

*Photo may include optional equipment.

MOVING YOU FURTHER

HYUNDAI MATERIAL HANDLING Environmentally - Friendly

10/13BOP-7 AC

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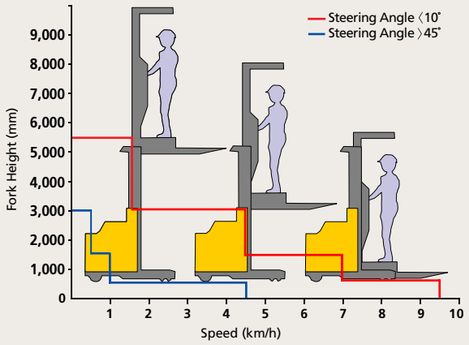
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PLEASE CONTACT

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Superior Power & Optimal Performance

Smooth running, efficiently and ergonomically designed,
10/13BOP-7 series are built to meet your needs.



Steering angle	Travel speed by platform height (km/h)				
	~600	~1,500	~3,000	~5,500	~9,200
S/Angle〈10°	9.5	7.0	4.5	1.6	0
10°〈s/Angle〈45°	9.5~4.5	7.0~1.0	4.5~0.5	1.6~0	0

Travel Speed Control by Platform Height

Limit travel speed by steering angle - 10 ° ~45 ° : Linearly reduce the maximum speed
Travel banned height is set for safety - over : 5,500mm



Electromagnetic brake is mounted on the traction motor.

Brake System

Electro-magnetic brake applied for parking - On travel, automatically unlock brake
(Negative type braking system by spring return force)



Minimum turning radius

Compact design suitable for narrow aisle operation guarantees work efficiency and maximum space utilization.



*Photo may include optional equipment(s).



Electric Power Steering(EPS)

EPS assures effortless steering allowing less fatigue to the operator. Machine performance and battery life are also enhanced.



Adjustable Pallet Clamp

Euro Pallet
(100~150mm Center Stringer width)
Wood Pallet
(44mm Center Stringer width)



Guide Roller

When the truck entering in the rack, the drive wheel position is lacked at the center, the operation is possible to do picking and driving work safely. (option)



Automatic Center Position at Starting

When the key ON, prox switch detects the position of drive wheel, and the wheel turns to the center position automatically.

High Technology ZAPI Controller

The efficient, almost noiseless, 8Khz(high frequency) controller provides smooth quite operation and protection for low & high voltage,
overheating and fault recording.

Energy Efficiency
H(High) mode : 100%
N(Normal) mode : 110%
E(Economic) mode : 120%





Drive Motor & Pump Motor

Efficient AC motor guarantees reliability and a optimized motor design provides for low noise levels. Temperature sensor ensure long motor life.



*Photo may include optional equipment

Comfortable Operation

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



Steering Wheel

A newly designed steering control coupled with our new Electric Power Steering control gives the operator exceptionally smooth and controlled steering for tight spaces.

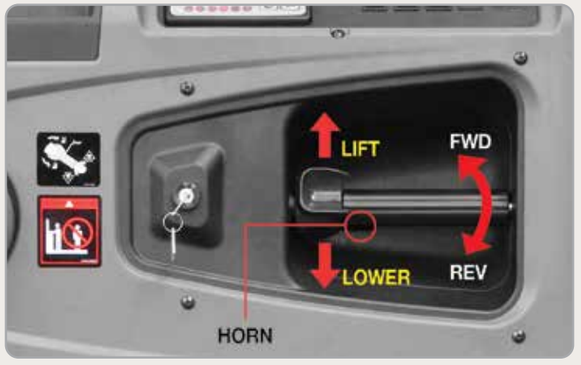


New High Visibility for Safe Operation

The operator is able to work with increased safety and accuracy due to a wider mast view.



Safety Belt & Side Bar



Multifunctional Control Lever

The control lever is designed ergonomically. The operator is able to control platform lift up and down, travel function and horn with one hand.



Self - diagnostic LCD Monitor

The LCD monitor has a back-light system to provide a clear view of the system's operation in all environments.
The monitor provides information about operation error, system fault, battery level, hour meter plus other various functions.

Storage Box Space

Additional storage spaces are located inside the operating space for operator's convenience.







