



VACTOR®  
**HXX**  
VACUUM EXCAVATORS

**Vactor® HXX**  
**ParaDiGm®**



Introducing the Vactor HXX Paradigm®, the most innovative and versatile compact vacuum excavator available. This customer-inspired vacuum excavator was based on input from over 100 utility company and contractor job site visits as well as years of experience from the market leading Vactor HXX line of vacuum excavators.

The HXX Paradigm was designed specifically for utility, municipal and contractor customers involved in installation, maintenance and repair of underground water, sewer, gas, electric and telecommunications utilities. In addition, the Paradigm is ideally suited for subsurface utility engineering (SUE) contractors and other design planning firms involved in civil, road, municipal, commercial, industrial and residential projects.

### This compact, multi-purpose truck can:



Excavate safely around utilities with water or air



Vacuum, contain and dispose of drill mud



Power pneumatic, hydraulic or electrical tools



Provide transport and storage of replacement parts, equipment and tools

## APPLICATIONS

### *Jobsite Safety is #1*

**Safety** is the key reason why vacuum excavation is important on even ordinary repair and maintenance jobs. Many states require excavation within the utility tolerance zone to be completed with hand tools or vacuum excavation. However, studies have indicated hand tools are the number two cause of underground strikes - second only to backhoes. Vacuum excavation is also minimally invasive reducing project reconstruction costs and damage to surrounding areas such as road ways, tree roots, and landscaping. Applications include:

- Excavate in hard to reach areas
- Precision excavations
- Exposure of live gas distribution lines
- Utility, pipe and line location
- Daylighting underground infrastructure
- Fire hydrant repair/replacement
- Valve box repair/replacement/installation
- Cathodic protection
- Cross-bore detection and prevention
- Service shut-off
- Fiber optic repair/installation
- Excavation in frozen ground
- Directional drilling mud recovery
- Pipe and line installation
- Utility excavation
- Keyholing
- Drill rig cleanup
- Emergency response
- Water main repair
- Slot trenching
- Potholing
- Pit cleaning
- Spill cleanup



## COMPACT, LOW PROFILE, MANEUVERABLE DESIGN

### Quick setup with Park-N-Dig™

The Paradigm's Park-N-Dig design reduces setup and tear down time between excavated holes, significantly increasing productivity. The time between arriving on the job site and actual excavation is minimized, including the ability to dig up to six feet in depth without additional pipe and hose.

- Park-N-Dig controls allow operator to flip a single switch to begin operations.
- A wireless remote control comes standard with vacuum, boom, and water controls.
- Paradigm can also be operated from the conveniently located control panel.
- Operational and performance information is visually monitored via the 7" IntelliView® display.
- Water jetting and air lances have the ability to remain connected to their respective supply of water or air when stowed for travel between jobs so no set-up or tear down is required between holes to begin digging.



### Unmatched versatility

With the ability to use air or hydro excavation as the digging method, the Paradigm can be used in a variety of applications allowing the operator to use the most effective excavation method for soil conditions. The Paradigm can also quickly be switched from air to hydro excavation. This capability, combined with the optional backfill hopper, allow the Paradigm to begin an excavation with air for dry backfill, then switch to water for tougher conditions when encountered.

The Paradigm features:

- Large water (300 gallons) and debris (675 gallons) capacities for maximum productivity.
- Flexible water fill system allowing unit to fill from a fire hydrant or a ¾" garden hose outlet for convenience.
- Standard air compressor rated for 185 CFM @ 150 PSI, ideal for air excavation applications. With push of a button, compressor's air pressure can be reduced to 110 PSI to power common jobsite tools such as a jack hammer or tamper, eliminating need for additional trailer-mounted, aux engine driven compressor at jobsite.
- Unmatched lockable storage space available for common jobsite tools, with several convenient toolboxes including a long-handle toolbox under the debris body.
- Optional 2" receiver hitch or Pintle hitch enable the Paradigm to tow up to 20,000 lbs of additional equipment to the jobsite - eliminating the need for additional job site trucks.



