

H170-190FT Series



H170-190FT SERIES

The H170-190FT Fortis® is more than a new lift truck series. It represents a transformation in how lift trucks are designed, built and acquired. Drawing on Hyster Company's legacy of strength, durability and toughness, the H170-190FT series means low cost of operations, dependability and owning a unit that's still going strong long after the day's work is done.

The H170-190FT is a versatile lift truck designed for indoor and outdoor use, and this truck series is ideally suited for a wide variety of applications such as Lumber, Steel, Concrete, and Car Salvage. These trucks are loaded with power utilizing the Kubota 3.8L EPA Certified Tier 4 interim Turbodiesel engine. The H170-190FT was configured with a new drive axle and cooling system that will take Fortis performance to a whole new level. The new VISTA® mast was designed to accommodate heavy loads and multiple attachment configurations.

Key standard features of the new H170-190FT include:

- Kubota 3.8L EPA Certified Tier 4 interim 110 HP Turbodiesel engine
- DuraMatch™ transmission
 - 3-forward speeds and 2-reverse
 - Controlled power reversal
 - Auto deceleration system
- Oil-cooled wet disc brakes
- Full suspension vinyl seat
- TouchPoint™ E-hydraulic controls
- · System Monitoring





RAISING THE STANDARD FOR LIFT TRUCKS



A Overhead Guard (OHG)

The unique grid-style pattern improves visibility while protecting operators and strengthening the truck's structure. The front, curved OHG leg design affords greater shoulder clearance for easier operator entry and exit. The optional Cab includes an integral heater, front & rear wiper/washers, removable doors with sliding windows, interior light, air circulating fan, insulating headliner and a full light package.

B Hydraulic Controls

The Hyster® Fortis® line of lift trucks utilizes TouchPoint™ mini-levers to provide unsurpassed, low effort, tactile control of all hydraulic functions.

C Exclusive VISTA® Mast

High strength hot-rolled steel mast channels and flush-faced design improve capacity retention at high lifts. Compact cast steel cross members optimize visibility and rigidity. Six 3-inch full-face load rollers roll on the web and the flange simultaneously.

D Tilt Steer Column

The infinitely adjustable tilt steer column accommodates operators easily. Assisted by a gas-spring and an easy-to-reach lever, obtaining your preferred position is simple. The standard 12-inch steering wheel with integrated spinner knob reduces fatigue while providing more knee room. And it goes lock-to-lock in just 4 turns for superior efficiency, maneuverability and control.

(E) Pacesetter VSM™

The computer "brain" of the Fortis® line of lift trucks manages all vehicle systems to optimize performance and significantly increase overall reliability and enhance diagnostic capabilities for maximum uptime.

F Hassle-Free Hydraulics

Use of leak-free O-ring face seals helps maximize uptime. In-tank filter increases hydraulic fluid filtration by 60% for particles down to 10 microns, significantly extending component life and creating a cleaner overall operation.



Trucks shown with optional equipment.

H170-190FT



(G) Carriage

The Fortis H170-190 features a robust 80" hook carriage with excellent visibility and the strength to handle long forks or tough attachment applications.

(H) Heavy-duty Drive Axle

The full floating design of the planetary drive axle lets the axle housing, not the shafts, carry the weight of the load, enhancing dependability and reliability for a longer service life.

Oil-Cooled Wet Disc Brakes

Provide excellent stopping power and extremely long service life. Brakes are completely sealed from water and dirt making them ready for your harshest environments.

J Hydrostatic Steer Axle

The Hyster designed cast ductile iron steer axle with transverse, double-acting hydraulic cylinder, tapered roller spindle- support bearings and non-adjustable tie rods provide maximum durability and superior steering control for easy maneuvering and low maintenance.

(K) Counterweight

The superior design permits a significant increase in airflow to assist the Fortis line of lift trucks to run cooler, even in extreme temperatures and environments.

(L) Gull-wing Hood

Gull-wing hood doors feature gas springs to assist opening, and holds covers in place without prop rods or having to remove panels.

M Brake/Backup Lights

For superior functionality, the optional Hyster LED brake/backup lights resist vibration and offer extremely long life.

N Fatigue-Reducing Operator Compartment

Ergonomically designed compartment plays a big role to enhance overall productivity. Entry and exit are made easy by the optimized step height with non-slip step tread, soft touch contoured hand grip and rounded hood. Repositioned foot pedals provide improved floor space, while better engine cooling keeps operators more comfortable. Infinitely adjustable tilt steer column accommodates any size operator. A formed fiberglass liner provides increased noise suppression for a more comfortable ride.

Decrease Downtime By Up To 30%

Approximately 70% of industrial lift truck downtime results from problems with the powertrain, brakes, electrical system, cooling system or hydraulic system. With the H170-190FT, many of these mechanical issues become a thing of the past as design advances have reduced downtime by up to 30%.