Strong Overhead Guard

The safety overhead guard meets EEC and ANSI regulations and protects the operator during hazardous work.



Dead man Switch



Convenience Devices

There are 3 devices for convenience.
· Operator room lamp
· Operator cooling fan
· Work lamp

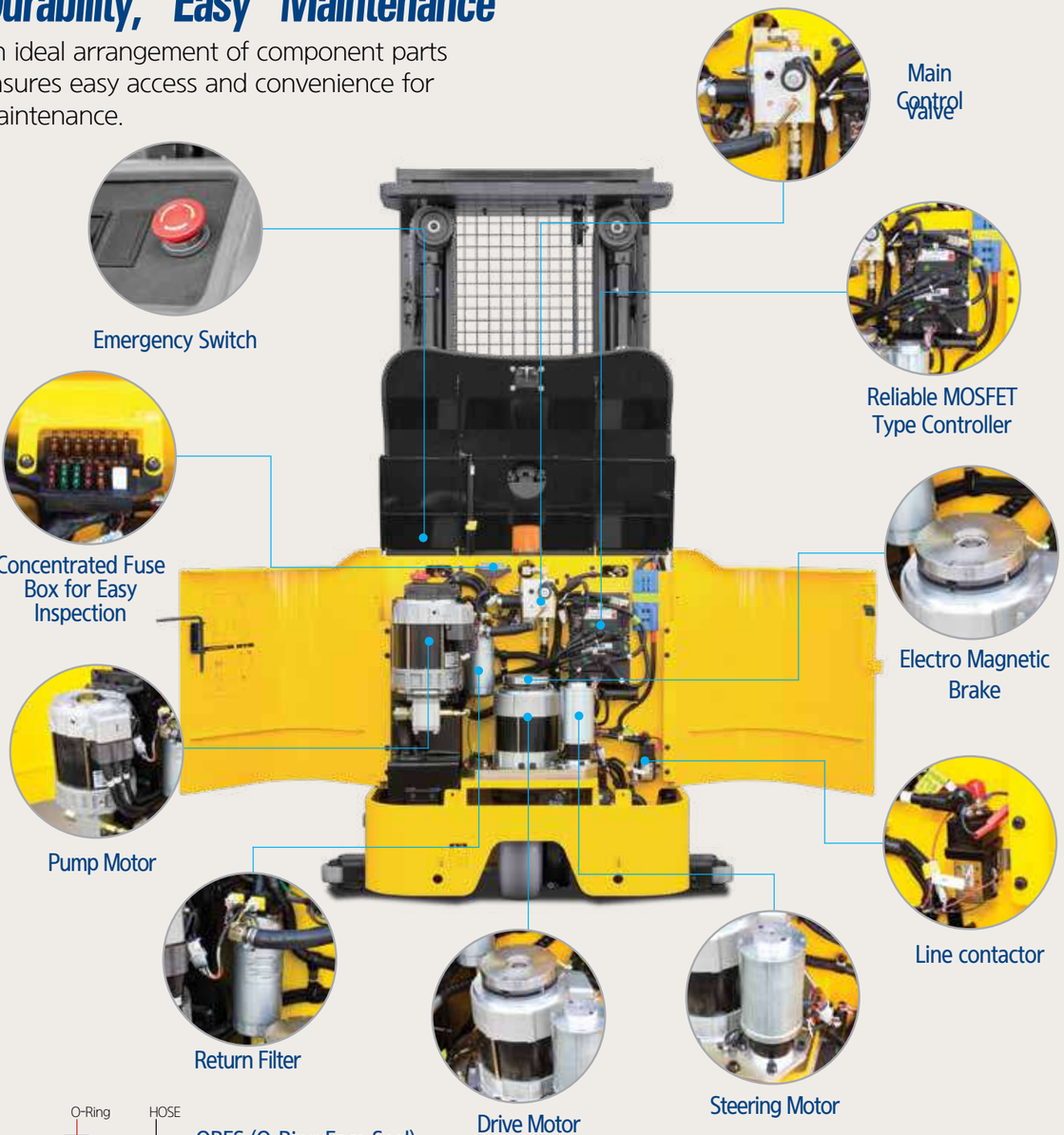


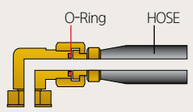
Pallet Clamp Pedal

It is easy clamp and release the pallet by pushing the pedal.

