

INDUSTRIAL LIFT TRUCK SPECIFICATION SHEET

XH-450M

Rated Capacity 45,000-lbs. (20,412 kg)

Load Center 48-in. (1,219 mm)

Wheelbase 160-in. (4,064 mm)

TAYLOR



Cover image is for example purposes only and may not reflect current features.



TAYLOR MACHINE WORKS, INC.

Founded in 1927 on the principles of “FAITH - VISION - WORK”, and entrenched with decades of Heavy Industrial Material Handling experience, Taylor heavy lift trucks are Proudly Made In America. Taylor meets all of your rugged industrial needs with models and capacities that range from 4,000-lbs to 125,000-lbs. The Taylor X-Series features Tier 4 Final engine technology that has increased fuel efficiency while retaining the powerful low-end torque that our customers have come to expect. Taylor’s reputation was built while performing in the harshest industrial environments the Material Handling Industry has to offer. We strive to keep things simple and use appropriate technology that brings value and the Taylor XH-450M continues that tradition!

you can depend on *Big Red*®

Performance: †

		XH-450M		
Travel Speed	Maximum Forward	mph (km/h)	18	29
Lift Speed	No Load	fpm (m/s)	53	0.27
	With Load	fpm (m/s)	42	0.21
Lowering Speed	No Load	fpm (m/s)	62	0.32
	With Load	fpm (m/s)	62	0.32
Gradeability	No Load*	%	32	
	With Load*	%	40	
Drawbar Pull	Maximum @ Stall*	lb (kN)	47,800	213
Stability	Comply with ANSI	%		Yes

*PowerShift (Maximum @ Stall)

† NOTE: Performance specifications are based on trucks with standard equipment. Performance specifications are affected by the condition of the vehicle, its components, and the nature and condition of the operating area. If these specifications are critical, the proposed application should be discussed with your Taylor sales representative.



XH-450M

Engine:					Optional Engine International Shipments Only			
Engine	Make & Model		++ Volvo TAD871VE (Turbocharged)		++ Cummins QSC8.3 C-240 (Turbocharged)			
	Tier Compliance		Tier 4 Final		Tier 3			
	Fuel - Engine Type		Diesel - 4 Stroke		Diesel - 4 Stroke			
	Output	hp (Kw)	248	185	240	179		
	Gov'n Speed w/Load	RPM	2200		2200			
Fluids	Cyl/Displacement	cyl/cu-in (L)	6	470	7.7	6	506	8.3
	Peak Torque*	ft-lbs/RPM (Nm/RPM)	856	1200	1161	1200	800	1500
	Fuel Capacity	gal (L)	83	314			83	314
	Diesel Exhaust Fluid	gal (L)	6.6	25				
	Battery	Volt/Ah (2 batteries)	24 / 2300		24 / 2300			
Electrical	Alternator	Amps	110		95			

*(SAE J1995 Conditions)

† This engine requires (DEF) Diesel Exhaust Fluid and features (SCR) Selective Catalytic Reduction, (CEGR) Cooled Exhaust Gas Recirculation, diagnostic and maintenance monitor, fuel/water separator and engine/trans. protection systems. Emission certification: US EPA Tier 4 Final

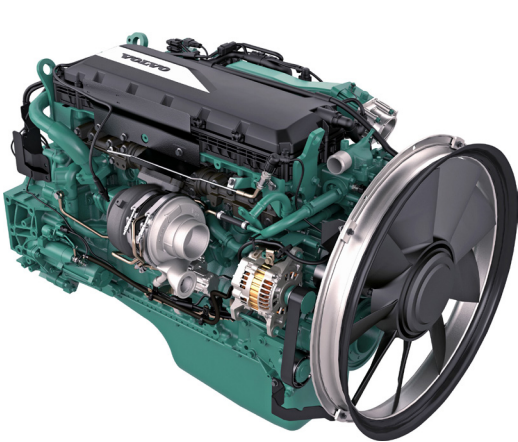
++ Standard features are electronic diagnostic and maintenance monitor, fuel/water separator and engine/transmission protection systems. Emission ertification: US EPA Tier III, Carb Tier III, EU Stage III. Attention: Taylor models equipped with U.S. EPA Tier 3 certified engines are available for sale outside of the highly regulated countries of North America, Europe and Japan. Refer to the off-road diesel engine emission regulations of the specific country in question for verification.

