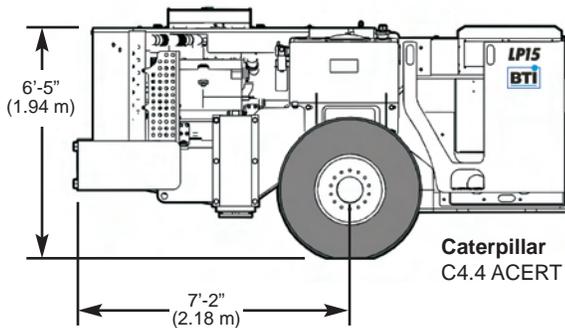
Carrier should be in a non-articulated state (in-line) with the front and rear jacks down while performing breaking and raking functions.

POWERTRAIN GROUP OPTIONS

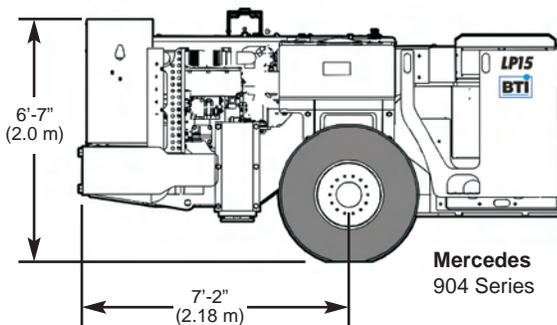
● Standard ▲ Optional



- **Engine:** Deutz BF4M1013C, four cylinder, turbocharged, intercooled diesel, MSHA/Tier II, 122 hp (91 kW) @ 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 x 20 tires @ 2200 rpm with standard axle ratio:
1st gear: 2.4 mph (3.9 kph) • **2nd:** 6.2 mph (10.0 kph) • **3rd:** 11.4 mph (18.3 kph)
- Engine end axle:** New Holland D65I, no-spin differential, wet disk SAHR emergency brakes, wet disk HASR service brakes.
- Boom end axle:** New Holland D65I, no-spin differential, wet disk SAHR emergency brakes, wet disk HASR service brakes.
- Drivelines:** Mechanics 6C and 7C

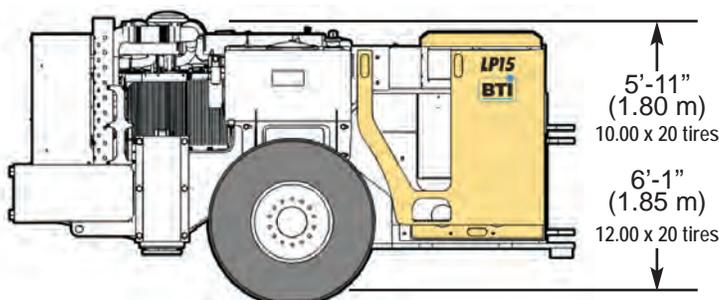


- ▲ **Engine:** Caterpillar C4.4 ACERT electronic four cylinder, turbocharged, intercooled diesel, Tier III, 127 hp (95 kW) @ 2200 rpm c/w fuel filter and water separator
- Torque converter:** Clark C2000 series
- Transmission:** Clark 20,000 series, long drop, remote mounted, electric shift
Three forward and three reverse speeds
- Vehicle speeds with 12 x 20 tires @ 2200 rpm with standard axle ratio
1st gear: 2.4 mph (3.9 kph) • **2nd:** 6.2 mph (10.0 kph) • **3rd:** 11.4 mph (18.3 kph)
- Engine end axle:** New Holland D65I, no-spin differential, wet disk SAHR emergency brakes, wet disk HASR service brakes.
- 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 904, four cylinder, turbocharged, intercooled diesel, Tier II, 174 hp (130 kW) @ 2200 rpm c/w fuel filter and water separator
- Torque converter:** Clark C320 series
- Transmission:** Clark 32,000 series, long drop, remote mounted, electric Shift
Three forward and three reverse speeds
- Vehicle speeds with 12 x 20 tires @ 2200 rpm with standard axle ratio
1st gear: 2.8 mph (4.5 kph) • **2nd:** 5.8 mph (9.3 kph) • **3rd:** 14.8 mph (23.8 kph)
- Engine end axle:** New Holland D65I, no-spin differential, wet disk SAHR emergency brakes, wet disk HASR service brakes.
- Boom end axle:** New Holland D65I, no-spin differential, wet disk SAHR emergency brakes, wet disk HASR service brakes.
- Drivelines:** Mechanics 6C and 7C

