

22/25/30/33D-9

Diesel Counterbalance Trucks

MOVING YOU FURTHER

HYUNDAI HEAVY INDUSTRIES



■ Some of the photos may include optional equipment.

 **HYUNDAI | FORKLIFT**
CONSTRUCTION EQUIPMENT AMERICAS, INC.

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2015. 03 Rev. 0

 **HYUNDAI**
CONSTRUCTION EQUIPMENT AMERICAS, INC.

Your satisfaction is our priority!

Hyundai introduces a new line of 9-series diesel forklift trucks.

The newly designed 4 wheel counterbalance trucks provide every operator comfortable driving, increased productivity and easy maintenance.

New Diesel Forklift with Proven Quality and Advanced Technology

- Maximum performance
- Spacious operator's cab
- Switch type parking brake
- 5.6 inch LCD color monitor
- Truck incline warning system
- OPSS System for safe operation
- Easy serviceability
- Max speed limit function
- HAC(Hill Assist Control)
- Password starting system
- Load weight indicator
- Auto fork leveling system (Optional)



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High Efficiency & Optimal Performance

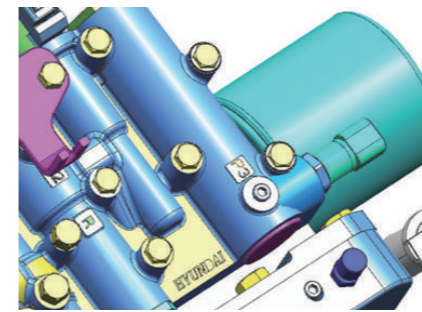


Powerful Tier IV Final Diesel engine and high technology system provide you with enhanced performance and highest productivity.

22/25/30/33D-9



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Clutch Protection System

The clutch protection system discourages excessive use of inching as well as minimizes wear and tear.



Boosting Type Brake Valve (Optional)

The boosting type brake valve is applied for strong braking performance.



Highly Durable Drive Axle with Wet Disc Type Brake

The strengthened drive axle has a U-Joint connection to the transmission to ensure low vibration and easy maintenance.



Fully Hydrostatic Power Steering

The hydraulic steering system always guarantees smooth and flexible steering, preventing over-run and kick-back.



KUBOTA V3307 Engine EPA Tier IV Final, 67HP/2,300rpm

High Power Engine - KUBOTA V3307

Market approved quality of KUBOTA V3307 engine ensures incomparable performance, durability and excellent fuel efficiency.



Travel Speed (MAX)

Model	mph
22D-9	11.5
25D-9	11.5
30D-9	12.4
33D-9	12.3

Gradeability (MAX)

Model	%
22D-9	45.8
25D-9	40.7
30D-9	31.4
33D-9	29.0

Faster Travel Speed & Gradeability

The powerful high-output engine provides dynamic acceleration, excellent gradeability and optimal travel speed on any terrains and slopes.

Optimized Ergonomics



The ergonomically designed cabin and the new style LCD color monitor provides full support and comfort to the operator.

22/25/30/33D-9



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Spacious Operator Cabin

The newly designed cabin provides wide visibility and spacious environment, ensuring all day comfort for the operator.



Optimized Pedal Position

On the 9-series the pedals are mounted to the console to reduce operator fatigue, noise and dust from the engine compartment.



Low Entrance Height

The low entrance height ensures easy and safe access for the operator.



Adjustable Steering Wheel

To achieve a comfortable driving position, the angle of the steering column can easily be adjusted by a lever on the right-hand side of the steering column.



