

Optional Items

- FORK (L x W x T)(mm)

110D-7A

75 x 200 x 1,200 / 75 x 200 x 1,500 / 75 x 200 x 1,650 /
75 x 200 x 1,800 / 75 x 200 x 2,100 / 85 x 200 x 2,440 /
85 x 200 x 2,600

130D-7A

85 x 200 x 1,200 / 85 x 200 x 1,500 / 85 x 200 x 1,650 /
85 x 200 x 1,800 / 85 x 200 x 2,100 / 90 x 200 x 2,440 /
90 x 200 x 2,600

160D-7A

90 x 200 x 1,200 / 90 x 200 x 1,500 / 90 x 200 x 1,650 /
95 x 200 x 1,800 / 95 x 200 x 2,100 / 95 x 200 x 2,440 /
100 x 200 x 2,600

- MAST : SIMPLEX MAST / DUPLEX MAST(160D-7A) / TRIPLEX MAST

- OVER SHOE : 1,800 / 2,000 / 2,200 / 2,400 / 2,600

- MCV : 4 - SPOOL / 5 - SPOOL

- SEAT : NON HEAT / HEAT , AIR SUSPENSION with HEAT

- BEACON LAMP : AMBER / RED / BLUE

- FORK POSITIONER : $\varnothing 82$ / $\varnothing 100$

- INTEGRAL SIDE SHIFT

- INTEGRAL SIDE SHIFT + FORK POSITIONER

- TERMINAL WEST SYSTEM(160D-7A)

- HYDRAULIC LINE : 3 - SPOOL / 4 - SPOOL / 5 - SPOOL

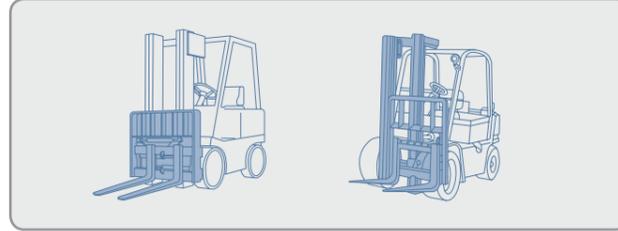
- TIRE : PNEUMATIC / SOLID

- WIDE CARRIAGE (2,730 mm)(160D-7A)

- HEAD GUARD

- AIRCON & HEATER

Various Attachments



We build a better future

HYUNDAI DIESEL FORKLIFT TRUCKS Applied Tier 4 Interim Engine

110/130/160D-7A

 **HYUNDAI | FORKLIFT**
HEAVY INDUSTRIES CO.,LTD.

Head Office (Sales Office)

14th Fl., Hyundai Bldg. 75, Yulgok-ro, Jongno-gu, Seoul 110-796, Korea
TEL (82) (2) 746-4609, 4753 / FAX (82) (2) 746-7444, 7445

Americas Operation : Hyundai Construction Equipment Americas, Inc.

6100 ATLANTIC BOULEVARD NORCROSS GA 30071 U.S.A
TEL (1) 847-678-823-7802 / FAX (1) 847-678-823-7778

Europe Operation : Hyundai Heavy Industries Europe N.V.

VOSSENDAAL 11, 2440 GEEL, BELGIUM
TEL (32) 14-56-2200 / FAX (32) 14-59-3405

PLEASE CONTACT

www.hyundai-ce.com

2013. 12 Rev. 0

 **HYUNDAI**
HEAVY INDUSTRIES CO.,LTD.

NEW Diesel Engine Forklift Trucks

Your satisfaction is our Priority
110 /130 /160D-7A



Excellent



Instrument Switch Panel



Air Conditioner & Heater
(Option)



Rear View Camera (Option)



Wheel Angle Sensing
& Load Indicator (Option)



ESL(Engine Start Limit)
(Option)

Some of the photos may include optional equipment.

Ability of best, the new master on the job-site!

Smooth running, efficient, and ergonomically designed, 110D-7A/130D-7A/160D-7A series are made to meet your needs.