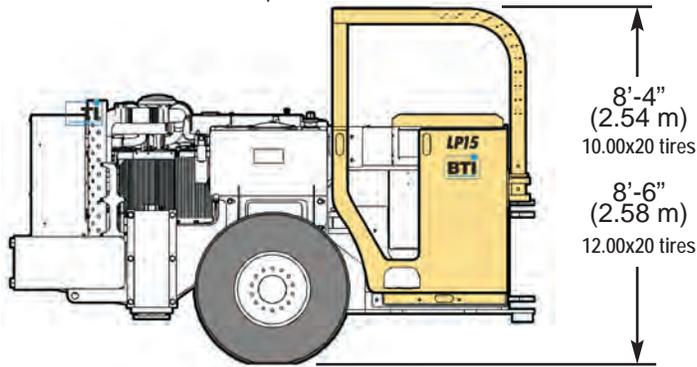
PROTECTIVE STRUCTURES OPTIONS



- **Standard Operator Compartment**
Standard dual compartments for operator and passenger.

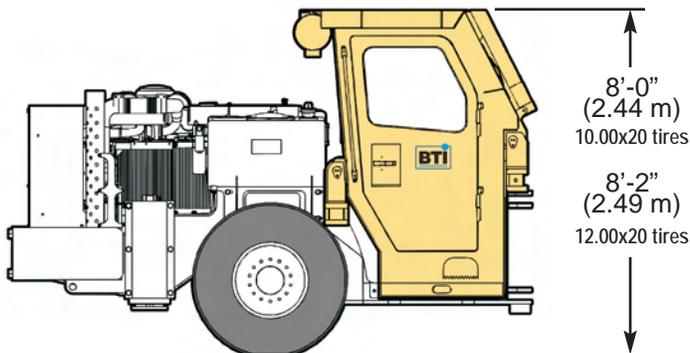
PROTECTIVE STRUCTURES OPTIONS

● Standard ▲ Optional



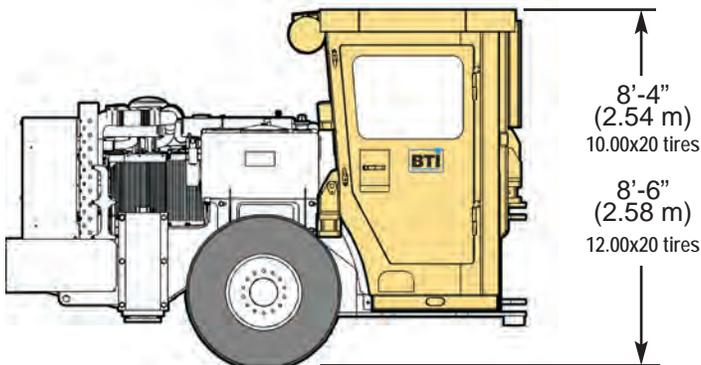
▲ ROPS/FOPS Canopy

Tested and certified ROPS/FOPS canopy, complete with guard bars to help protect operator and passenger from dangerous fly-rock. Complete with swivel operator seat.



