CME-1050

The CME-1050...

Because sometimes you need big drilling power

The CME-1050 is in a class all by itself.

It gives you the drilling performance of a big truck-mounted rig but has only about 1/4th the ground bearing pressure. This high flotation lets you negotiate mud, snow, sand and rocky terrain that would stop even all-wheel drive truck-mounted drills in their tracks.

The CME-1050 can eliminate the need for expensive access roads. That means you can be even more competitive when bidding on those really big jobs that are hard to get to.

The bottom line is, you can get to remote drill sites easier, quicker and more economically... with the drilling power to do the job right.

Versatile enough to tackle almost any job.

The CME-1050 can also handle those everyday jobs that don't require off-road mobility. Since it's not overwidth, the CME-1050 is easily transported on a trailer. Any time of the day, any day of the week...without special permits.

The rubber tires will not damage most paved surfaces. And a front axle disconnect allows you to shift from 4-wheel to 2-wheel drive to prevent axle wind-up when driving on hard pavement.

But when the going gets rough, this drill has the ultimate combination for off-road traction.

Planetary axles put the gear reduction at the wheels. That means less stress on other drive train components. And no-spin differentials give you true 4-wheel pulling power.

The 50 inch (127 cm) diameter tires are flexible and tend to flatten out on the bottom. This provides more ground contact area and lower ground bearing pressure per square inch. The aggressive lug design provides a deep, sharp bite for even, steady pulling in soft terrain. And the open-center pattern assures efficient self-cleaning action.

For optimum drilling performance, we designed the CME-1050 to be heavier in the rear. So, to keep ground bearing pressure equal on all four wheels, we put wider, 31 inch (78.7 cm) tires on the back (compared to the 25 inch [63.5 cm] wide tires up front). The front axle oscillates when traveling on uneven terrain, allowing all four tires to remain on the ground for better traction and load distribution.

and off-road mobility.

High ground clearance and low center of gravity.

The underside of the CME-1050 is protected by a steel belly pan. There are no protrusions under the carrier to hang up on logs or rocks. And in order to keep the center of gravity as low as possible, we mounted the drill to the carrier frame, in between the tires.

Integral design gives you completely self-contained drilling unit with no compromises.

Since we designed the carrier ourselves as an integral part of the overall drill, we were able to utilize all space to the best advantage. The deck layout provides plenty of easily accessible storage area for augers, rods and other drilling tools.

Lockable tool boxes are provided on both sides of the drill. And two underbody hydraulic auger racks, one on each side of the rig, are standard. The CME-1050 can carry everything you need to get the job done.