**High Power
Low Noise**

Powerful Engine

Cummins QSB6.7 Engine

The six cylinders turbo-charged engine is built for power, reliability and economy. This engine meets EPA Tier 4 Interim and EU stage IIIb emission regulation.

Variable Geometry Turbo

Unique sliding nozzle design controls EGR flow and boosts response at all engine speeds.

New CM2250 (ECU)

3 x faster processing power
2 x increased memory capability
Increases HPCR capability and provides a seamless interface to equipment systems.

Clean Crankcase Filter

Removes crankcase emissions and eliminates oil drips or mist for ultra-clean engine operation.

High Efficiency Combustion

Removes high value of PM at source – less for catalyst to remove. Incorporates a proven cooled EGR system enabling up to 5% improved fuel efficiency.



123KW / 2,200rpm
74.6kgf.m/1,500rpm



Engine Control Mode

According to operating load, the operator can select engine mode by changing side panel switch.

STANDARD Mode : Fuel reduction mode for light-duty operating load
POWER Mode : Heavy-duty or operating at slope



Adjustable Engine Low Idle RPM

While engine runs, low idle rpm can be increased by unit of 25rpm and it keeps previously set rpm when engine restarts.

Electronic Full-automatic Transmission

High quality ZF transmission gives easy, convenient handling and soft, smooth shifting. The operator can select two stage of full automatic modes. (1stage : 1st→3rd, 2stage : 2nd→3rd)
The optimum shifting quality control offers soft and smooth shifting, and improved control by proportional modulation.

Self Diagnosis Function Error indication on display



Some of the photos may include optional equipment.

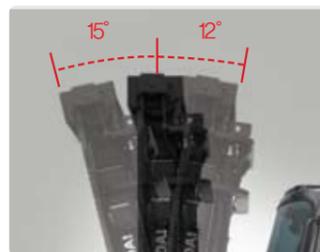


Transmission Control Switch



Excellent Night Work

- Variety position of work lamp provides the operator more comfortable and safe operating environments.
- Front : fender(2), mast(2) - Rear : cab(2)



Increased Mast Tilting Angle

Utilizing the mast tilting angle of 15 degrees forward and 12 degrees backward, the operator can perform loading and unloading jobs safely and rapidly.



Faster Travel Speed & Better Gradability

The powerful high-output engine provides greater acceleration, better gradability and faster travel speed on any tough terrains or slopes.

Gradability(Loaded)	Travel Speed(Unloaded)
110D-7A : 38.2% (20.9°)	110D-7A : 34.7km/h
130D-7A : 34.6% (19.1°)	130D-7A : 34.5km/h
160D-7A : 33.7% (18.6°)	160D-7A : 29.1km/h

Ergonomic driving space design!

A design based on human engineering relieves fatigue and increases operator's efficiency.



Operator friendly gauges and water-resistant monitor panel



Wide visibility with Round Front Glass



High-output Air Conditioner & Heater (Option)

An air conditioner with integrated the condenser is mounted on upper side of the cabin to make a wide room in the cabin. And an air conditioner with high-output and heater always provide you with comfortable environment when you work.



Luxury(Air-suspension+Heat+Head Rest) seat(Option)

An attractive and adjustable seat, based on a human engineering design, provides great comfort, safety and durability.



Some of the photos may include optional equipment.



Rear View Camera (Option)
The rear view camera makes the operation more easy and convenient. And it supports 4 camera channels.



Wheel Angle Sensing (Option)
Real-time steering wheel angle is displayed on the monitor for easy operation.



Load Indicator (Option)
A load can be placed on the fork and can be accurately weighed by measuring the hydraulic pressure.