▲ ROPS/FOPS Cab

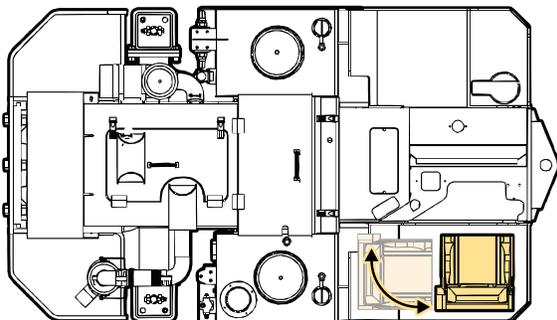
Full cab; covers operator, controls and passenger. Tested and certified ROPS/FOPS cab, complete with guard bars to help protect operator and passenger from dangerous fly-rock. Includes heavy-duty safety glass, wiper/washers, HVAC heat / air conditioning system, air pressurization system and operator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



▲ Operator only Protective Cab

2/3 cab; covers operator and controls. ROPS/FOPS certified by design (not tested). Operator protective cab, complete with guard bars to help protect operator from dangerous fly-rock. Includes heavy-duty safety glass, wiper/washers, cassette player, HVAC heat / air conditioning system, air pressurization system and operator swivel seat.

OPERATOR SEAT OPTIONS



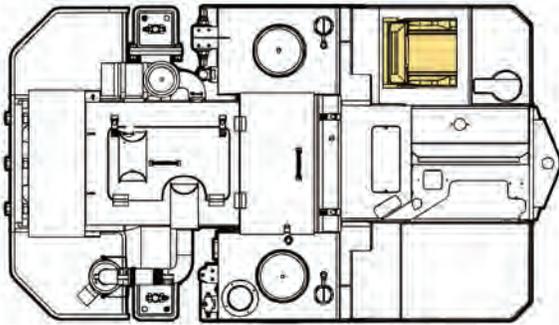
Operator Seat Options

● Suspension Seat ▲ Air Ride Seat

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

PASSENGER SEAT OPTIONS

● Standard ▲ Optional



● No Passenger Seat

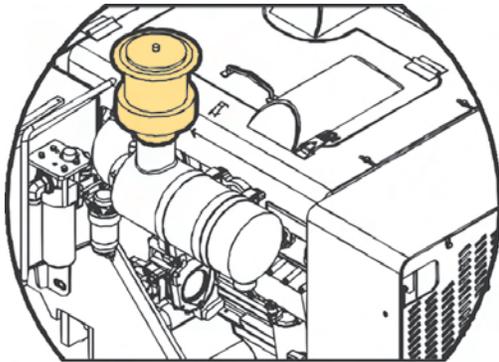
Passenger Seat Options

- ▲ **Suspension Seat:** Fixed suspension, mine duty passenger seat.
Note: cannot be combined with dust suppression system.
- ▲ **Air Ride Seat:** Fixed air ride, mine duty passenger seat.
Note: cannot be ordered if unit purchased with dust suppression system.

AIR INTAKE SYSTEM OPTIONS

● 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

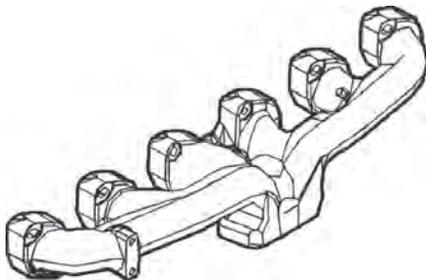
A catalytic exhaust, purifier/silencer. No exhaust blanket.

▲ 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.

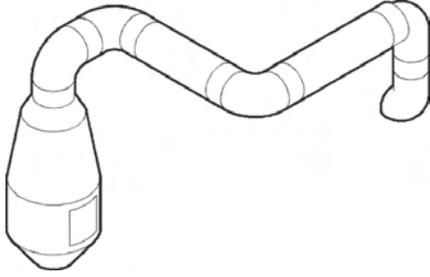
Non-flammable. Protects personnel from burns.

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



EXHAUST SYSTEM OPTIONS

● Standard ▲ Optional



▲ Exhaust System Wrap

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

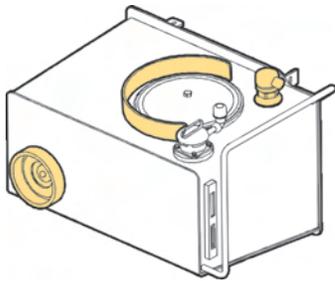
Non-flammable. Protects personnel from burns.

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.