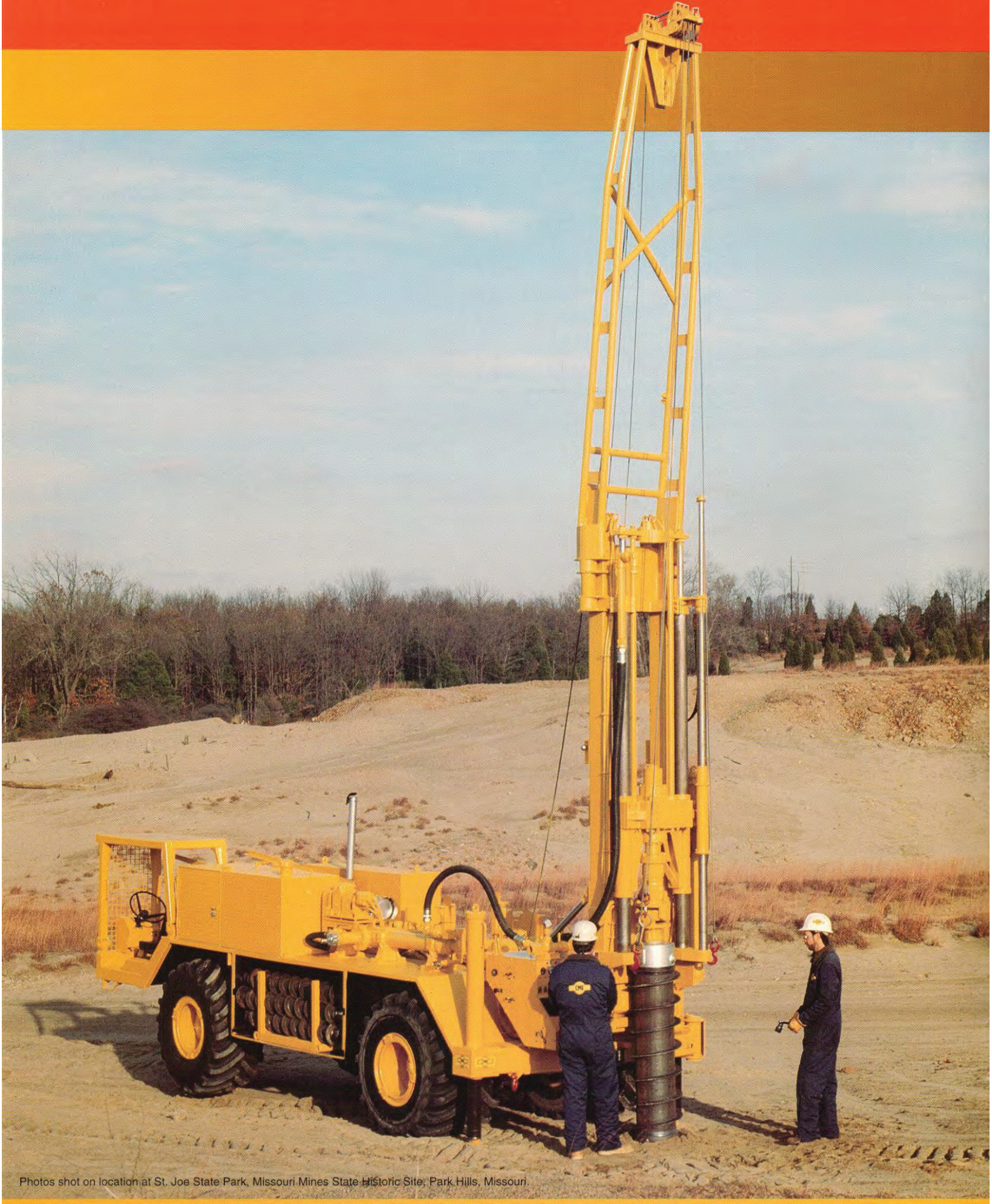
Single engine provides big savings.

A 359 cubic inch (5.9 L) Cummins 6BT 6 cylinder turbocharged diesel engine provides power for both driving and drilling. This single engine means big savings in your initial investment, when compared to dual engine ATV drill rigs. It also means savings in overall weight, space, and maintenance.

Forward cab design adds stability and extra deck storage area.

The cab is located in the front of the drill for a low center of gravity. This arrangement also provides extra deck space for tool boxes, storage areas or a water tank. The cab features all necessary gages for monitoring the engine. For operator convenience, we even designed a tilt steering wheel system that makes getting in and out of the cab easy.

A rollover protection structure, which meets SAE specification J1040C, is standard on the CME-1050.



Photos shot on location at St. Joe State Park, Missouri Mines State Historic Site, Park Hills, Missouri.

Safety…
it's a habit you can live with.

The CME-1050...

It gives a whole new dimension to all-terrain drilling performance.

24,000 foot pounds (32,544 Nm) of rotary torque... from an ATV-mounted drill rig.

You might expect to see that kind of power on a big truck-mounted drill. The CME-1050 brings it to you on an ATV carrier.

The rugged, mechanical rotary drive with power-shift transmission gives you 24,000 ft lbs (32,544 Nm) of torque for turning large diameter augers, as well as rotation speeds to 490 rpm for rotary or core drilling applications. Other optional rotation speed and torque combinations are also available for your specific drilling applications.