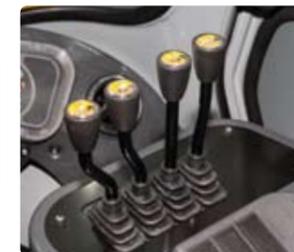
Centralized Instrument Switch Panel



USB MP3 Player & Remote Control



Bluetooth Hands Free Socket (Option)



Quick Response of Operating Control Levers

Only minimal operator's effort is required for precise, safe and productive control. (3-Lever : standard / 4·5-Lever : option)



Ergonomically positioned pedals

Based on human engineering ; the accelerator, brake and inching pedals are optimally positioned for the operator's convenience.



Adjustable Steering Column

Steering handle is adjustable depending on the operator's body shape. Adjustability of steering column makes you more comfortable.



Danger-free through high durability!

Safety and durability are priorities in design of the equipment.



Up-to-date Cooling System

The minimum fuel consumption and low noise are available by applying hydraulic cooling fan sensing intake air temperature, transmission oil temperature, coolant temperature and hydraulic temperature.



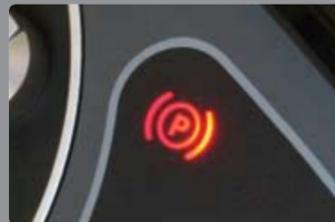
OPSS(Operator Presence Sensing System)

Control of mast tilting, lifting and lowering is not possible through operation of the appropriate control when the operators is not in the normal position.



Durable Drive Axle

The bevel gear and hub reduction drive axle smoothly delivers desired torque to the drive wheels.



Auto Parking

The parking brake is engaged automatically when the transmission is neutral and the operator leaves the seat.



Some of the photos may include optional equipment.



Wet Disc Brake System

The wet disc brake system is virtually maintenance free and is enclosed to protect from dust and water.



Fitted Protector for Hub Bolts

Durability has improved by applying protector for preventing bolts breakage. (Easy parts supply due to the wheel in common with front wheel)



Cylinder Guard

This guard helps to prevent possible damage from any foreign material.



Grease Fittings

Grease fittings are installed for fast access to steering axle center pin when doing your service checks.



Highly Durable Mast & Carriage Side Roller

Side roller with great durability for mast and carriage is included.



Highly Durable Carriage

The carriage is very strong cause of applying the high tensile structural steel which has a excellent durability. Work at the narrow space is easy because the width of carriage is narrower than overall width of the vehicle.



Large Footboard & Handle

Wide "open" step offers convenience and safety when entering and exiting the truck.

Centralized design for easy service!

An ideal arrangement of component parts ensures easy access and convenience for maintenance.



Enlarged Engine Hood Cover

Highly accessible engine compartment assures fast and efficient maintenance.



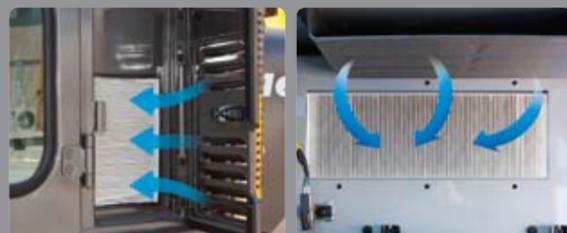
Cabin Tilting Automatic System

Cabin tilting automatic system makes servicing of all power train components quick and easy. An electrically assisted hydraulic actuated cylinder tilts operator cabin to left side about 55 degrees for easy access to inside of truck components.



Easy Change Air Cleaner

This air filter is readily accessible for cleaning or replacement.



Cabin Air Fresh Filter

The internal pressure is maintained to be slightly higher than that of outside to exclude dust and to reduce noise levels.



Some of the photos may include optional equipment.



Compact fuse Box for Easy Inspection



Mechanic Friendly Fuel Filter Replacement

Highly accessible engine compartment allows quick replacement of filters.



Electrically Monitored Air Filter

Air cleaner sensor alerts the operator of a clogged air filter and allows replacement before damage.



Automatic Self Locking Gas Spring

Engine compartment hood is safely opened by a self locking gas spring.



Master Switch

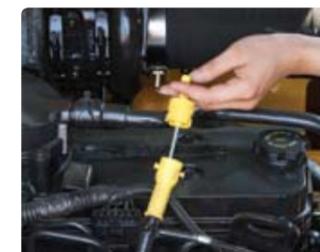
A master switch disconnects the battery power to protect the electrical system from excess electrical drainage.