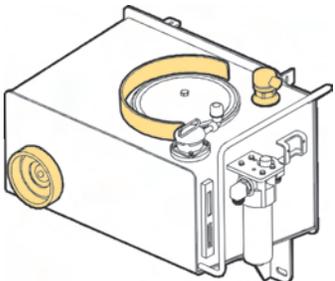
▲ Fuel Tank with Fast Fill

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

HYDRAULIC TANK OPTIONS

● Hydraulic Tank

65 gal (246 liter) hydraulic tank, top fill, 4 psi pressurized cap.



▲ Hydraulic Tank with Fast Fill

65 gal (246 liter) Hydraulic tank complete with Fast Fill filling system. Designed for on-site fast fluid transfer.

TIRE OPTIONS

● Pneumatic Tires

12:00 x 20; 20 ply

▲ Foam Filled Tires

12:00 x 20, 28 ply

▲ Solid Tires

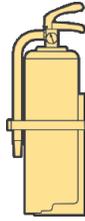
10:00 x 20, Multi-density rubber

▲ Solid Tires

12:00 x 20, Multi-density rubber

FIRE SUPPRESSION SYSTEM OPTIONS

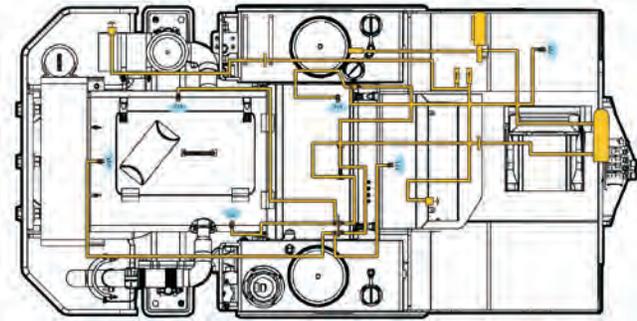
- Standard
- ▲ Optional



● 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 and a 20 lb (9 kg) fire extinguisher.

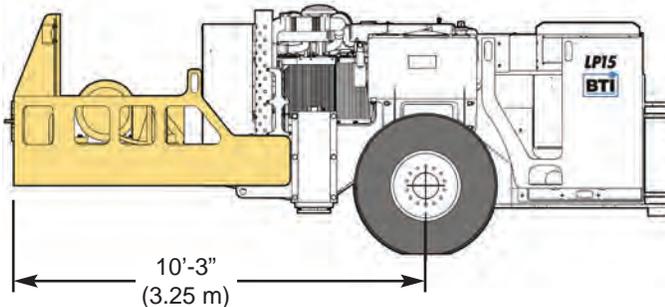
▲ Ansul Fire Suppression with Detection

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

ELECTRIC POWER PACK OPTIONS

● No Power Pack

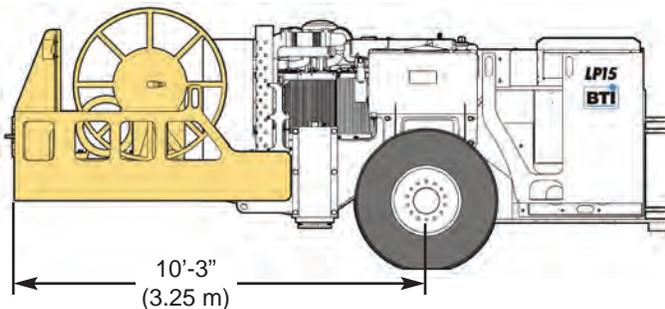
Standard bumper



▲ Power Pack

Bumper mounted, 100 hp (75 kW) electric/hydraulic auxiliary electric/hydraulic power pack. Complete with starter panel.

Advise voltage at time of order.



▲ Power Pack with Cable Reel

Bumper mounted, 100 hp (75 kW) electric/hydraulic auxiliary electric/hydraulic power pack.

Complete with starter panel and cable reel. Cable supplied by customer.

Advise voltage at time of order.