Lockable overfender toolbox with slideout tray

# VACTOR HXX PARADIGM

## Powerful vacuum

### The Paradigm includes:

- Standard boom with 6" vacuum hose to prevent hose clogging and increase performance, which is over double the area of 4" hose systems which are prone to clogging.
- Airflow produced via a positive displacement, hydraulically driven blower delivering performance up to 2,200 CFM and 15" Hg of vacuum.
- The standard boom eliminates need for the operator to manually manipulate or hold hose while excavating which can be strenuous and difficult.
- For quick cleanout applications the Paradigm has a convenient 4" rear loading port and hose to get the job done quickly.

The combination of these features make the Paradigm more productive than other units this size.



Available as an optional enhancement, Vactor's patent pending DigRight® technology for unmatched water pressure control around vulnerable buried infrastructure.

- Allows operator to select a maximum water pressure limit to prevent the pressure from exceeding site or industry requirements
- Includes three default pressure limitations based on industry best practices for digging around underground utilities: 1500, 2500, 3000 PSI with option to turn feature off



Standard wireless boom and air compressor

\*\*Capacity rating on a non-CDL class 6 chassis. Legal capacity can be optioned up to 8200 lbs on a class 7 chassis. Actual capacity is dependent on chassis configuration and tools stored on the unit.



## Increased payload hauling capabilities

With a maximum payload of more than 6,000 lbs\*\* of spoils, no other vacuum excavator in this size range can match the Paradigm's hauling capability. Weight enforcement is an important issue within the vacuum excavation industry, as overweight fines can be significant. The Paradigm's payload is nearly three times the payload of larger sized vacuum excavators.

## Single engine design

The Paradigm features a powerful, single-engine, PTO driven design that drives all vacuum, air and water systems. Unlike other vacuum excavators this size that require two engines – one to power the truck chassis and one to generate vacuum and excavating power – the Paradigm delivers superior performance with a single engine. This saves on fuel, parts, time and money spent on additional engine maintenance. It also decreases job setup time and increases productivity.

## Non-CDL chassis

The Paradigm is available on a Class 6 non-CDL, (state dependent) chassis, which is helpful for vacuum excavator operators who don't have a commercial driver's license. A Class 7 chassis (CDL required) for customers looking for increased payload capacity is also available.

## Compact design for tight urban areas

Worksites are often on crowded urban streets with overhead power lines, trees and even low bridge height. The Paradigm's compact, low-profile design and truck maneuverability are well-suited for these tight, urban job sites.

## Service and support

The HXX Paradigm is supported by Vactor's extensive, factory-trained dealer network of more than 50 dealers, as well as 12 factory direct locations in the USA through FS Solutions, and 8 JJE sites in Canada.

The Paradigm's Bluetooth connectivity service tool allows remote troubleshooting and diagnostics anywhere in the world through your Bluetooth device with cell or wifi connectivity. Simply connect your smart phone to the truck's Bluetooth and a factory authorized service rep can provide troubleshooting assistance getting you back up and working quickly without leaving the jobsite.



Bluetooth connectivity for service support



4" rear loading port



# STANDARD EQUIPMENT

The Vactor HXX Paradigm is loaded with standard features making it 'work ready.'

## Debris Body

- 675 gal volumetric capacity debris body
- Hydraulically open and close and hydraulic locking rear door
- 6" vacuum pipe storage
- Hydraulically raising debris body for easy offloading
- Electric vibrator
- 48" unladed dump height
- Rear door splash shield
- 4" quick connect loading port

## Vacuum System

- 2,200 CFM blower, 15" Hg
- Ultra quiet blower silencer package
- Hydrostatic blower drive
- 6" pipe package with clamps
- Final filter with washable 5-micron polyester insert for dry fines vacuuming
- Park-N-Dig quick operation design
- Dual Cyclone Filtration

## Boom and Vacuum Pipe

- 6" diameter extendable boom with 5' of extension
- Hydraulic up/down control
- 4" loading port on rear door includes 4" x 25 ft smooth-bore vacuum hose
- Boom tube handle

## Water System

- 300 gal capacity polyethylene water tank
- Anti-siphon fill device & anti-splash valve
- 2" camlock with 25 ft hydrant fill hose
- 3/4" x 25 ft garden fill hose
- Triplex water pump - 8 GPM @ 2500 PSI
- Hydraulic water pump drive
- Hose reel equipped with 1/2" x 50 ft hose
- Excavating water lance with quick connect fittings
- Two Vactor HXXPOSE™ rotating nozzles