Large Tool Box



Pressure Gauge Port



Easy Maintenance Oil Check

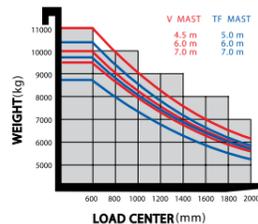
Mast Specification

Mast Type	Maximum Fork Height (mm)	Overall Height (Lowered) (mm)	Free Lift Height (mm)	Tilt Angle (deg) Fwd / Bwd	Load Capacity (600mm LC)(kg)		Truck Weight (Unloaded) (kg)		
					110D/130D-7A	110D-7A	130D-7A	110D-7A	130D-7A
2-Stage Limited Free Lift	V280	2,805	2,900	0	15 / 12	11,000	13,000	15,595	16,350
	* V300	3,005	3,000	0	15 / 12	11,000	13,000	15,628	16,383
	V330	3,305	3,150	0	15 / 12	11,000	13,000	15,704	16,459
	V350	3,505	3,250	0	15 / 12	11,000	13,000	15,754	16,509
	V400	4,005	3,550	0	15 / 12	11,000	13,000	16,006	16,761
	V450	4,505	3,800	0	15 / 12	11,000	12,600	16,131	16,886
	V500	5,005	4,100	0	15 / 12	11,000	12,200	16,281	17,036
	V550	5,505	4,350	0	15 / 12	11,000	11,800	16,511	17,266
	V600	6,005	4,650	0	15 / 12	10,600	11,400	16,663	17,418
	V650	6,505	4,900	0	15 / 12	10,300	11,100	16,796	17,551
V700	7,005	5,150	0	15 / 12	10,000	10,800	16,927	17,682	
3-Stage Full Free Lift	TF440	4,405	2,950	1,595	10 / 10	11,000	12,300	16,682	17,449
	TF470	4,750	3,050	1,695	10 / 10	11,000	12,100	16,752	17,519
	TF500	5,005	3,150	1,795	10 / 10	11,000	11,800	16,823	17,590
	TF550	5,505	3,317	1,962	10 / 10	10,600	11,500	16,991	17,758
	TF600	6,005	3,484	2,129	10 / 10	10,300	11,100	17,109	17,876
	TF650	6,505	3,651	2,296	10 / 10	10,000	10,800	17,323	18,090
	TF700	7,005	3,818	2,463	10 / 10	9,700	10,500	17,442	18,209

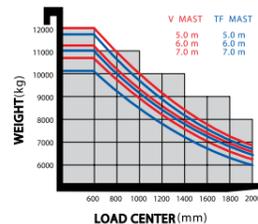
Mast Type	Maximum Fork Height (mm)	Overall Height (Lowered) (mm)	Free Lift Height (mm)	Tilt Angle (deg) Fwd / Bwd	Load Capacity (600mm LC)(kg)		Truck Weight (Unloaded) (kg)	
					160D-7A	160D-7A	160D-7A	160D-7A
2-Stage Limited Free Lift	V295	2,950	2,950	0	15 / 12	16,000		19,173
	* V300	3,010	3,250	0	15 / 12	16,000		19,337
	V330	3,310	3,400	0	15 / 12	16,000		19,431
	V350	3,510	3,500	0	15 / 12	16,000		19,476
	V400	4,010	3,750	0	15 / 12	16,000		19,764
	V450	4,510	4,000	0	15 / 12	15,900		19,918
	V500	5,010	4,300	0	15 / 12	15,900		20,100
	V550	5,510	4,550	0	15 / 12	15,200		20,369
	V600	6,010	4,850	0	15 / 12	14,600		20,551
	V650	6,510	5,125	0	15 / 12	14,200		20,717
V700	7,010	5,375	0	15 / 12	13,800		20,868	
2-Stage Full Free Lift	VS300	3,010	3,200	1,550	10 / 10	16,000		19,323
	VS330	3,310	3,350	1,700	10 / 10	16,000		19,416
	VS350	3,510	3,450	1,800	10 / 10	16,000		19,479
	VS400	4,010	3,700	2,050	10 / 10	16,000		19,637
	VS450	4,510	3,950	2,300	10 / 10	15,800		19,887
	VS500	5,010	4,250	2,550	10 / 10	15,400		20,119
	VS550	5,510	4,500	2,800	10 / 10	15,100		20,307
VS600	6,010	4,800	3,050	10 / 10	14,600		20,600	
3-Stage Full Free Lift	TF395	3,964	2,950	1,610	10 / 10	15,600		20,450
	TF450	4,504	3,130	1,790	10 / 10	15,300		20,611
	TF500	5,004	3,297	1,957	10 / 10	14,900		20,786
	TF550	5,504	3,464	2,124	10 / 10	14,500		20,969
	TF600	6,004	3,631	2,291	10 / 10	14,100		21,125
	TF650	6,504	3,798	2,458	10 / 10	13,700		21,403
TF700	7,004	3,965	2,625	10 / 10	13,400		21,546	