Toughest Powertrain

- Pacesetter VSM[™] industrial onboard computer monitors and protects the engine powertrain to maximize the H170-190FT series uptime.
- Transmission gears and shafts are up to 15% stronger to handle even the most demanding duty cycle.
- Electronically controlled powershift transmissions have state-of-the-art clutch packs that are stronger and larger and provide up to 3 times the life.
- Oil-Cooled Wet Disc Brakes provide excellent stopping power and extremely long service life. Brakes are completely sealed from water and dirt making them ready for your harshest environments.

Industrial Strength Electronics

- CANbus communications network reduces wiring complexity, providing superior dependability.
- Non-mechanical, Hall-Effect sensors and switches are designed to outlast the life of the truck.
- Proven tough, Pacesetter VSM industrial onboard computer manages truck operation to maintain world-class dependability to maximize uptime.
- IP66 sealed electrical connectors keep out water and debris, so you can power wash our trucks.
- Smart, one-way routing path for wire harnesses ensures consistent high-quality assembly while increasing durability and simplifying maintenance when needed.



Exceptional Cooling

- Standard Combi-cooler radiator provides 3-row aluminum core for additional transmission oil cooling capacity for the most demanding and intensive applications.
- Soft rubber isolator mounted radiators increase reliability and durability to significantly extend service life.
- A superior counterweight tunnel design coupled with a "pusher" type fan and enhanced shroud design improves airflow and significantly reduces the recirculation of hot air to maximize cooling capabilities.

Hassle-Free Hydraulics

- Leak-free O-ring face seal fittings reduce leaks for enhanced reliability.
- A 10-micron high-performance in-tank filtration system captures 99.5% of hydraulic system debris, significantly extending component life
- Smart placement of the control valve and hydraulic lines away from heat sources reduces operating temperature, extending the life of seals and hoses for unbeatable reliability.

Lowering operating costs in all types of applications is what the Hyster® H170-190FT Fortis® series does best. With up to a 30% decrease in downtime, the Hyster H170-190FT Fortis series is an exceptionally smart choice. The H170-190FT series is configured to provide improved efficiency, while enhancing reliability and superior serviceability to reduce your operating costs.

World-Class Efficiency

- Auto Deceleration System extends brake life by up to 60% by automatically slowing the truck when the accelerator pedal is released.
- · Controlled power reversal feature virtually eliminates tire spin, increasing tire life by up to 50%. This feature is programmable to match the needs from delicate to more aggressive settings for maximum productivity.
- Electronic hydraulic control valve precisely manages hydraulic pressure and flow to supply exactly the right amount of power for each function, reducing fuel consumption.
- Kubota 3.8L EPA Certified Tier 4 interim Turbodiesel engine features 500 hour service intervals.
- Hydraulic oil change interval extended from 2,000 to 4,000 hours.
- · Improved engine options provide excellent performance with advanced combustion technology that enhances fuel economy.

Advanced Dependability

- Toughest Powertrain: Electronic controlled transmissions reduce shock loading; clutch packs with 3 times the life; 15% stronger gears and shafts; and Hyster oil-cooled wet disc brakes all work to provide unmatched reliability.
- Industrial Strength Electronics: CANbus communications, nonmechanical sensors and switches and IP66 rated sealed connections mean electrical problems are a thing of the past.
- Industrial Cooling: The H170-190FT series' superior airflow and heavy-duty cooling systems keep heat in check, while providing world-class dependability in even the harshest of environments.
- Hassle-free Hydraulics: Leak-free O-ring face seal fittings at all high pressure connection points, superior filtration (10 micron) system and smart placement of valve and lines take the worry out of hydraulics.



Superior Serviceability

- Pacesetter VSM[™] continuously monitors fluid levels and powertrain, reducing daily service checks and preventing major repairs.
- Unmatched service access: Gull-wing hood door design offers superior service access to the engine compartment.
- Daily checks are easily accessed and performed.
- State-of-the-art onboard diagnostics reduce repair time and minimize expensive parts swapping.
- Standard oil-cooled wet disc brakes virtually eliminate brake maintenance.

DOWNTIME IS COSTLY				
Estimated Costs per Downtime Event:				
Repair Costs (parts & labor)	\$ 500			
Idle Operator Costs	+\$60			
Truck Rental Costs	+ \$ 120			
Administrative Costs	+\$50			
TOTAL COST (per Downtime Event)	\$ 730			
Additional Costs:	+\$			
Lost Productivity and Sales	\$???			
Assumptions: 1. Operator Cost = \$15.00/hr.				

- 2. Average Length of Downtime Event = 4 hrs.