The power-shift transmission features hydraulically actuated clutches and a torque converter that provides shock overload protection. With four gears in both forward and reverse, there's a rotation speed and torque combination available for any situation.

Low speed drive system makes lining up auger connections easy.

An independent, hydraulically actuated system gives you infinite regulation of spindle rotation. It is especially beneficial when lining up auger connections and also works exceptionally well in down-the-hole hammer drilling applications.

48,000 pounds (21,773 kg) of retract force and 28,000 pounds (12,701 kg) of down pressure.

The hydraulic vertical drive system has no chains which need lubrication or cables which can stretch. It gives you precise control of force on the drilling tools.

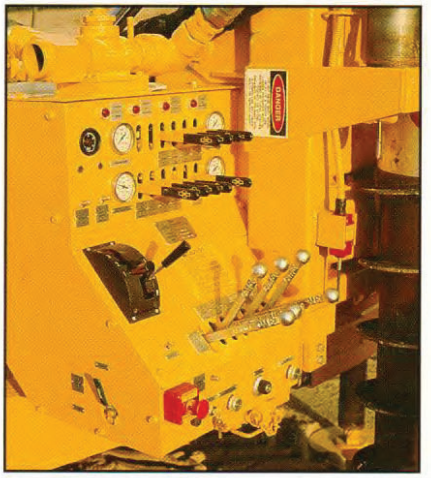
For exceptional drilling efficiency, the feed system has two separate controls. One gives you manual control of feed and retract and features both normal and fast retract positions. Retract rates of up to 95 feet (29 m) per minute let you add or remove drilling tools quickly.

The other control is used exclusively for feed and has a detent engaged position. Pressure controls let you dial in specific feed rate and feed pressure. This system is advantageous in core drilling and other operations that require precise control of feed.

And since the two controls are isolated, you can use the manual control for rapid retract without changing pressure settings for the detent feed control.

Control logic - the key to operator productivity.

Drilling and set-up controls are logically arranged on a control panel located at the driller's station. For added convenience, we've staggered the more frequently used controls, such as the hydraulic hoists and sliding base levers.



10,000 pound (4536 kg) hydraulic hoist is standard.

The hoist is controlled by a single lever located at the driller's station. Fast line speeds of 72 feet (22 m) per minute up and 310 feet (95 m) per minute down mean excellent hoisting efficiency.

Optional equi

for even more versatility

Patented spindle brake stops rotation in an instant.*

An emergency spindle brake stops rotation in less than a revolution. This system is activated by two conveniently located push button switches as well as by strategically located wobble switches.

Slide bases make the job easier and quicker.

A 20-inch (51 cm) in-out movement allows you to quickly move the drill off the borehole and align the sheaves for lifting tools with the cathead or any of the hoists. Up to 8 inches (20 cm) sideways movement (depending on in-out slide position), gives you even more versatility.

Patented angle drilling system is standard.*

This unique system is especially effective for drilling under ponds, storage tanks or other structures. When used with our patented Continuous Sample Tube System, you can even take soil samples while drilling angle holes.

The angle drilling system will also allow you to drill vertically with the carrier positioned on an uphill slope. That can eliminate the time-consuming job of leveling an area on which to place the rig.

The kelly drive is directly connected to the right angle drive box through a universal joint. You can raise or lower the mast with the drivetrain already connected and ready to go.

Hydraulic rod holder and breakout wrench*

The hydraulic rod holder makes your job quicker and safer. It not only pivots from on-hole to off-hole positions, but also hydraulically moves in and out. That's what makes it so compatible with the in-out and sideways slide bases. You'll never have a problem lining up drill rods or augers.

Automatic hammer*

Our 140 pound (63.5 kg) automatic hammer gives you extremely consistent and accurate Standard Penetration Test results, meeting all ASTM-D-1586-84 requirements. That's because there are no ropes or cables to impede the free-fall of the weight.