Load Capacity

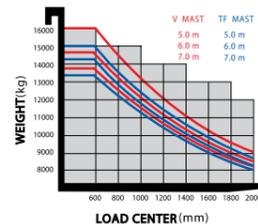
110D-7A



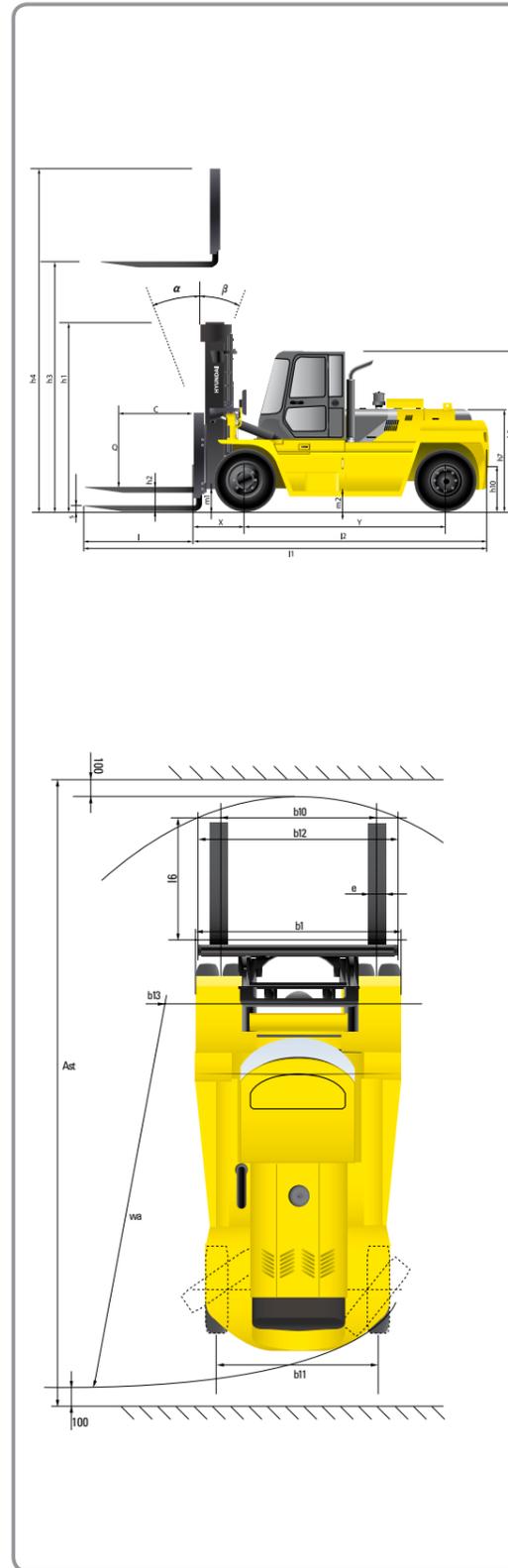
130D-7A



160D-7A



Dimension



Specification

Identification			
1.1	Manufacturer	Hyundai	Hyundai
1.2	Manufacturer's type designation	110D-7A	130D-7A
1.3	Drive: electric (battery or mains),diesel,petrol,fuel gas,manual	DIESEL	DIESEL
1.4	Type of operation:hand,pedestrian,standing,seated,order-picker	seated	seated
1.5	Load capacity / rated load	Q (t)	11.0
1.6	Load center distance	c (mm)	600
1.8	Load distance, center of drive axle to fork	x (mm)	760
1.9	Wheelbase	y (mm)	2,900
Weights			
2.1	Service weight	kg	15,628
2.2	Axle loading, loaded front/rear	kg	23,711 / 2,917
2.3	Axle loading, unloaded front/rear	kg	7,552 / 8,076
Wheels, Chassis			
3.1	Tires:pneumatic, solid	Pneumatic	Pneumatic
3.2	Tires size, front(width x Φ)	10.00 - 20	10.00 - 20
3.3	Tires size, rear(width x Φ)	10.00-20	10.00 - 20
3.5	Wheels, number front x rear (x=driven wheels)	4 x 2	4 x 2
3.6	Track width, front	b10 (mm)	1,842
3.7	Track width, rear	b11 (mm)	1,910
Basic Dimensions			
4.1	Mast / fork carriage tilt forward / backward(α / β) degrees	15 / 12	15 / 12
4.2	Lowered mast height	h1 (mm)	3,000
4.3	Free lift	h2 (mm)	0
4.4	Lift height	h3 (mm)	3,000
4.5	Extended mast height	h4 (mm)	4,465
4.7	Overhead load guard (cab) height	h5 (mm)	2,900
4.8	Seat height / standing height	h7 (mm)	1,723 / 1,884