Superior Operator Comfort

- Low noise level at the operator's ear lessens driver fatigue, improving driver satisfaction for an overall increase in productivity.
- Isolated drivetrain minimizes the effect of powertrain vibration and road-born shocks to increase operator comfort all shift long.
- Rear drive handle mounted on overhead guard leg (optional)
 provides an excellent hand hold for reverse driving while giving ready
 access to the auxiliary horn button for use when approaching crossaisles and pedestrian traffic areas.
- An infinitely adjustable steer column and optional full suspension swivel seat assures the right fit for any operator.
- Easy-to-use 3-point entry design of operator compartment uses a large molded hand grip and open non-slip steps with a low step height to minimize muscle/joint strain during entry/exit.
- Adjustable armrest that accompanies the TouchPoint™ E-hydraulic control moves with the seat and telescopes forward/vertical in one simple movement to provide greater flexibility in achieving a more custom position.
- Choice of 4 different seats enables a more customizable level of operator comfort by its enhanced design and adjustable features.
- Increased shoulder clearance a result of the redesigned overhead guard and more floor space gives operators greater foot room.





Precise, Effortless Operation

- Improved brake pedal layout and the reduced braking requirements of the Auto Deceleration System significantly reduce operator fatigue.
- 12-inch steering wheel with spinner knob improves steering response, increasing control and efficiency while minimizing shoulder strain with only 4 turns lock-to-lock.

Performance At-A-Glance

- Advanced dash display uses a non-reflective, backlit LCD screen and 21 indicator lights provide performance at-a-glance in all lighting conditions.
- Easy-to-use onboard diagnostics through the advanced dash display provide fast and accurate troubleshooting for first-time fixes.
- Optional premium monitoring package reports air and hydraulic oil filter restrictions and low engine coolant levels.

Increase Throughput and Sales Volume While Reducing Operating Costs

Productivity means moving more of your loads in less time with less cost. The Hyster® Fortis® series has been proven to lead the industry in productivity through performance, ergonomics (operator comfort and control), service, uptime and dependability.

Performance For Your Application

- H170-190FT series with high output engine, performance transmission, hydraulic controls and cooling system allows you to optimize productivity in your application.
- Kubota 3.8L EPA Certified Tier 4 interim TurboDiesel engine features electronically controlled high-pressure common-rail fuel system controls combustion rate to improve fuel efficiency and reduce noise.
- Pacesetter VSM[™] industrial onboard computer enables you to adjust and optimize the performance of your H170-190FT trucks.
- Patented DuraMatch™ transmission provides breakthrough features that include the Auto Deceleration System, controlled rollback on ramps, controlled power reversals to move loads more efficiently with less operator fatigue and product damage.
- With the exceptional cooling and its ability for extended drawbar pull, the H170-190FT series will continue to perform when other lift trucks may fail.

ESTIMATED ANNUAL LIFT TRUCK OPERATOR COSTS			
Costs Related To Fatigue	Average Annual Cost Per Lift Truck Operator		
Absenteeism¹ Turnover² Lift Truck and Property Damage³ Workers Compensation⁴ Productivity/Lost Sales	\$6,862		
Potential Savings Level	Average Annual SAVINGS Per Lift Truck Operator		
Savings at 10% - 20%	\$686 - \$1,372		

- 1 Absentee cost based on national average as published in Facility Management safety study, 2003.
- 2 Average turnover cost according to U.S. Dept. of Labor 2002, 30% of income at \$15/hour for 2,000 hours per year.
- 3 Lift Truck and Property Damage based on data from NMHG Fleet Services.
- 4 Workers Compensation costs are average costs for high and low fatigue environments according to 2004 Shiftwork Practices Survey.



Superior Operator Control

 Superior ergonomic features like more foot and leg room, standard TouchPoint mini-lever hydraulic controls, infinitely adjustable steer column, integrated dashboard display, 12-inch steering wheel with spinner knob, Auto Deceleration System, 4 choices of seats and the rear drive handle enable your operator to maximize productivity.

Superior Serviceability

 Easy access, daily service checks easily located and accessed, the integral dashboard display's onboard diagnostic capabilities and reduced service requirements significantly minimize service times to maximize uptime.



The Fortis® line of lift trucks represents a breakthrough in how Hyster® lift trucks are being designed, built and acquired. But even the toughest, most durable machine with moving parts will need service at some point. As your strong partners, we are committed to delivering extraordinary aftermarket support to the H170-190FT series that includes a parts availability program which is the fastest and most comprehensive in the industry today – to keep your materials moving at the speed of business today and tomorrow.

Objective:

• To provide world-class product support unparalleled in the industry.

Performance Plus™ Parts Guarantee:

- Off-the-shelf availability guarantee on the parts commonly required in the first two years of use.
- Simply stated, if "Performance Parts" are not available from your local Authorized Hyster Dealer within 1 business day from the date of order – they are free.*
- · Please contact your local Hyster Dealer for the details.

Industry's Best Warranty:

- One year/2,000 hours on full truck.
- Two years/4,000 hours on powertrain.



Best In Class Serviceability:

- Designed to be one of the fastest and easiest lift trucks to service.
- State-of-the-art on-board and PC-based diagnostics available.
- Significantly reduced regular service requirements.