Durability, Easy Maintenance

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





ORFS (O-Ring Face Seal)
ORFS type hose prevents the leaking of hydraulic oil.

Option

- **Fork(mm) :** 900 / 1,050 / 1,350 / 1,500 / 1,600
- **Guide Roller(Wide Frame) :** 1,226mm / 1,256(1,456)mm /1,280(1,480)mm / 1,304(1,504)mm
- **Pallet Clamp :** Euro Pallert, Wood Pallet
- **UL(E)**
- **Beacon lamp (Amber)**
- **Battery :** 10BOP-7(400AH, Compartmant) 13BOP-7(500AH, Compartmant)

Mast Specification (10BOP-7)

Mast Type		Maximum Fork Height	Overall Height (Lowered) With OHG	Overall Height (Lifted) With OHG	Free lift Height With OHG	Load capacity w/o side shift 600mm LC	Truck Weight (Unloaded)
		mm	mm	mm	mm	kg	kg
2-STAGE LIMITED FREE LIFT	V325	3,275	2,220	5,470	0	1,000	2,761
	V355	3,575	2,375	5,770	0	1,000	2,786
	V415	4,175	2,680	6,370	0	1,000	2,837
	V475	4,775	2,985	6,970	0	1,000	2,888
	V535	5,375	3,285	7,570	0	1,000	2,989
3-STAGE FULL FREE LIFT	TF500	5,071	2,220	7,266	25	1,000	3,004
	TF530	5,355	2,375	7,550	180	1,000	3,039
	TF610	6,115	2,680	8,310	485	1,000	3,113
	TF685	6,879	2,985	9,074	790	930	3,243
	TF760	7,641	3,285	9,836	1,090	900	3,373
	TF815	8,175	3,515	10,370	1,320	840	3,428
	TF865	8,681	3,745	10,876	1,550	770	3,488
	TF930	9,321	4,025	11,516	1,830	700	3,606

Mast Specification (13BOP-7)

Mast Type		Maximum Fork Height	Overall Height (Lowered) With OHG	Overall Height (Lifted) With OHG	Free lift Height With OHG	Load capacity w/o side shift 600mm LC	Truck Weight (Unloaded)
		mm	mm	mm	mm	kg	kg
2-STAGE LIMITED FREE LIFT	V325	3,275	2,220	5,470	mm	1,361	2,902
	V355	3,575	2,375	5,770	0	1,361	2,928
	V415	4,175	2,680	6,370	0	1,361	2,978
	V475	4,775	2,985	6,970	0	1,361	3,029
	V535	5,375	3,285	7,570	0	1,361	3,130
3-STAGE FULL FREE LIFT	TF500	5,071	2,220	7,266	0	1,361	3,145
	TF530	5,355	2,375	7,550	25	1,361	3,180
	TF610	6,115	2,680	8,310	180	1,210	3,255
	TF685	6,879	2,985	9,074	485	1,110	3,384
	TF760	7,641	3,285	9,836	790	1,000	3,514
	TF815	8,175	3,515	10,370	1,090	930	3,569
	TF865	8,681	3,745	10,876	1,320	860	3,630
	TF930	9,321	4,025	11,516	1,550	790	3,748

Mast Specification (10BOP-7) (Additional lift)