4.12	Coupling height	h10 (mm)	600
4.19	Overall length	l1 (mm)	5,690
4.20	Length to face of forks	l2 (mm)	4,340
4.21	Overall width	b1 (mm)	2,450
4.22	Fork dimensions	s / e / l (mm)	75 x 200 x 1,350
4.23	Fork carriage ISO 2328, class / type A,B	Pin Mount	Pin Mount
4.24	Fork-carriage width	b12 (mm)	2,362
4.31	Ground clearance, loaded, under mast	m1 (mm)	270
4.32	Ground clearance, centre of wheelbase	m2 (mm)	330
4.33	Aisle width for pallets 1000x1200 crossways	Ast (mm)	6,465
4.34	Aisle width for pallets 800x1200 lengthways	Ast (mm)	6,465
4.35	Turning radius	Wa (mm)	4,160
4.36	Smallest pivot point distance	b13 (mm)	1,516
Performance Data			
5.1	Travel speed, Unloaded	km/h	34.7
5.2	Lift speed, Loaded/Unloaded	m/s	0.44 / 0.51
5.3	Lowering speed, Loaded/Unloaded	m/s	0.51 / 0.46
5.5	Drawbar pull, Loaded	N	102,264
5.7	Gradient performance, Loaded	%	38.2
5.9	Acceleration time, Loaded/ Unloaded(10m)	sec	-
5.10	Service brake	hydraulic	hydraulic
Engine			
6.1	Engine manufacturer / type	Cummins QSB6.7	Cummins QSB6.7
6.2	Engine power acc. to ISO 1585	kW	123
6.3	Rated speed	1/min	2,200
6.4	No. of cylinder / cubic capacity	/cm ³	6 / 6,700
Other Details			
8.1	Type of drive control	Toque Convert 3/3	Toque Convert 3/3
8.2	Operating pressure for attachments	bar	210
8.3	Oil volume	ℓ	135
8.4	Sound level at driver's ear according to DIN 12.053	db(A)	82
8.5	Tow coupling, type DIN	-	-