WHEEL CHOCK OPTIONS



● No Wheel Chocks

▲ Wheel Chocks - aluminum

Complete with holder

BOOM GREASING SYSTEM OPTIONS

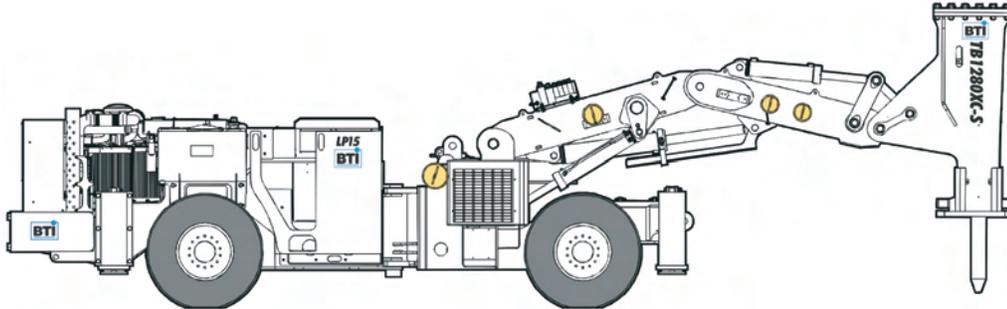
● Standard ▲ Optional

● Point of Use

Point of use grease zerk, no remote greasing points

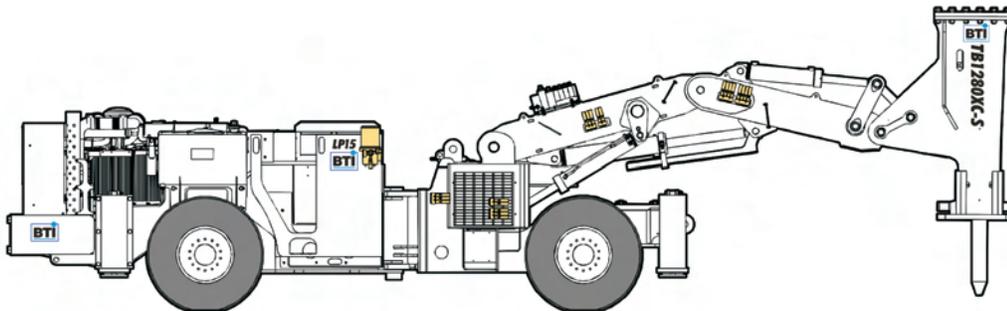
▲ Boom Manual Lube System

Manual greasing system, boom only. Strategically placed grease manifolds which are easily accessible by grease gun for lubricating all boom cylinders and boom pivot pins.



▲ Boom Auto-Lube System

Auto grease system - boom only. VDC grease pump with 2.1 gal. (8 liter) reservoir. Located in passenger wing compartment. Timer activated automatic grease injector manifolds for lubricating all boom cylinders and boom pivot points.



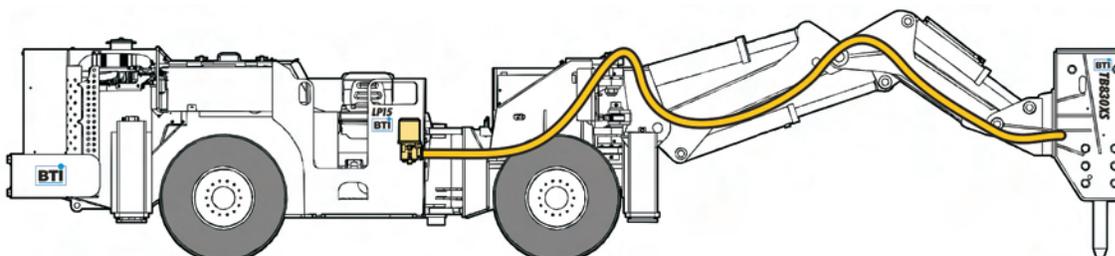
BREAKER GREASING SYSTEM OPTIONS

● Point of Use

Point of use grease zerk, no remote greasing points

▲ Breaker Auto-Lube System

Auto greasing system, breaker only. Complete with 2.1 gal (8 liter) 24 VDC electric driven grease pump and reservoir. Pump is activated when breaker is fired via remote control. Use only BTI Chisel Paste.