The hammer swings from the stored position to on-hole position. Since raising and lowering is done hydraulically, set-up is quick and almost effortless.

For maximum safety, all moving parts are enclosed, including the impact area between weight and anvil. A 340/140 pound (154 kg) hammer is also available.

*Patented by CME

pment

and productivity

Quick mast disconnect

This feature allows you to quickly disconnect the mast when working inside buildings, underneath bridges or in other low overhead drilling locations. Since the mast is completely separated from the uprights, it doesn't interfere with other drill functions such as the in-out and sideways slide bases.

With the mast in a horizontal position, you simply clamp it to its storage rack and extend the drill's in-out slide base. This pulls the sockets on the upright drill frame away from the large tapered pins on the mast.

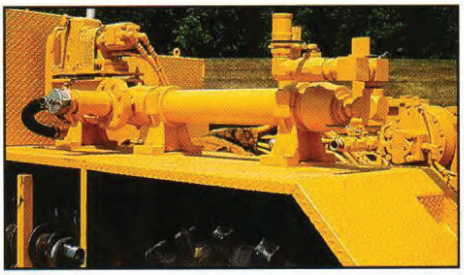
Additional optional equipment

Hydraulic cathead, 8 inch (20.3 cm) diameter
4,000 lb (1,814 kg) hydraulic hoist
max line speed...100 ft (30.5 m)/min
2,200 lb (998 kg) hydraulic hoist
max line speed...200 ft (61 m)/min
1,125 lb (510 kg) hydraulic wireline hoist
max line speed...400 ft (122 m)/min
1,200 pound (544 kg) driver hoist
max line speed...600 ft (183m)/min
1/4 inch (.635 cm) cable capacity...250 ft (76m)
Fluted kelly and hydraulic chuck assembly
Quick disconnect spindle adapter assembly
Dual pipe vises
Auger and rod guides for angle drilling
Quick disconnect spindle adapter
Air compressor and impact tools
Water tank, 140 gallon (530 l)
Water pumps:

Progressive cavity .....36 gpm/225 psi (136 lpm/1,551 kPa)
Progressive cavity .....84 gpm/225 psi (318 lpm/1,551 kPa)
Bean .....35 gpm/500 psi (132 lpm/3,448 kPa)
Gardner-Denver 41/2x5 ...148 gpm/197 psi (560 lpm/1,358 kPa)
(other pumps available)

Dual pipe vises

Cathead



Moyno 84 gpm/225 psi water pump
(318 lpm/1,551 kPa)

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Specifications

Power

Cummins 6BT (5.9 L) 6 cylinder turbocharged diesel engine

Carrier

Tire sizes: Front..50 inch (127 cm) diameter x 25 inch (63 cm) wide x 10-ply
Rear..50 inch (127 cm) diameter x 31 inch (79 cm) wide x 12-ply
Ground bearing pressure .....8 psi (.56 kg/cm²)
Power-shift transmission.....4 speed forward,4 speed reverse
Axles (front and rear).....planetary with no-spin differentials
Front axle disconnect.....standard
Steering .....hydraulic power
Wheel brakes.....hydraulic power
Parking brake.....standard
Hydraulic front winch .....15,000 pound (6,804 kg)

Rotary Drive

Power shift transmission .....4 speed forward,4 speed reverse
Rotary torque.....24,000 foot pounds (32,544 Nm) max
Rotary speed.....up to 489 rpm max