Most Experienced Dealer Network:

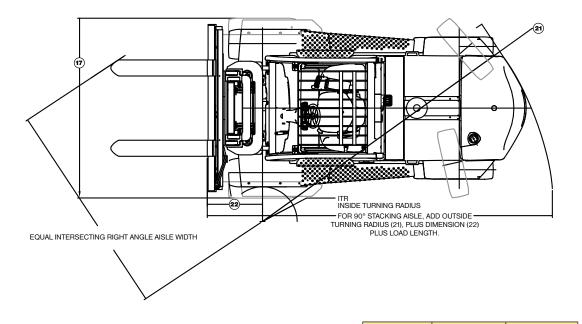
- Over 230 dealer locations in North America.
- Dealers average over 30 years of materials handling experience.
- Over 2,500 trained service technicians.
- Rental fleet of over 14,000 lift trucks.

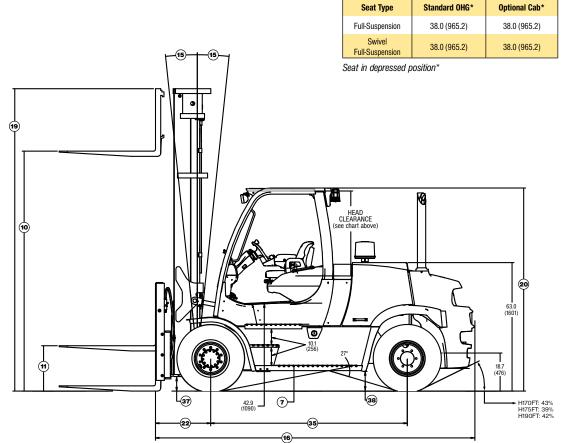
*Contiguous 48 states of the U.S.A. only











