#### **Optional Items**

#### • FORK (L x W x T)(in)

#### 110D-7E

3.0 x 7.9 x 47.2 / 3.0 x 7.9 x 53.1 / 3.0 x 7.9 x 59.1 / 3.0 x 7.9 x 65.0 / 3.0 x 7.9 x 70.9 / 3.0 x 7.9 x 82.7 / 3.3 x 7.9 x 94.5 / 3.3 x 7.9 x 102.4 130D-7E

3.3 x 7.9 x 47.2 / 3.3 x 7.9 x 53.1 / 3.3 x 7.9 x 59.1 / 3.3 x 7.9 x 65.0 / 3.3 x 7.9 x 70.9 / 3.3 x 7.9 x 82.7 / 3.5 x 7.9 x 94.5 / 3.5 x 7.9 x 102.4

#### 140D-7E

3.3 x 7.9 x 47.2 / 3.3 x 7.9 x 53.1 / 3.5 x 7.9 x 59.1 / 3.5 x 7.9 x 65.0 / 3.7 x 7.9 x 70.9 / 3.7 x 7.9 x 82.7 / 3.7 x 7.9 x 96.1 / 3.9 x 7.9 x 102.4 160D-7E

3.5 x 7.9 x 47.2 / 3.5 x 7.9 x 53.1 / 3.5 x 7.9 x 59.1 / 3.5 x 7.9 x 65.0 / 3.7 x 7.9 x 70.9 / 3.7 x 7.9 x 82.7 / 3.7 x 7.9 x 96.1 / 3.9 x 7.9 x 102.4

- MAST : SIMPLEX MAST / TRIPLEX MAST / Duplex Mast(14/16 ton only)
- **OVER SHOE** : 70.9/78.7 / 86.6 / 94.5 / 102.4
- MCV: 4 SPOOL / 5 SPOOL
- SEAT : NON HEAT / HEAT
- BEACON LAMP : AMBER / RED / BLUE
- FORK POSITIONER :
- INTEGRAL SIDE SHIFT
- INTEGRAL SIDE SHIFT + FORK POSITIONER
- HYDRAULIC LINE: 3 SPOOL/4 SPOOL/5 SPOOL
- SOLID TIRE
- **PNEUMATIC TIRE** : LUG / SMOOTH(14/16 ton Only)
- HEAD GUARD
- Sliding Carriage & Fork
- Separater holder



**Various Attachments** 



110D/130D/140D/160D -7E



FORKLIFT TRUCKS Environmentally Friendly

# 110D/130D/140D/160D-7E





North America only



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

Smooth running, efficient and ergonomically designed, 110D/130D/140D/160D-7E series are made to meet your needs.

**Powerful Engine** 

Cuinins **QSB5.7 Engine** 

and EU stage IIIA emission regulation.

switch.

The six cylinders turbo-charged engine is built for power, reliability and economy. This engine meets EPA Tier 3

STD Mode : Fuel reduction mode for

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

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.

**Engine Control Mode** 



# 16211P//2,2007pm 74.6kgf+m/1,4007pm

#### **Full-automatic Transmission**

Full-automatic transmission gives easy, convenient handling and soft, smooth shifting. The operator can select two kinds of automatic modes. (1st↔3rd, 2nd↔3rd)





**Cruise Control** 

04

It offers the ability to automatically maintain a desired engine speed with no accelerator pedal input and reduce fuel consumption.



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)

110D-7E : 45.4 % 140D-7E : 37.0% 130D-7E : 41.0% 160D-7E : 31.4%



#### Travel Speed(Unloaded)

110D-7E : 20.96mph 130D-7E : 20.56mph 140D-7E : 20.00mph 160D-7E : 20.00mph

# Ergonomic driving space design!

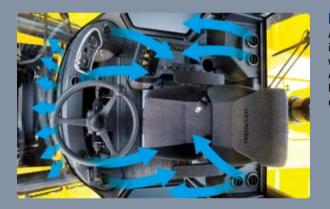
A design based on human engineering relieves fatigue and increases operator's efficiency.