Hydraulic Feed System

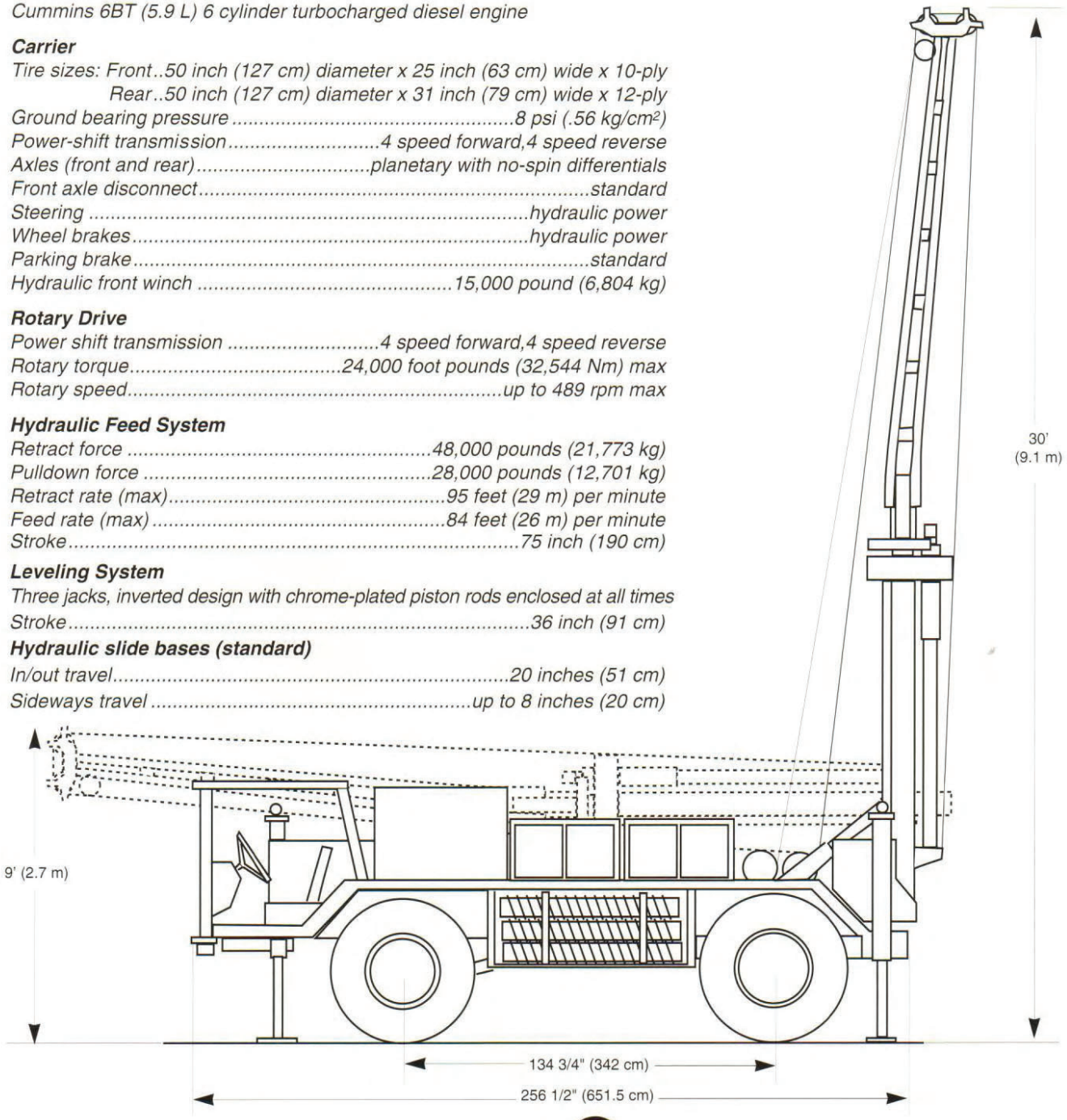
Retract force .....48,000 pounds (21,773 kg)
Pulldown force .....28,000 pounds (12,701 kg)
Retract rate (max).....95 feet (29 m) per minute
Feed rate (max) .....84 feet (26 m) per minute
Stroke.....75 inch (190 cm)

Leveling System

Three jacks, inverted design with chrome-plated piston rods enclosed at all times
Stroke.....36 inch (91 cm)

Hydraulic slide bases (standard)

In/out travel.....20 inches (51 cm)
Sideways travel .....up to 8 inches (20 cm)



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