Transmission:								
Trans.	Make & Model		Dana TE-17 Powershift		Dana TE-17 Powershift			
	Number of Speeds	Fwd/Rev	3/3		3/3			
	Clutch		Inching		Inching			
	Gear Change		Hand - Joystick		Hand - Joystick			

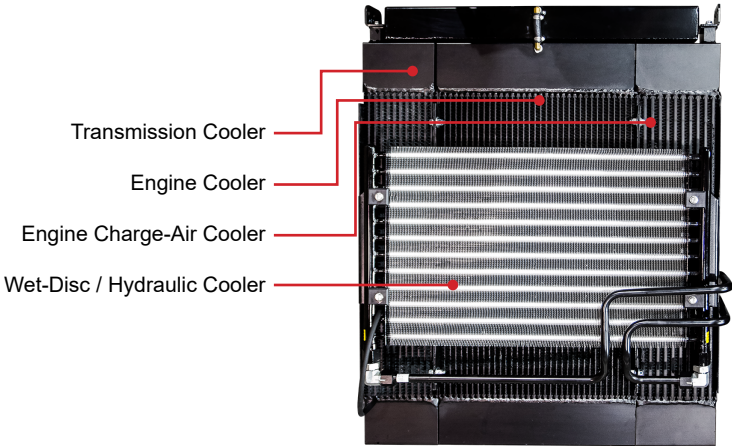
The 3-speed automatic powershift transmission is modulated, fully reversing and features inching capability. Directional controls are actuated through joystick mounted push buttons. Temperature control is achieved through a seperate air-to-oil cooler. The filler-pipe dipstick and large, heavy-duty oil filter are easily accessed for maintenance.

Axles:								
Drive Axle	Make & Model	Wet Disc	Axeltech PRLC-1794W		Axletech PRLC-1794W			
Steer Axle	Make & Model		Taylor 450		Taylor 450			

The bolted heavy-duty planetary drive axle utilizes wet disc brakes. The steer axle is a single hydraulic cylinder design with heavy-duty links from the cylinder ram directly to tapered roller bearing mounted spindles.



Volvo D8 248 HP
Fuel Consumption Rate: 2.0 Gph to 2.4 Gph



3-Section Bolted Radiator
Each section can be serviced separately

The conventional top & bottom tank radiator has wide fin spacing to reduce dirt build-up and provide optimum engine cooling. Cooling includes engine charge-air cooler, engine coolant-air cooler, transmission oil-air cooler, and a separate wet disc and hydraulic oil-air cooler.

Note: Most manufacturers do not allow you to see fuel consumption data. We make this data available on every machine for every customer to track daily. Depending on duty cycle, individual trucks could be slightly above or below these numbers.

Lift Truck Dimensions:

General	Model	Manufacturer's Designation		XH-450M	
	Capacity	Rated Capacity	lb (kg)	45,000	20,412
	Load Center	Distance	in (mm)	48.0	1,219
	Wheelbase	G1 If Equipped w/ Volvo Tier 4 Final Engine	in (mm)	160.0	4,064
		If Equipped w/ Cummins Tier 3 Engine	in (mm)	156.0	3,962
	Power Type	Diesel or LPG		Diesel	
Dimensions	Upright Lift	D1 Lift Height (Ground to Top of Fork)	in (mm)	136.5	3,467
	Forks	Thickness	in (mm)	4.5	114
		Width	in (mm)	8.5	216
		Length	in (mm)	96.0	2,438
	Tilt Angle	D2 Standard Upright - FWD/Backward	degrees	15° / 10°	
	Overall Dim.	D3 Length to Face of Forks (160-in WB)	in (mm)	236.6	6,010
		Length to Face of Forks (156-in WB)*	in (mm)	232.6	5,909
		D4 Width (Standard Tires)	in (mm)	121.0	3,073
		D6 Width (Over Counterweight/Fenders)	in (mm)	116.0	2,946
		D7 Width (Standard Fork Spread)	in (mm)	100.0	2,540
		D8 Overall Height (Lowered)	in (mm)	155.0	3,937
		D9 Overall Height (Raised)	in (mm)	221.0	5,613
		D10 Height (Ground to Top of Carriage)	in (mm)	77.0	1,956
		D11 Height (Top of Counterweight)	in (mm)	65.5	1,664
		D12 Height (Top of "A" Frame)	in (mm)	133.5	3,391
	Load Distance	D13 Center of Wheel to Face of Forks	in (mm)	44.3	1,124
	Turning Radius	R1 Minimum Outside (160-in WB)	in (mm)	219.0	5,563
		Minimum Outside (156-in WB)*	in (mm)	213.0	5,410
		R2 Minimum Inside (160-in WB)	in (mm)	20.0	508
		Minimum Inside (156-in WB)*	in (mm)	17.0	432
	Aisle Width	(Add Load Length for 90° Stacking)	in (mm)	263.3	6,687
Weight	Total Apprx.	Standard Truck	lb (kg)	75,600	34,292
	Axle Loading	Static with Rated Load (Front)	lb (kg)	109,300	49,578
		Static with Rated Load (Rear)	lb (kg)	11,300	5,126
		Static with No Load (Front)	lb (kg)	38,300	17,373
		Static with No Load (Rear)	lb (kg)	37,300	16,919
Wheels & Tires	Tire Type	Cushion or Pneumatic (Front / Rear)		Pneumatic / Pneumatic	
	Wheels	Number (Front / Rear)		4 / 2	
	Tires	Number (Front / Rear)		4 / 2	
		Size (Front)		14.00 X 25 - 20 PR	
		Size (Rear)		14.00 X 25 - 20 PR	
	Tread	W1 Center of Outside Tires (Front)	in (mm)	105.5	2,680
		W2 Center of Tires (Rear)	in (mm)	97.0	2,464
	Ground Clearance	Lowest Point (No Load)	in (mm)	12.0	305
		Center of Wheelbase (No Load)	in (mm)	16.0	406
	Brakes	System Type		Wet Disc	
		Control Method (Service / Parking)		Foot / Hand	
		Operation Method (Service / Parking)		Hyd / Spring	
Misc.	Load Moment		in-lbs (m-kg)	4,151,250	47,828
	Relief Pressure	For Attachments	psi (bar)	1,500	103
	Hydraulic Fluid	Tank Capacity	gal (L)	74	280

XH-450M

Mast Dimensions:

11' ULTRA-VU*	Standard	D1	Lift Height (Ground to Top of Fork)	in (mm)	136.5	3,467
		D8	Overall Height (Lowered)	in (mm)	155.0	3,937
		D9	Overall Height (Raised)	in (mm)	221.0	5,613
13' ULTRA-VU*	Optional	D1	Lift Height (Ground to Top of Fork)	in (mm)	160.5	4,077
		D8	Overall Height (Lowered)	in (mm)	167.0	4,242
		D9	Overall Height (Raised)	in (mm)	245.0	6,223
15' ULTRA-VU*	Optional	D1	Lift Height (Ground to Top of Fork)	in (mm)	184.5	4,686
		D8	Overall Height (Lowered)	in (mm)	179.0	4,547
		D9	Overall Height (Raised)	in (mm)	269.0	6,833
18' ULTRA-VU*	Optional	D1	Lift Height (Ground to Top of Fork)	in (mm)	220.5	5,601
		D8	Overall Height (Lowered)	in (mm)	197.0	5,004
		D9	Overall Height (Raised)	in (mm)	305.0	7,747

* The Taylor ULTRA-VU telescopic mast has two multiple-leaf lift chains that are nested inside the mast rails for improved visibility. The double-acting lift cylinders are nested to the rear of the mast rails. The mast is constructed of high-strength steel and has two lifting eyes and bolt-on caps that permit safe, easy removal.