DUST SUPPRESSION SYSTEM OPTIONS

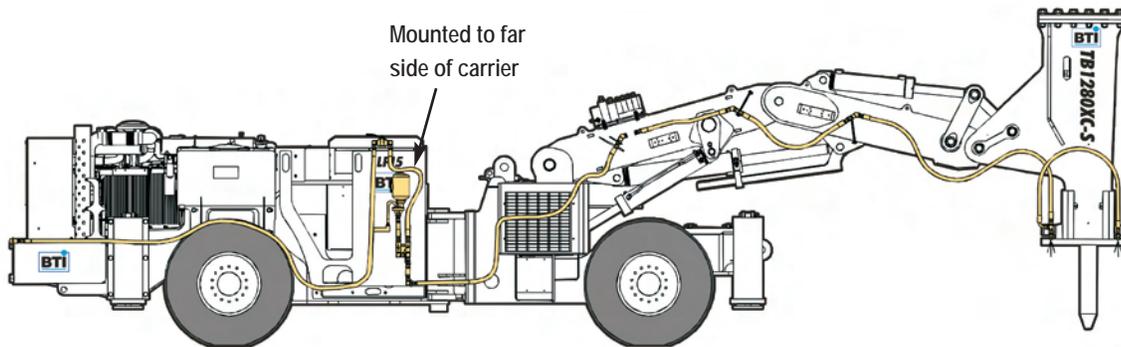
● No Dust Suppression System

▲ Manual System

Manual system - mine water hookup with manual on/off valve

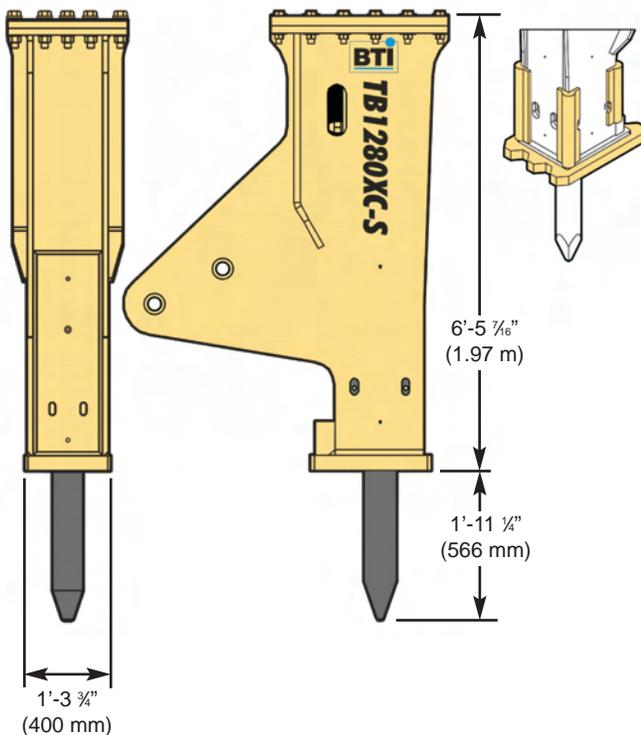
▲ On-board System

Includes a 24 VDC water pump with a 35 gal (132 liter) S.S. reservoir, located in passenger wing compartment. Strategically located spray nozzles suppress dust at the breaker tool. Activation switch is located on the remote control box. The system can also be used with mine water. Cannot be combined with passenger seat option and/or ROPS/FOPS cab option.



Note: Hose routing not exactly as shown.

BREAKER OPTIONS



TB1280XCS BREAKER

● TB1280XCS integral side mount

▲ TB1280XCS Severe Duty Wear Kit, factory application of cast abrasion strips and wear resistant plate complete with rock claws. Only available with new units.