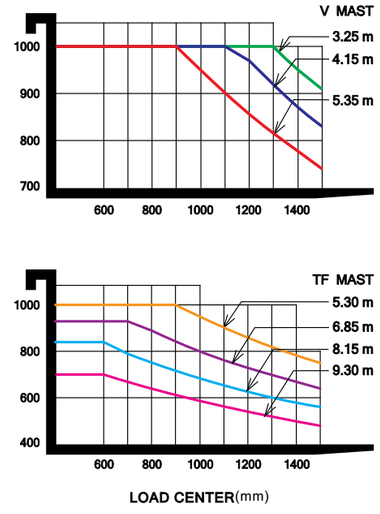
Mast Type		Maximum Fork Height (Additional lift)	Overall Height (Lowered)	Overall Height (Extended)		Free lift Height		Additional lift	Load capacity w/o side shift	Truck Weight (Unloaded)
				With OHG	Without OHG	With OHG	Without OHG		600mm LC	
		mm	mm	mm	mm	mm	mm	mm	kg	kg
2-STAGE LIMITED FREE LIFT	V325	4,035	2,220	5,470	3,805	0	0	760	900	2,952
	V355	4,335	2,375	5,770	4,105	0	0	760	900	2,977
	V415	4,935	2,680	6,370	4,705	0	0	760	900	3,028
	V475	5,535	2,985	6,970	5,305	0	0	760	900	3,079
	V535	6,135	3,285	7,570	5,905	0	0	760	900	3,180
3-STAGE FULL FREE LIFT	TF500	5,831	2,220	7,266	5,581	25	1,710	760	900	3,192
	TF530	6,115	2,375	7,550	5,885	180	1,845	760	900	3,227
	TF610	6,875	2,680	8,310	6,625	485	2,170	760	750	3,301
	TF685	7,639	2,985	9,074	7,389	790	2,475	760	560	3,431
	TF760	8,401	3,285	9,836	8,151	1,090	2,775	760	480	3,561
	TF815	8,935	3,515	10,370	8,685	1,320	3,005	760	420	3,616
	TF865	9,441	3,745	10,876	9,191	1,550	3,235	760	350	3,676
	TF930	10,081	4,025	11,516	9,831	1,830	3,515	760	300	3,794

Mast Specification (13BOP-7) (Additional lift)

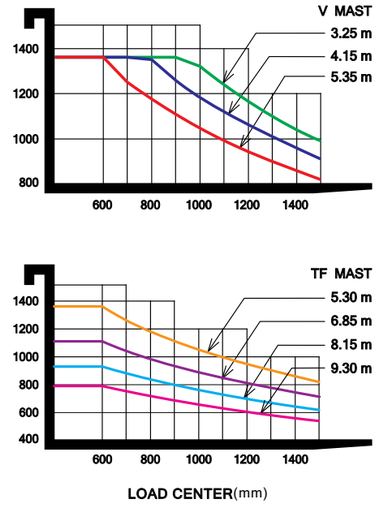
Mast Type		Maximum Fork Height (Additional lift)	Overall Height (Lowered)	Overall Height (Extended)		Free lift Height		Additional lift	Load capacity w/o side shift	Truck Weight (Unloaded)
				With OHG	Without OHG	With OHG	Without OHG		600mm LC	
		mm	mm	mm	mm	mm	mm	mm	kg	kg
2-STAGE LIMITED FREE LIFT	V325	4,035	2,220	5,470	3,805	0	0	760	1,000	3,093
	V355	4,335	2,375	5,770	4,105	0	0	760	1,000	3,119
	V415	4,935	2,680	6,370	4,705	0	0	760	1,000	3,169
	V475	5,535	2,985	6,970	5,305	0	0	760	1,000	3,220
	V535	6,135	3,285	7,570	5,905	0	0	760	1,000	3,321
3-STAGE FULL FREE LIFT	TF500	5,831	2,220	7,266	5,581	25	1,710	760	1,000	3,333
	TF530	6,115	2,375	7,550	5,885	180	1,845	760	1,000	3,368
	TF610	6,875	2,680	8,310	6,625	485	2,170	760	825	3,443
	TF685	7,639	2,985	9,074	7,389	790	2,475	760	650	3,572
	TF760	8,401	3,285	9,836	8,151	1,090	2,775	760	550	3,702
	TF815	8,935	3,515	10,370	8,685	1,320	3,005	760	500	3,757
	TF865	9,441	3,745	10,876	9,191	1,550	3,235	760	450	3,818
	TF930	10,081	4,025	11,516	9,831	1,830	3,515	760	350	3,936