#### **Operator Friendly Gauges and** Water-resistant Monitor Panel





**Easily Adjustable Suspension Seat** An attractive and adjustable seat, based on a human engineering design, provides great comfort, safety and durability. (Head Rest - option)



**High-output Air Conditioner & Heater** 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 comfortable environment when you work.







ESL(Engine Start Limit) / Rear View Camera Monitor Engine starting is possible after password verifying, when password is not correct, intercepts the fuel injection of engine. Whether to use ESL can be selected from the menu of the monitor. The rear view camera makes the operation more easy and convenient. And it supports 4 camera channels.



Centralized Instrument Switch Panel



**USB MP3 Player** & Remote Control



**Hands Free Socket** 



**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!**

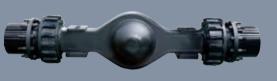
Safety and durability are priorities in design of the equipment.



**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 hypoid type planetary 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.



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 damage from any foreign material. breakage. (Easy parts supply due to the wheel in coinon with front wheel)



**Cylinder Guard** This guard helps to prevent possible



**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 then 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.



Large Engine Hood Highly accessible engine compartment assures fast and efficient maintenance.



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.



**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 65 degrees for easy access to inside of truck components.





**Compact fuse Box for Easy Inspection** 



Mechanic Friendly Fuel Electrically Monitored Filter Replacement Highly accessible engine compartment allows for quick replacement of filters.



**Air Filter** 

Air cleaner sensor alerts the operator of a clogged air filter and allows opened by a self locking gas spring. replacement before damage.



**Automatic Self Locking Gas Spring** Engine compartment hood is safely



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



Large Tool Box

Some of the photos may include optional equipment.