	1	Manufacturer		Hyster Company	Hyster Company	Hyster Company
	2	Model designation		H170FT	H175FT	H190FT
	2a	Power Train - Engine		Kubota 3.8L EPA Certified Tier 4 (i)	Kubota 3.8L EPA Certified Tier 4 (i)	Kubota 3.8L EPA Certified Tier 4 (i)
		Transmission Type		Electronic Powershift	Electronic Powershift	DuraMatch™
甘		Load capacity	lbs/kg	17,000 (8,000)	17,500 (8,000)	19,000 (9,000)
监	_	Load center	in (mm)	24 (600)	36 (900)	24 (600)
딇		Drive Power Type: Gas, Diesel, LPG		Diesel	Diesel	Diesel
		Operation: Seated rider	in (m.m.)	Seated Rider	Seated Rider	Seated Rider
		Step Height (from ground to running board) Step Height (btwn intermediate steps btwn running board and floor)	in (mm) in (mm)	12.6 (321) 10.1 (256)	12.6 (321) 10.1 (256)	12.6 (321) 10.1 (256)
		Tires: P=pneumatic, C=cushion, SC=supercushion	111 (111111)	Pneumatic	Pneumatic	Pneumatic
		Number of wheels, front/rear (X = driven)		4X/2	4X/2	4X/2
		Lift height, w/LBR (TOF) (Rounded Down)	in (mm)	219 (5565)	219 (5565)	219 (5565)
	11 Standard Free lift height (Rounded Down)		in (mm)	4 (105)	4 (105)	4 (105)
	12	Fork carriage width Standard Carriage	in (mm)	80¹ (2030¹)	80¹ (2030¹)	80¹ (2030¹)
	12b	Fork Spacing - Std Carriage - Minimum Inside to inside edge	in (mm)	2.6 (65)	2.6 (65)	2.6 (65)
	13	Fork dimensions	in (mm)	7.9 X 2.5 X 47.2 (200 X 65 X 1200)	7.9 X 2.5 X 47.2 (200 X 65 X 1200)	7.9 X 2.5 X 47.2 (200 X 65 X 1200)
		Fork carriage to DIN 15173. Class, A/B		IV A	IV A	IV A
		Fork Spacing - Std Carriage - Maximum outside to outside edge	in (mm)	78.3 (1990)	78.3 (1990)	78.3 (1990)
	_	Mast tilt, forward / back	degrees	5F/9B ²	5F/9B ²	5F/9B ²
	_	Overall length (length to face of forks)	in (mm)	153 (3883) 88 (2239)	158 (4024) 88 (2239)	155 (3944) 88 (2239)
SNO	_	Overall width Height of Standard mast, lowered (Rounded Up)	in (mm) in (mm)	88 (2239) 156 (3962)	88 (2239) 156 (3962)	88 (2239) 156 (3962)
<u>~</u>	_	Height of mast, extended w/o load backrest (Rounded Up)	in (mm)	265 (6725)	265 (6725)	265 (6725)
鱼	_	Height of mast, extended w/ load backrest (Rounded Up)	in (mm)	270 (6850)	270 (6850)	270 (6850)
言		Height to top of Std. overhead guard (high) (Rounded Up)	in (mm)	100 (2531)	100 (2531)	100 (2531)
		Height to top of Cab (Rounded Up)	in (mm)	101 (2549)	101 (2549)	101 (2549)
	20b	Towing coupling height	in (mm)	18.7 (476)	18.7 (476)	18.7 (476)
	21	Outer turning radius	in (mm)	145 (3673)	149 (3794)	147 (3723)
	21a	Inner turning radius	in (mm)	14.3 (362)	14.3 (362)	14.3 (362)
		Load distance (load face-ctr of wheel to face of forks-front overhang) 2 stg	in (mm)	23.6 (599.5)	23.6 (599.5)	23.6 (599.5)
		Load distance (load face-ctr of wheel to face of forks-front overhang) 3 stg	in (mm)	25.6 (650.5)	25.6 (650.5)	25.6 (650.5)
		Right angle stack (add length of load)	in (mm)	168 (4273)	173 (4394)	170 (4323)
		Right angle stack with pallets (with pallet W=42in, L=48in)	in (mm)	216 (5492)	221 (5613)	218 (5542)
		90° intersecting aisle (with pallet W=42in, L=48in) Travel speed (RL/NL)	in (mm) mph (km/hr)	120 (3056) 14.4/14.8 (23.2/23.8)	123 (3126) 14.4/14.8 (23.2/23.8)	121 (3085) 14.4/14.8 (23.2/23.8)
		Lifting speed (2LFL) (RL/NL)	ft/min (m/sec)	85/89 (0.43/0.45)	83/89 (0.42/0.45)	83/89 (0.42/0.45)
		Lifting speed (3FFL) (RL/NL)	ft/min (m/sec)	75/89 (0.38/0.45)	75/89 (0.38/0.45)	73/89 (0.37/0.45)
뜅		Lowering speed (2LFL) (RL/NL)	ft/min (m/sec)	81/73 (0.41/0.37)	81/73 (0.41/0.37)	81/73 (0.41/0.37)
[€		Lowering speed (3FFL) (RL/NL)	ft/min (m/sec)	77/65 (0.39/0.33)	77/65 (0.39/0.33)	77/65 (0.39/0.33)
룵	28	Maximum drawbar pull	lbs (kg)	12000/7239 (5443/3284)	12000/7239 (5443/3284)	12000/7239 (5443/3284)
띭	28a	Drawbar pull @ 1.0 mph or 1.6 km/h	lbs (kg)	12000/7239 (5443/3284)	12000/7239 (5443/3284)	12000/7239 (5443/3284)
뿐		Drawbar pull @ 3.0 mph or 4.8 km/h	lbs (kg)	8319/7239 (3773/3284)	8272/7239 (3752/3284)	8252/7239 (3743/3284)
		Gradeability max	%	30/30	28/27	27/28
		Gradeability @ 1.0 mph or 1.6 km/h	%	30/30	28/27	27/28
	_	Gradeability @ 3.0 mph or 4.8 km/h Unladen weight (w/ std equipment: mast, carriage, forks, etc.)	% lb (lcg)	20/30	19/27	18/28
Ŀ	_	Axle loading laden w/ std option configuration (Front/Rear)	lb (kg) lb (kg)	23336 (10585) 36921/4052 (16747/1838)	25940 (11766) 38815/4762 (17606/2160)	24357 (11048) 39890/4306 (18094/1953)
3		Axle loading unladen w/ std option configuration (Front/Rear)	lb (kg)	10549/12787 (4785/5800)	10282/15657 (4664/7102)	10223/14134 (4637/6411)
60		Tire size-front	ib (ivg)	8.25 X 15 -14PR	8.25 X 15 -14PR	8.25 X 15 -14PR
巤	_	Tire size-rear		8.25 X 15 -14PR	8.25 X 15 -14PR	8.25 X 15 -14PR
E		Wheelbase	in (mm)	96.5 (2450)	96.5 (2450)	96.5 (2450)
S	_	Ground clearance under mast, laden	in (mm)	6.8 (173)	6.8 (173)	6.8 (173)
屈		Ground clearance at center of wheelbase	in (mm)	10.0 (253)	10.0 (253)	10.0 (253)
喜		Brakes Service – Method of Control/Operation		Hydraulic/Foot	Hydraulic/Foot	Hydraulic/Foot
		Brakes Park – Method of Control/Operation		Mechanical/Hand	Mechanical/Hand	Mechanical/Hand
		Battery Type		Maintenance Free	Maintenance Free	Maintenance Free
		Battery Volts/Cold Cranking Amps		12V / 1010 X 2	12V / 1010 X 2	12V / 1010 X 2
ij		Engine manufacturer/type Engine output, in accordance with ISO1585	bn (lass)	Kubota 3.8L Diesel 110 (82) @ 2400 rpm	Kubota 3.8L Diesel 110 (82) @ 2400 rpm	Kubota 3.8L Diesel 110 (82) @ 2400 rpm
5	_	Torque	hp (kw) ft/lb (N-m)	373 (275) @ 1600 rpm	373 (275) @ 1600 rpm	373 (275) @ 1600 rpm
ভ		Number of cylinders/displacement	No./cc (ci)	I-4/3769 (230)	I-4/3769 (230)	I-4/3769 (230)
9		Gear change type	, 00 (01)	Elec. Controlled Powershift	Elec. Controlled Powershift	Elec. Controlled Powershift
~≥		Transmission: Number of speeds forward/reverse		3F / 2R	3F / 2R	3F / 2R
Ş		Fuel Tank - Capacity (Gasoline- or Diesel-Powered Units Only)	gal (liters)	19.8 (74.8)	19.8 (74.8)	19.8 (74.8)
鞷	49	Working pressure for attachments	psi (bar)	2250 (155)	2250 (155)	2250 (155)
		Oil flow for attachments	gal/min (I/min)	24 (93)	24 (93)	24 (93)
		Towing coupling type		Pin	Pin	Pin
	52	Hydraulic Tank – capacity (drain & refill)	gal (liters)	18.7 (70.9)	18.7 (70.9)	18.7 (70.9)