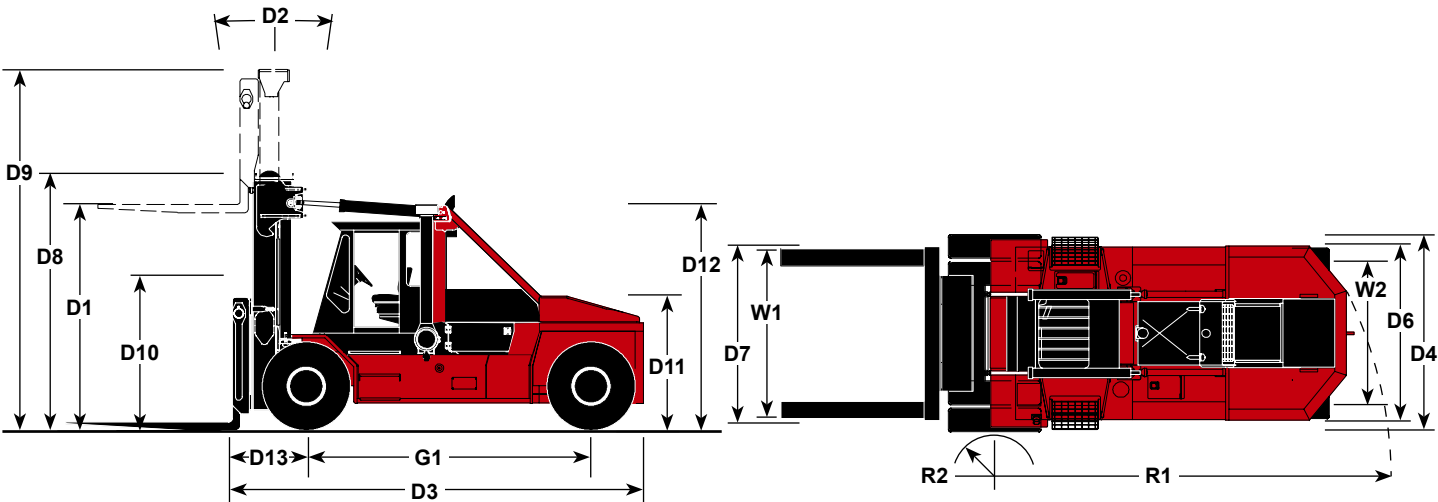
Carriage Dimensions:

Carriage	Standard	D7	Pin-type "C" carriage	in (mm)	100.0	2,540
The mast and carriage main rollers are common and use shielded roller bearings.						Dimension references Standard Fork Spread"

Fork Dimensions:

Forks	Standard	Thickness	in (mm)	4.5	114
		Width	in (mm)	8.5	216
		Length	in (mm)	96.0	2,438

The forks are pin-mounted and fully adjust from the outer carriage plates to the center brace. They are forged from heat treated steel and have square tips and bottom tapers. Optional fork or coil ram configurations are available but may effect the rated capacity of the standard truck and could require additional equipment. Any optional fork or coil ram application should be discussed with your Taylor sales representative.



Standard Features: XH-450M

- 11' ULTRA-VU 2-stage mast (155-in lowered height)
- 100-in Pin-type "C" carriage (retains base capacity when equipped with optional side-shift and standard forks)
- 4.5-in X 8.5-in X 96-in pin mounted forks
- Volvo TAD871VE (Turbocharged) 248 Hp Tier 4 Final Diesel
- Donaldson dry-type air cleaner w/safety element & restriction indicator (vertical air intake extension with TaylorMax Precleaner)
- Dana TE-17 3-speed powershift transmission
- Powertrain protection system for engine and transmission
- Axletech PRLC1794 HD planetary drive axle with wet disc brakes
- Taylor HD-450 welded steel steer axle (single hydraulic cylinder design with heavy-duty links from the cylinder ram directly to tapered roller bearing mounted spindles)
- 14.00 X 25 – 20PR bias pneumatic drive and steer tires (high load)

Chassis

- All-welded steel frame with 4 Lifting Eyes (lifting eyes not designed for level pick)
- Bolted counterweight
- Replaceable bolt-on steps and handrails
- Lockable Fuel Cap
- Hinged engine hood and side service doors for ease of maintenance.