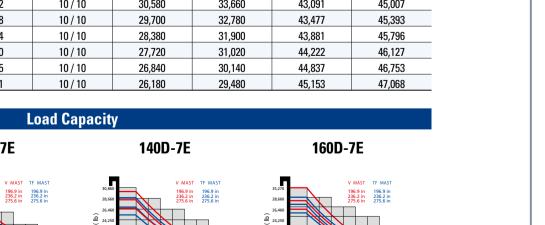


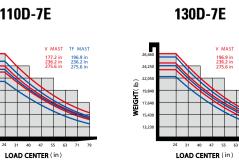
**Pressure Gauge Port** 



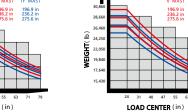
**Easy Maintenance Oil** Check

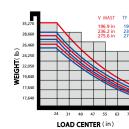
			Mas	st Specificat	tion			
Mast Type		Maximum Fork Height (in)	Fork Height Height Lowerd Tilt Angle		Load Capacity (24in LC)(Ib)		Truck Weight Unloaded (lb)	
			110D/130D-7E		110D-7E	130D-7E	110D-7E	130D-7E
2-Stage Limited Free Lift	V300	118.3	118.1	15/12	24,200	28,600	34,661	36,215
	* V330	130.1	124.0	15/12	24,200	28,600	34,829	36,383
	V350	138.0	128.0	15/12	24,200	28,600	34,936	36,491
	V400	157.7	139.8	15/12	24,200	28,600	35,494	37,048
	V450	177.4	149.6	15/12	24,200	27,720	35,770	37,324
	V500	197.0	161.4	15/12	24,200	26,840	36,098	37,653
	V550	216.7	171.3	15/12	24,200	25,960	36,608	38,162
	V600	236.4	183.1	15/12	23,320	25,080	36,943	38,497
	V650	256.1	192.9	15/12	22,660	24,420	37,236	38,790
	V700	275.8	202.8	15/12	22,000	23,760	37,525	39,079
3-Stage	TF440	173.4	116.1	10/10	24,200	27,060	36,951	38,508
	TF470	185.2	120.1	10/10	24,200	26,620	37,108	38,664
	TF500	197.0	124.0	10/10	24,200	25,960	37,264	38,821
Full	TF550	216.7	130.6	10/10	23,320	25,300	37,633	39,189
Free Lift	TF600	236.4	137.2	10/10	22,660	24,420	37,893	39,449
	TF650	256.1	143.7	10/10	21,120	23,760	38,365	39,921
	TF700	275.8	150.3	10/10	19,140	23,100	38,627	40,183
Mast Type		Maximum Fork Height (in)	Overall Height Lowerd (in)	Tilt Angle	Load Capacity (24in LC)		Truck Weight Unloaded (lb)	
			140D/160D-7E		140D-7E	160D-7E	140D-7E	160D-7E
	V295	116.1	116.1	15 / 12	30,800	35,200	39,947	41,837
2-Stage Limited Free Lift	V300	118.5	128.0	15 / 12	30,800	35,200	40,309	42,198
	* V330	130.3	133.9	15 / 12	30,800	35,200	40,517	42,406
	V350	138.2	137.8	15 / 12	30,800	35,200	40,615	42,505
	V400	157.9	147.6	15 / 12	30,800	35,200	41,248	43,138
	V450	177.6	157.5	15 / 12	30,800	34,980	41,590	43,479
	V500	197.2	169.3	15 / 12	30,800	34,980	41,991	43,881
	V550	216.9	179.1	15 / 12	29,920	33,440	42,584	44,474
	V600	236.6	190.9	15 / 12	29,040	32,120	42,985	44,875
	V650	256.3	201.8	15 / 12	28,160	31,020	43,351	45,241
	V700	276.0	211.6	15 / 12	27,500	30,360	43,684	45,574
	TF395	156.1	116.1	10 / 10	30,800	34,320	42,736	44,652
	TEAEO	177.3	123.2	10 / 10	30,580	33,660	43,091	45,007
	TF450	1	100.0	10 / 10	29,700	32,780	43,477	45,393
3-Stage	TF500	197.0	129.8					
Full		197.0 216.7	129.8	10 / 10	28,380	31,900	43,881	45,796
	TF500				28,380 27,720	31,900 31,020	43,881 44,222	45,796 46,127
Full	TF500 TF550	216.7	136.4	10 / 10				