CERTIFICATION: These Hyster lift trucks meet design specifications of Part III ANSI B56.1-1969, as required by OSHA Section 1910.178(a)(2) and also comply with Part III ANSI B56.1-revision in effect at time of manufacture. Certification of compliance with the applicable ANSI standards appears on the lift truck

[†] NOTE: Performance specifications / ratings are for truck equipped as described under Standard Equipment in this Technical Guide. Performance specifications are affected by the condition of the vehicle and how it is equipped, as well as by the nature and condition of the operating area. Specifications are subject to change and the proposed application should be discussed with your authorized Hyster Company Dealer.

^{††} Limited by traction. For further information on this dimension, please contact your local Hyster dealer.

Carriage is 80" wide, load backrest is 82" wide.

² Backtilt limited to 6 degrees with some mast options.

Maximum Fork Height (TOF) †	Overall Lowered Ht.	Overall Extended Height		Free-Lift (TOF)		Approximate Total Wt. of Standard Equipped Truck		
		w/ Load Backrest	w/o Load Backrest	w/ Load Backrest	w/o Load Backrest	H170FT with NL	H175FTS with NL	H190FTS with NL
in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	in. (mm)	lbs. (kg)	lbs. (kg)	lbs. (kg)
2-STAGE LIMITED FREE-LIFT (LFL) VISTA® MAST								
140 (3565)	117 (2962)	191 (4850)	187 (4725)	4 (105)	4 (105)	24361 (11050)	26592 (12062)	25395 (11519)
179 (4565)	137 (3462)	231 (5850)	226 (5725)	4 (105)	4 (105)	24591 (11155)	26822 (12167)	25625 (11624)
219 (5565)	156 (3962)	270 (6850)	265 (6725)	4 (105)	4 (105)	24822 (11259)	27053 (12271)	25856 (11728)
3-STAGE FULL FREE-LIFT (FFL) VISTA® MAST								
181 (4615)	107 (2702)	240 (6077)	235 (5952)	56 (1440)	61 (1565)	25216 (11438)	27447 (12450)	26250 (11907)
234 (5965)	125 (3152)	293 (7427)	288 (7302)	74 (1890)	79 (2015)	25528 (11579)	27759 (12591)	26561 (12048)



STANDARD EQUIPMENT

Complete truck equipped with:

- Kubota 3.8L EPA Certified Tier 4 interim engine
- DuraMatch™ transmission
 - Electronic inchina
 - Electronic shift control
 - Auto deceleration system
 - Controlled power reversal
 - Controlled roll back on ramps
 - 3 speeds forward, 2 speeds reverse
- · Oil-cooled wet disc brakes
- MONOTROL® pedal
- 2-Stage limited free-lift (LFL) VISTA® mast with maximum fork height of 219" (5,565 mm)
- 80" (2,030 mm) wide hook-type carriage with 48" (1,219) tall load backrest extension
- 47.2" (1,200 mm) long hook type standard taper pallet forks
- 5 degrees forward and 9 degrees backward mast tilt
- 3-function hydraulic control valve
- · Integrated dashboard display includes:
 - LCD Display
 - Fuel level
 - Hour meter
 - Coolant Temperature
 - Clock
 - Messages
 - Service Indicator Lights:
 - Alternator
 - Transmission oil temperature
 - Engine oil pressure
 - Brake fluid level
 - Fasten seat belt
 - Low fuel level
 - Engine malfunction
 - System malfunction
 - Park brake
 - Coolant temperature
 - Forward, reverse and neutral direction indicators

- · Hydrostatic power steering
- Full-suspension vinyl seat
- Flectronic horn
- · Adjustable steer column
- · Rubber floor mat
- · Air intake with precleaner
- Integral tie downs
- · Operator restraint system
- · Combi-cooler radiator
- Single pedal inch brake
- TouchPoint[™] hydraulic mini-levers with fully adjustable armrest
- Side view mirrors
- · Operator presence system
- 100" (2,531 mm) Tall overhead guard
- 12 months / 2,000 hours manufacturer's warranty
- 24 months / 4,000 hours manufacturer's powertrain warranty
- Operator's manual
- · UL Classification D