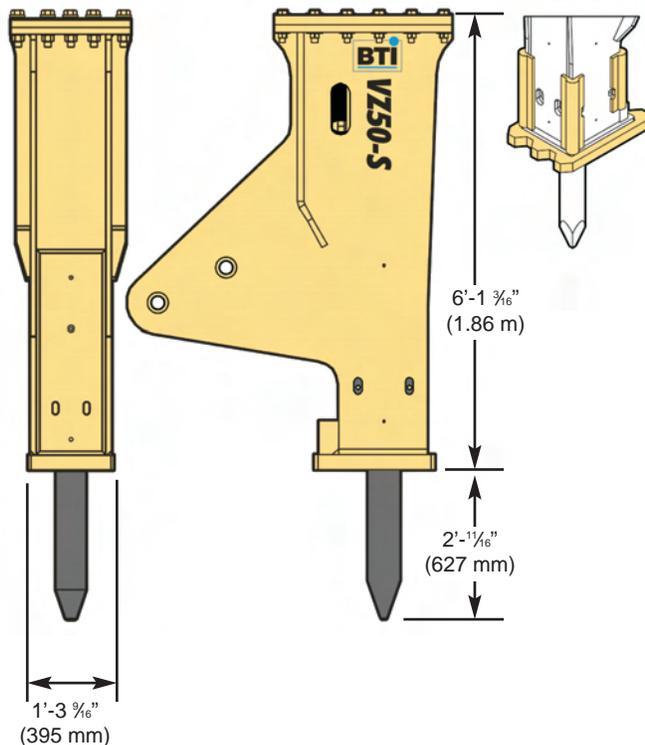
Energy Class:	5,500 ft-lb (7,457 joule)
CIMA Rating:	3,459 ft-lb (4,659 joule)
Blows per minute:	470 - 610
Oil Flow required:	50 - 65 US gal/min (160 - 200 l/min)
Working Pressure:	2,030 - 2,755 psi (140 - 190 bar)
Operating Weight:	4,917 lb (2,230 kg)
Tool Diameter:	5.5 in (140 mm)
Tool Weight:	252 lb (114 kg)

PRODUCTION	Cubic Yards:	Cubic Meters:
	(yd ³ / 8 hr day)	(m ³ / 8 hr day)
Medium Rock:	260 - 425	199 - 325
Hard Rock:	210 - 360	161 - 275

(Values will vary depending on machine, operator, and job conditions)

BREAKER OPTIONS

- Standard
- ▲ Optional



VZ50S BREAKER

- VZ50S integral side mount

- ▲ VZ50S Severe Duty Wear Kit, factory application of cast abrasion strips and wear resistant plate complete with rock claws. Only available with new units.

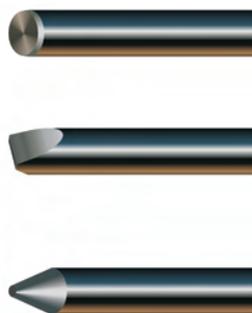
Energy Class:	5,000 ft-lbs (6,800 joule)
CIMA Rating:	2,793 ft-lbs (3,788 joule)
Blows per minute:	480 - 630 low speed 580 - 720 high speed
Oil Flow required:	42 - 53 US gal/min (160 - 200 l/min)
Working Pressure:	2030 - 2755 psi (140 - 190 bar)
Operating Weight:	4,520 lb (2,050 kg)
Tool Diameter:	5.3 in (135mm)
Tool Weight:	252 lb (114 kg)

PRODUCTION	Cubic Yards:	Cubic Meters:
	(yd ³ / 8 hr day)	(m ³ / 8 hr day)
Medium Rock:	260 - 410	238 - 375
Hard Rock:	215 - 375	197 - 343

(Values will vary depending on machine, operator, and job conditions)

TOOL OPTIONS

Note: Qty of one tool of selected style is included per unit. If additional tools are required, please indicate at time of order.



- **Blunt** – For impact in hard material, such as hard rock. The blunt tool transfers energy into the material, causing the material to fracture.
- ▲ **Chisel** – For penetration in soft to medium materials, such as light rock. The chisel provides a splitting action, creating a fracture line to break the material.
- ▲ **Moil** – For penetration in soft material, such as reinforced concrete.



10457-ENG-1009

All dimensions and specifications are subject to change without notice.