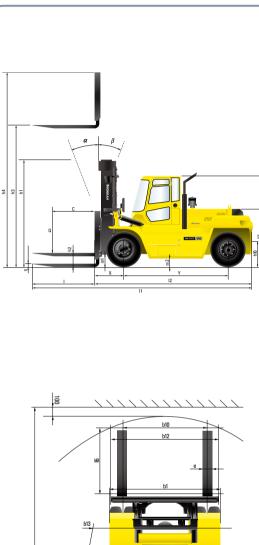


110D-7E

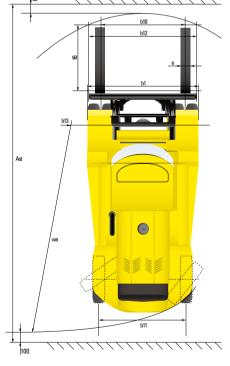


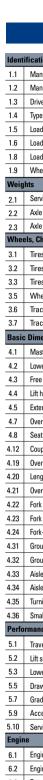


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Dimension





 6.2
 English

 6.3
 Rate

 6.4
 No. c

 6.5
 Fuel

 Other Deta

8.1 Type 8.2 Oper 8.3 Oil v 8.4 Sour 8.5 Tow

### Specification

ation		there is the	These def	House do t	These det
Aanufacturer Aanufacturer's type designation		Hyundai	Hyundai	Hyundai 140D-7E	Hyundai
Aanufacturer's type designation		110D-7E	130D-7E		160D-7E
Irive: electric (battery or mains),diesel,petrol,fuel gas		DIESEL	DIESEL	DIESEL	DIESEL
ype of operation:hand,pedestrian,standing,seated,or		seated	seated	seated	seated
oad capacity / rated load	Q (lb)	24,250	28,660	30,865	35,274
oad center distance	c (in)	24	24	24	24
oad distance, center of drive axle to fork	x(in)	29.7	29.9	32.7	32.9
Vheelbase	y(in)	114.2	114.2	129.9	129.9
ervice weight	lb	34,829	36,383	40,517	42,406
xle loading, loaded front/rear	lb	52,286 / 6,793	58,867 / 6,176	64,705 / 6,676	70,986 / 6,694
xle loading, unloaded front/rear	lb	16,704 / 18,125	16,766 / 19,617	20,466 / 20,051	20,373 / 22,033
Chassis			<b>D</b>	<b>D</b> 4	<b>D</b>
ires:solid rubber, superplastic, pneumatic, polyu	urethane	Pneumatic	Pneumatic	Pneumatic	Pneumatic
ires size, front( width $x \Phi$ )		10.00 - 20	10.00 - 20	12.00 - 20	12.00 - 20
ires size, rear( width x $\Phi$ )		10.00 - 20	10.00 - 20	12.00 - 20	12.00 - 20
Vheels, number front x rear (x=driven wheels)		4 x 2	4 x 2	4 x 2	4 x 2
rack width, front	b10 (in)	72.5	72.5	72.5	72.5
rack width, rear	b11 (in)	75.2	75.2	77.2	77.2
imensions					
/last / fork carriage tilt forward / backward( $\alpha$ / $\beta$ )	degrees	15/12	15/12	15/12	15/12
owered mast height	h1 (in)	118.1	118.1	128.0	128.0
ree lift	h2 (in)	0.0	0.0	0.0	0.0
ift height	h3 (in)	118.3	118.3	118.5	118.5
xtended mast height	h4 (in)	175.8	175.8	185.4	185.4
Iverhead load guard (cab) height	h5 (in)	114.2	114.2	115.6	115.6
eat height / standing height	h7 (in)	67.8	67.8	68.9	68.9
coupling height	h10 (in)	23.6	23.6	23.6	23.6
Iverall length	l1 (in)	224.0	224.2	246.1	246.3
ength to face of forks	l2 (in)	170.9	171.1	192.9	193.1
Iverall width	b1 (in)	96.5	96.5	99	99
ork dimensions	s / e / l(in)	3.0 x 7.9 x 53.1	3.3 x 7.9 x 53.1	3.3 x 7.9 x 53.1	3.5 x 7.9 x 53.1
ork carriage ISO 2328, class / type A,B		Pin Mount	Pin Mount	Pin Mount	Pin Mount
ork-carriage width	b12 (in)	92.8	92.8	98.3	98.3
round clearance, loaded, under mast	m1(in)	10.6	10.6	10.6	10.6
round clearance, centre of wheelbase	m2(in)	13.0	13.0	13.0	13.0
isle width for pallets 1000x1200 crossways	Ast(in)	255.7	255.9	278.9	280.7
isle width for pallets 800x1200 lengthways	Ast(in)	255.7	255.9	278.9	280.7
urning radius	Wa(in)	165	165	185.2	186.9
mallest pivot point distance	b13(in)	59.7	59.7	68.8	68.8
ance Data	510(111)	33.1	33.1	00.0	00.0
	mah	20.96	20.56	20.0	20.0
ravel speed, Unloaded	mpn fam				
ift speed, Loaded/Unloaded	fpm fam	88.6 / 100.4	84.6 / 100.4	70.9 / 88.6 68.9 / 84.6	68.9 / 88.6 68.9 / 84.6
owering speed, Loaded/Unloaded	fpm	100.4/90.6			
Irawbar pull, Loaded	N	26,753	27,055	27,137	25,545
iradient performance, Loaded	%	45.4	41.0	37.0	31.4
Acceleration time, Loaded/ Unloaded(10m)	Sec	-	-	-	-
ervice brake		wet disc	wet disc	wet disc	wet disc
ingine manufacturer / type		Cuinins QSB6.7	Cuinins QSB6.7	Cuinins QSB6.7	Cuinins QSB6.7
ingine power acc. to ISO 1585	Нр	162	162	162	162
lated speed	1/min	2,200	2,200	2,200	2,200
lo. of cylinder / cubic capacity	/cm <sup>3</sup>	6 / 6,700	6 / 6,700	6 / 6,700	6 / 6,700
uel consumption acc. To VDI cycle	ℓ/h	11.0	11.0	11.5	11.5
etails					
		Full Auto	Full Auto	Full Auto	Full Auto
ype of drive control					
	bar		150		150
ype of drive control Iperating pressure for attachments III volume for attachments	bar I/min	150	150	150 295	150 295
perating pressure for attachments		150		150	