OPTIONS

- · Powertrain protection system
- · Premium monitoring
- Accumulator
- Keyless start (with auxiliary key switch)
- · Return to set tilt
- Rear drive handle with horn button
- Full suspension seat cloth
- Swivel full-suspension seat vinyl or cloth
- Impact monitor with immediate or delayed shutdown
- · Load weight display
- · Operator pre-shift checklist
- · Dual-inch brake pedals
- Operator password protection
- Audible Reverse activated 82-102 dB(A) selfadjusting alarm
- Visible amber LED strobe light continuously activated, overhead guard mounted
- · Various light packages:
 - Two front and one rear halogen work lights
 - Two front and one rear LED work lights
 - Two front, one rear halogen work light and two LED brake/tail/back-up lights
- Cab includes the following:
 - Front and rear
 - Wiper
 - Full light package
 - Integral heater
 - Defogger
 - Removable doors
 - Operator dome light
 - Fa
- Parts publications printed or CD, serial number specific
- · UL Classification D, DS
- Operator cabin

STANDARD FEATURES AND OPTIONS

CAPACITY:

Model H170FT: 17,000 lbs. at 24" (8,000 kg at 600 mm) load center Model H175FT: 17,500 lbs. at 36" (8,000 kg at 900 mm) load center Model H170FT: 19,000 lbs. at 24" (9,000 kg at 600 mm) load center

RATED CAPACITIES ARE FOR TRUCKS EQUIPPED WITH:

- · 3-Stage full free-lift (FFL) VISTA® mast to 171.5" (4,356 mm) maximum fork height
- 80" (2,030 mm) hook-type carriage with 47.2" (1,200 mm) long forks
- 48" Tall load backrest extension (LBE)

MASTS

Masts are available in 2-stage limited free lift (LFL) and 2- or 3-stage full free-lift (FFL) VISTA® masts.

Masts show nested-channel design and full-radius, angled load rollers provides increased capacity at height while affording shorter overall length.

CARRIAGE

Carriages are hook-type, ITA Class IV mounting. Overall width without load backrest extension (LBE) is 78" (1,981 mm); with LBE is 78." Minimum inside-to-inside edge fork spacing is 6.3" (160 mm). Maximum outside-to-outside edge fork spacing is 73.9" (1,876 mm).

FORKS

H170-190FT lift trucks feature: 2.5" x 6" x 48" to 96" $(60 \times 150 \times 2438 \text{ mm})$ long pallet forks.

FNGINE

Kubota 3.8L EPA Certified Tier 4 interim Turbodiesel engine features:

- Cast iron block and heads
- · Spin-on full flow oil filter
- · Heavy-duty air cleaner with pre-cleaner
- · Forged steel crankshaft
- Turbocharger with wastegate
- · Oil-cooled pistons
- Electronically controlled high-pressure common-rail fuel system controls combustion rate to improve fuel efficiency and reduce noise
- · Fuel filter with water separator
- Equipped with an Exhaust Gas Recirculation (EGR) system to reduce emissions and a Diesel Particulate Filter (DPF) to capture and oxidize particulate matter (soot)
- 3.3L Turbocharged & Intercooled engine produces 110HP
- Engine is compatible with Biodiesel to a rating of B5 (5% bio, 95% diesel)

TRANSMISSION

 DuraMatch™: Electronic shift control, neutral start switch, 3 speeds forward/2 speeds reverse; Auto Deceleration System, electronic inching, controlled power reversal, controlled roll back on ramps

COOLING SYSTEM

- All models feature square-wave anti-clog Combi-cooler
- All radiators utilize cross-flow aluminum cores, pusher type fans and permanently lubricated water pumps
- "Knife-edge" type fan shrouds that direct air flow through the counterweight air passages
- 15 psi operating system pressure
- Combi-cooler contains an externally mounted transmission oil cooler to aid in heat dissipation

ELECTRICAL SYSTEM

- CANbus electrical system simplifies truck wiring and enhances truck dependability
- IP66 sealed automotive style electrical connectors
- Standardized wire routing, all wires are color coded, and marked with numbers for easy identification
- Vehicle System Manager (VSM) directly or indirectly controls all electrical functions except those controlled by the Engine Control Unit (ECU)
- 12-volt maintenance free battery provides 475 (900 Diesel) cold cranking amps (cca) for easy starts
- · Onboard diagnostics monitoring and feedback

HYDRAULIC SYSTEM

Manual Hydraulic Control Valve & Electro-Hydraulic Controls Available

- Hydraulic lift system relief operates at 3400 psi (23.4 Mpa)
- Tilt and auxiliary systems have 2,200 psi (15.5 Mpa) relief pressure in all valve variations
- Hydraulic system is protected by a replaceable 10-micron element in-tank filter assembly
- Hydraulic breather filter includes an anti-splash baffle and is rated at three micron