Load Capacity

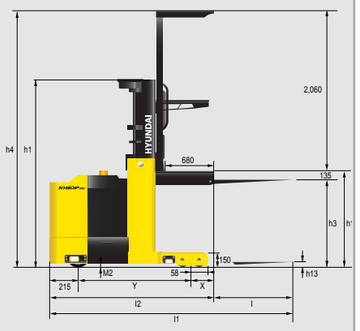
10BOP-7

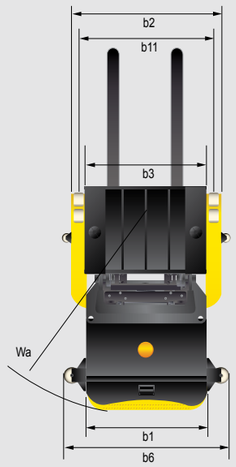


13BOP-7



Dimension





Specification

■ Identification				
1.1	Manufacturer		HYUNDAI	HYUNDAI
1.2	Manufacturer's model designation		10BOP-7	13BOP-7
1.3	Power supply(electric ,diesel,petrol,gas,manual)		electric	electric
1.4	Type of operation(hand,pedestrian,standing,seated,order-picker)		order picker	order picker
1.5	Load capacity / rated load	Q (t)	1.0	1.36
1.6	Load center distance	c (mm)	600	600
1.8	Load distance, center of drive axle(Loadwheel) to fork	x (mm)	235	235
1.9	Wheelbase	y (mm)	1,430	1,480
■ Weights				
2.1	Service weight (Inc. battery)	kg	2,760	2,902
2.2	Axle loadings laden drive end / load end	kg	958 / 2,802	849 / 3,413
2.3	Axle loadings unladen drive end / load end	kg	1,549 / 1,211	1,625 / 1,276
■ Wheels,Chassis				
3.1	Tyres		Polyurethane	Polyurethane
3.2	Tyre size drive end	mm	305 x 140	305 x 140
3.3	Tyre size load end	mm	152 x 100	152 x 100
3.5	Wheels, numbers (x=driven wheels) drive / load		1 x / 4	1 x / 4
3.6	Track width (front) drive end	b10 (mm)	0	0
3.7	Track width (rear) load end	b11 (mm)	909 (1,109)	909 (1,109)
■ Basic Dimensions				
4.2	Colosed mast height	h1 (mm)	2,220	2,220
4.4	Lift height	h3 (mm)	3,275	3,275
4.5	Height, mast raised (console / overhead guard)	h4 (mm)	5,470	5,470
4.7	Height to top of overhead guard	h6 (mm)	2,260	2,260
4.8	Platform height (h13+135mm)	h7 (mm)	200	200
4.14	Picking height (h12+1,600mm)	h28 (mm)	5,010	5,010
4.15	Height lowered (Fork Height)	h13 (mm)	65	65
4.19	Overall length without load	l1 (mm)	3,080	3,130
4.20	Length to front face of forks	l2 (mm)	1,880	1,930
4.21	Overall width	b1 / b2 (mm)	1,020 / 1,050	1,020 / 1,050
4.22	Fork dimensions	s/e/l (mm)	40 x 100 x 1,200	40 x 100 x 1,200
4.25	Distance between fork-arms	b5 (mm)	588	588
4.26	Platform width	b3 (mm)	1,020 (1,250)	1,020 (1,250)
4.27	Guide roller width	b6 (mm)	see option chart	see option chart
4.32	Foor clearance, centre of wheelbase 2	m2 (mm)	51	51
4.33	Working aisle width, with 800 x 1,200 crosswise	Ast (mm)	2,941	2,990
4.34	Working aisle width, with 1,200 x 800 lengthwise	Ast (mm)	3,014	3,063
4.35	Turning radius	Wa (mm)	1,769	1,818
■ Performance Data				
5.1	Speed, laden / unladen	km/h	9.5 / 10	9.5 / 10
5.2	Lift speed, laden / unladen	mm/s	250 / 350	240 / 350
5.3	Lowering speed, laden / unladen	mm/s	380 / 380	380 / 380
5.9	Acceleration time (over 10m)	sec	7	7
5.10	Brakes		electric release	electric release
■ E-Motor				
6.1	Dirve motor rating S2 = 60min	kW	5.2	5.2
6.2	Lift motor rating at S2 = 15%	kW	10.6	10.6
6.4	Battery voltage, capacity K5	V/Ah	48 / 300	48 / 400
6.5	Battery weight 5% (dependent on manufacturer)	kg	600	730
■ Other Details				
8.1	Drive control		AC	AC
8.4	Noise peak at operator ears	dB (A)	-	-

MEMO