Optional front bumper tool storage



Raising debris body



## Air Excavation Package

- Dual PSI setting 150 PSI for air excavation and 110 PSI for powering air tools
- 185 CFM air compressor
- Retractable air tool reel with 1" x 25 ft hose
- Air excavation lance
- Compressor upgrade - 300 CFM @ 250 PSI

## Controls and Instrumentation

- Illuminated curbside control station featuring: waterpump, blower, and air compressor controls, vibrator, fuel level, blower RPM, vacuum level, operation status indicator, warning indicators
- New wireless remote with two-way communication displaying unit performance in operator's hand
- LED worklight curbside
- Hydraulic extend/retract boom

## Storage (Options)

- Lockable full width storage locker front bumper mounted
- Lockable, vertical storage locker, passenger side
- Lockable aluminum storage box driver side mid-ship
- Lockable aluminum storage box driver and passenger side rear
- Water excavation nozzle storage rack
- Lockable overfender toolbox with slide out tray

## Safety

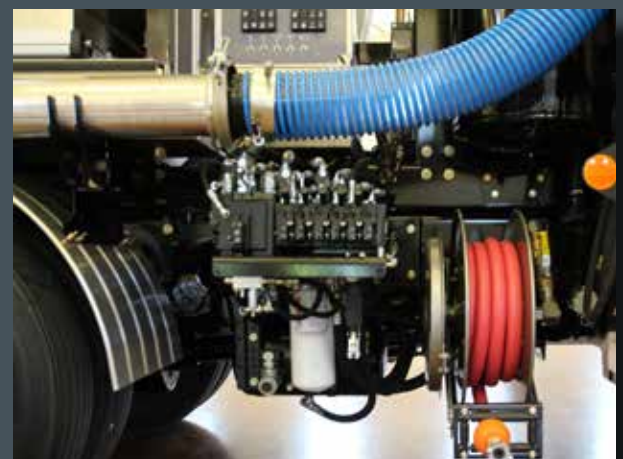
- Emergency stop button at all HMI
- New emergency shut-off wrist strap
- Rear door prop
- Debris body prop
- 6" air-operated vacuum relief valve
- Backup camera with in-cab display standard
- LED stop, tail, turn, and brake lighting

## Paint

All painted and powder coated components are sand blasted for proper adhesion prior to finishing. Debris body painted customer colors per Vactor's 5 stage paint process that includes 2 coats of automotive grade Axalta™ Imron® Elite polyurethane top coat.



Large vertical storage cabinet



Curbside controls with manual override capability

## HXX PARADIGM PRODUCT ENHANCEMENTS:

- Backfill hopper
- Lockable tool storage
- 2" receiver hitch
- Hydraulic tool package
- Cold weather protection
- Amber LED flashing light system
- LED work lighting
- Compressor upgrade - 300 CFM @ 250 PSI
- 4X4 chassis

Additional options available



### Backfill Hopper

When clean backfill is needed, an optional 175 U.S. gallon backfill hopper is available for transporting this material. The hopper is supplied with a manual gate offload and chute for easy filling of the excavated hole or a 5-gallon bucket for remote transport. The hopper includes a vibrator to assist in material removal. The hopper can be filled via vacuum through a 4" loading port or manually through a top access hatch.



Vactor offers the widest range of vacuum excavators for the utility industry ranging from single to four-rear axle, 3.5 cu. yard to 15 cu. yard debris capacity, and air, water or both for digging.



For more information or schedule a demonstration call 815-672-3171

[www.vactor.com](http://www.vactor.com)

[www.verifylocates.com](http://www.verifylocates.com)



[vactor.com](http://vactor.com)

Some items shown may be optional. Specifications subject to change without notice. Vactor®, HXX®, Paradigm®, IntelliView®, DigRight™, HXXpose™ and Park-N-Dig® are registered trademarks of Vactor Manufacturing. Axalta™ Imron® are registered trademarks of Axalta Coating Systems IP Co. LLC. Vactor is a subsidiary of Federal Signal.

Effective 1/17 P/N 00166-B ©2016 Vactor Manufacturing

Vactor Manufacturing, Inc. • 1621 South Illinois Street • Streator, IL 61364 U.S.A.

(815) 672-3171 Phone • (815) 672-2779 Fax