Cab

- Enclosed 2-door steel all-welded DREAM Cab (includes dome light, wide angle mirrors, door hold back latches with trip handles, handrails, black floor mats and is isolation mounted for noise and vibration reduction)
- 32,000 BTU heater and defrost
- Tinted glass with front and rear windshield wipers
- Fully adjustable air ride swivel seat
- Multifunction Joystick mounted on adjustable arm rest with integrated directional shift control
- Operator Restraint System (Orange, anti-cinch seat belt with starting sequence neutral lock)
- Operator Presence System with timed idle and neutral shutdown (5 minute default, password adjustable from 1-120 minutes by end user)
- Taylor Integrated Control System (TICS) ...see next page for additional info
- TaylorTrak Pro - Advanced Fleet Telematics hardware
- 7-in touch screen color display
- The one-piece flip-down instrument panel is pre-wired to accommodate heavy-duty accessories.
- All wiring is color and number coded.
- Dual USB charging ports
- Hydrostatic, steer-on-demand power steering with tilt steering column

Electrical

- 24-volt electrical system with 110 amp alternator
- Dual heavy-duty batteries
- Battery disconnect/lock-out switch
- (4) forward facing LED work lights (cab mounted)
- (2) rear facing LED work lights ("A" pillar mounted)
- (2) LED work lights (mast mounted)
- Circuit breakers with heavy duty connectors (no automotive type fuses)
- Breaker reset switches
- Key-type anti-restart ignition switch
- Dual electric trumpet horns (116 dBA)
- Keyswitch-actuated amber strobe light
- Forward and reverse-actuated warning alarms

Vehicle Information Package

- Operators Guide
- Maintenance and Service documentation including key circuit drawings (Serial Number Specific Parts Book is available upon request)
- Safety Check Manual and Video



Fully Enclosed 2-Door Cab with Multiple Climate Control Configurations Available
(featured cab is shown with available options)



Ergonomic & Serviceable Joystick (Standard)



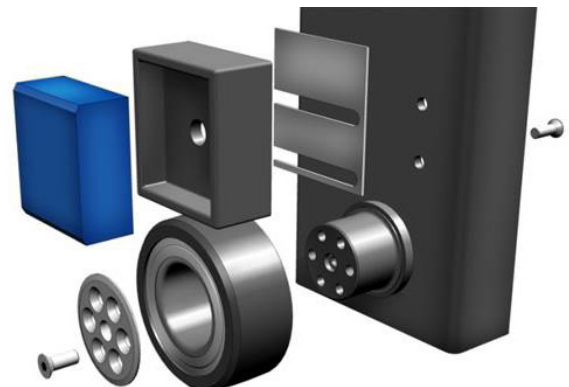
Fully Adjustable Air Suspension Seat (Standard)



Industry's Toughest Steer Axle (Standard)



Vehicle Information Package "VIP" (Standard)



The mast and carriage main rollers are common and use tapered roller bearings. The side thrust pads, made from cast nylon, are adjustable to compensate for wear.

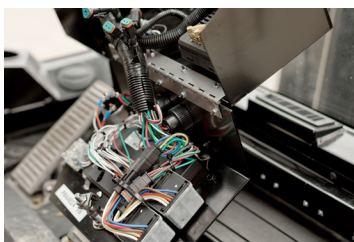
NEED OPTIONS?

Just ask one of our Taylor Specialist.

Taylor Machine Works was founded on the promise of meeting our customer's needs. The signage on our original facility in 1927 stated "We Engineer and Build What You Need" and those ideals still ring true today! From multiple Mast, Carriage and Fork configurations to Special Attachments that are unique to your business, we will step forward to meet the challenge. We have a dedicated engineering group focused on meeting special request from our customers. This ensures that you have the exact equipment you need to tackle your rugged applications. With hundreds of options readily available for our trucks, and the ability to custom engineer any other need that arises, Taylor Machine Works is here ready to serve.