- O-Ring face seal fittings with captive O-Ring grooves are used on all high pressure connections
- Emergency lowering valve allows load to be lowered in the event of battery power loss
- 100 Mesh suction line strainer

STEER AXLE / STEER SYSTEM

- Equal-area, double-ended, hydrostatic steering cylinder is mounted in cast ductile iron axle frame
- Elastomeric axle mounts absorb shock and allow lubrication free articulation
- Axle assembly utilizes synthetic boots and seals to retain lubricants and shield components against destructive grit and reduce lube points
- · Wheel hubs rotate on large, tapered roller bearings
- Top spindle bearings lubricated through easy access lube fittings
- Hydrostatic steer system provides smooth, precise steering with only 4 turns lock-to-lock

BRAKES

- Oil-cooled wet disc brakes provide extremely long service life and are protected from dirt and moisture
- Hydraulically boosted single circuit master cylinder with sealed fluid reservoir and magnetic fluid level concer.
- Ratchet-type, hand-activated parking brake lever allows controlled application

OPERATOR COMPARTMENT

- TouchPoint™ electro-hydraulic seat side mini-levers
- 12-Inch textured steering wheel with spinner knob
- Automotive style foot controls with single braking/ inching pedal (dual pedals are optional)
- Integrated dashboard display is backlit, allowing easy visibility under all lighting conditions
- Grid-style overhead guard offers superb visibility at extended heights
- · Infinitely adjustable tilt steer column
- Optimal entry step height on both sides of the truck
- MONOTROL® pedal controls engine speed and truck direction, freeing operator's hands to operate steering and hydraulic levers

Special attachments, equipment or accessories not listed above may be available through Applications Engineering for specific application requirements.

It's not just about the lift trucks.

Any company worth its weight knows success has just as much to do with the support before and after the sale as the sale itself. We pride ourselves on being more than just a lift truck manufacturer. Through our Dealer Network, we're also fleet managers, parts suppliers, capital procurement specialists and trainers. You'll find that when it comes to service, we do it all.

Hyster Fleet Services

As much as we'd like for your entire fleet to be Hyster, we know that's not always the case. But just because you also operate other brands doesn't mean we can't manage your lift truck maintenance and replacement plan. We can analyze your current fleet or provide summary of your fleet history and a cost-effective proposal for replacement and scheduled maintenance of all your vehicles. Once this initial review is complete, we'll continue to monitor your fleet to ensure it's performing optimally.

UNISOURCE™ Parts Program

In addition to providing fleet management for a variety of brands, we can also serve as your source of parts for all your lift trucks. With the Hyster UNISOURCE parts and service program, we offer approximately 2 million part number crosses for most brands of materials handling and other in-plant mobile equipment. UNISOURCE also has remanufactured parts that provide the same quality and guarantee but at a lower price. And we can deliver parts to you in less than 24 hours, any day of the week. How's that for convenience?

Rental Products

At Hyster Company, we're always looking for ways to help you keep your productivity up. Through the Hyster Dealer Network, you can access rental equipment for the times when leasing or buying isn't a practical option. Your local Hyster Dealer has access to over 14,000 units that are available for shortor long-term rental. Whether you need one truck to substitute for a vehicle that's being serviced or several lift trucks to accommodate seasonal changes in your business, we'll help you maintain output in a cost-effective manner.

Hyster Capital

We know that financing new additions to your fleet can sometimes be challenging. That's why your Hyster Dealer has a long list of ways for you to fund your purchase. We are skilled in arranging solutions for special financing requirements, taking the difficulties out of buying the equipment you need. Whether you purchase or lease a new or used lift truck, Hyster Capital offers better service and competitive rates, ensuring you receive the value you deserve.

Special Products

Engineering Department (SPED)

In a perfect world, every application could be handled with a standard lift truck. However, in the real world, different materials require different handling. That's why Hyster Company's Special Products Engineering Department works with you to customize* your lift trucks. From strobe lights to specially made forks, SPED can provide you with the tools you require to get the job done right.

* May be subject to an additional charge. Contact your local authorized Hyster Dealer for more information

Automated Warehouse Solutions

As society's technological capabilities advance, we strive to find practical applications. One of our most recent innovations in that pursuit is our development of automated warehouse solutions. We can help you determine if your operation would benefit from this type of system, which improves inventory accuracy, warehouse productivity and safety records, as it reduces maintenance and overtime.

Operator and Service Training

Hyster Company recognizes that proper training is a key element of a profitable company. That's why your local authorized Hyster Dealer offers a training program for your lift truck operators as well as those who maintain your vehicles. Proper education in running and servicing lift trucks cuts down on the number of repairs and risk of injuries due to accidents while increasing productivity. All of our trainers are professionals with experience in materials handling.





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