Serviceability

Taylor Lift Trucks are designed with ease of maintenance and serviceability as a key priority. With today's engine and emissions requirements, daily maintenance checks and timely periodic service are the key to your equipment's longevity. All daily checks across the Taylor product line can be accessed from the ground or running board, ensuring that operators can complete these requirements with ease. Also, the hinged engine hood, side service doors and removable floor panels open to expose the drive train and hydraulics to provide easy access for service and inspection.



Flip-down Dash with Color/Number Coded Wiring (Standard)



Spin-on Breather, Wire Mesh Strainer & Replaceable Internal Element (Standard)



Easy Access to Drive Train & Hydraulics



3-Section Bolted Radiator (Each section can be serviced separately)



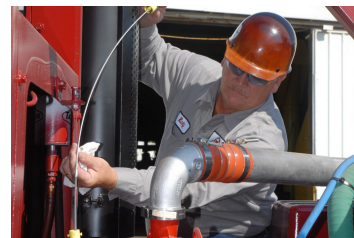
Donaldson Air Cleaner with Safety Element (Standard)



Heavy Duty Circuit Breakers/ Reset Switches (Standard)



Service & Inspection from Ground Level



Easily Accessible Daily Checks

Hydraulics & Brakes

Taylor Lift Trucks feature hydraulic systems that utilize gear type pumps and sectional control valves. Joystick control that can be tuned for operator comfort is standard on all of our models. Power-on-Demand is also featured on every Taylor lift truck, but can be turned off to suit operator preferences. The Hydraulic tank features a spin-on breather, wire- mesh strainers, full-flow 10-micron return-line filters and a replaceable internal element. The hydraulic oil and wet disc brakes are cooled by an air-to-oil cooler separate from the transmission cooler. Taylor strives to keep things simple and use appropriate technology that brings value to our customers.

Hydraulics & Brakes

The TICS system is a vehicle electronic control system comprised of multiple components including an operator display module, which provides integrated control of the electronic and hydraulic systems on the truck. J1939 CANbus technology allows all machine data to be accessed through the 7-in. touch screen color display (located in the cab) and allows controllers and sensors to communicate with minimal wiring between the components. This display indicates engine, transmission, hydraulic and emissions info as well as active warnings, fuel consumption, maintenance data and man/machine interface data. The display also allows service personnel to access data needed during troubleshooting (such as sensor status and controller outputs). Machine functions can be tuned through this display and are password protected to prevent operator access.



- TICS gives customers the ability to customize operation parameters of their Taylor lift truck, perform diagnostics, and monitor key functions including fuel consumption.
- The TICS interface is simple, easy to understand and user friendly.
- The TICS diagnostic ability is key to quick repair and less downtime.
- Troubleshooting and diagnosing most problems can be done by the customer's own mechanic, without the need for a service tech with a detached computer.
- There are multiple options available including, but not limited to, scale systems, modem based fleet tracking and the Vision Plus™ pedestrian detection system.

DISCLAIMER:

This vehicle is certified to meet the applicable design and performance criteria required for Powered Industrial Trucks in OSHA Safety and Health Standards, Title 29 CFR, Part 1910.178, and the applicable design and performance requirements in ANSI B56.1 that were in effect at the time of manufacture. These standards also apply to the user and should be adhered to while operating this vehicle.

All specifications are subject to change without notice. Some operating data may be affected by the condition of the vehicle, how it is operated and the nature and condition of the operating area. If these specifications are critical, contact the factory.



www.taylorsuddenservice.com

24/7 Worldwide Support

No-one can match our record for service and reliability.
Unbeatable customer service, backed by over 90 years of customer satisfaction.



Taylor Machine Works, Inc.
3690 North Church Avenue
Louisville, MS 39339
www.taylorforklifts.com