Comfortable Grammer Seat

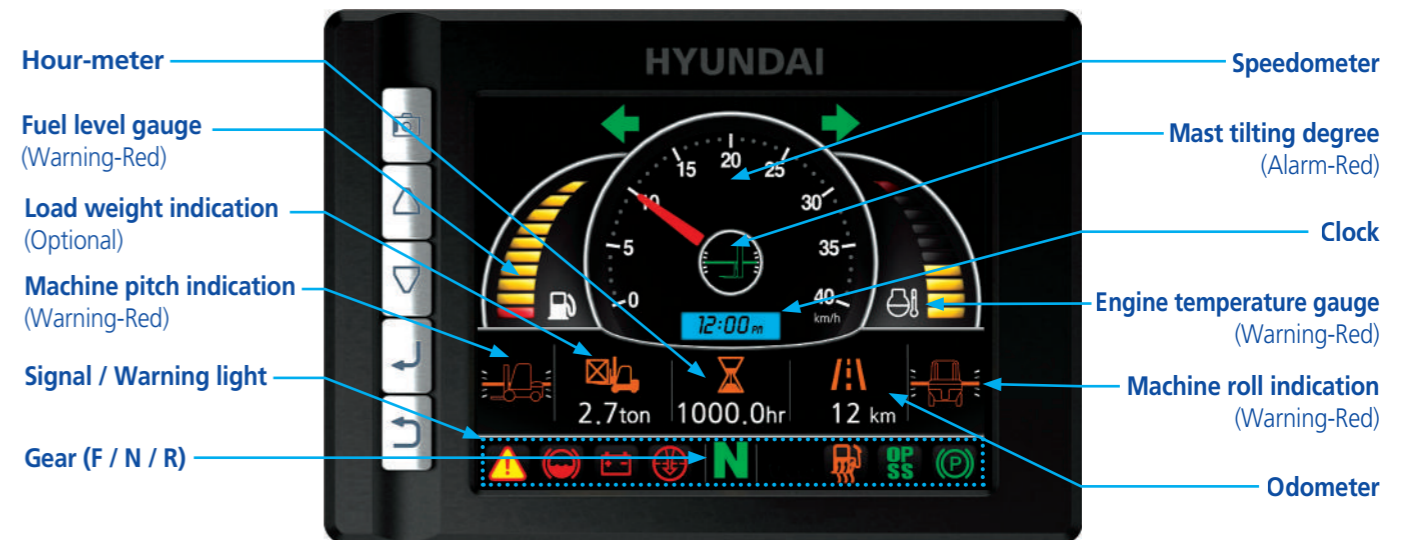
Easily adjustable suspension seat, based on a human engineering design, reduces operator fatigue and provides great comfort and durability.

*ELR (Energy Locking Retractor) Type Seat Belt (Standard)

*Heated seat and Head-rest (Optional)

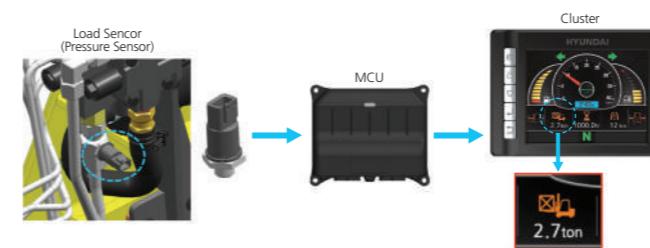
Advanced LCD Monitor

The 5.6 inch wide screen LCD color monitor allows the operator to control the machine with ease. The monitor features speed, travel direction, battery discharge indicator and hour meter.



Max Speed Limit System

- Safety function for the customer
- Maximum speed limit range : 5mph - 12mph (Selectable)
- Easy to set the maximum speed limit
- Smooth acceleration while reaching maximum speed



Load Indicator

The load indicator displays the load weight on the monitor. The load sensor reduces the time to check loaded weight and the alarm alerts the driver when overloaded.



Auto Fork Leveling System (Optional)

To improve the productivity, the auto fork leveling system will automatically stop the tilt movement when the mast is in a straight position.

Advanced Safety



Enhanced operator compartment allows for comfortable operation.

22/25/30/33D-9



Excellent Visibility for Safe Operation

Optimized lift cylinder arrangement provides operator with wider visibility. The panoramic mirror expands the driver's view when backing up.

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HAC (Hill Assist Control)

Automatically activates the HAC when the truck stops on an uneven surface.

Fork Safety Features

When the forks are being lowered, a down-control valve maintains the controlled speed. The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.

OPSS (Operator Presence Sensing System)

All mast and drive movements stop functioning when the operator is not in the seat.

- Lift Lock
- Tilt Lock
- Drive Lock
- Parking



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Strong Overhead Guard

Exceeding CEE and ANSI regulations, the overhead guard offers optimal protection combined with excellent all round visibility.



Steel Side Cover (Optional)

The strengthened steel side cover provides enhanced durability.



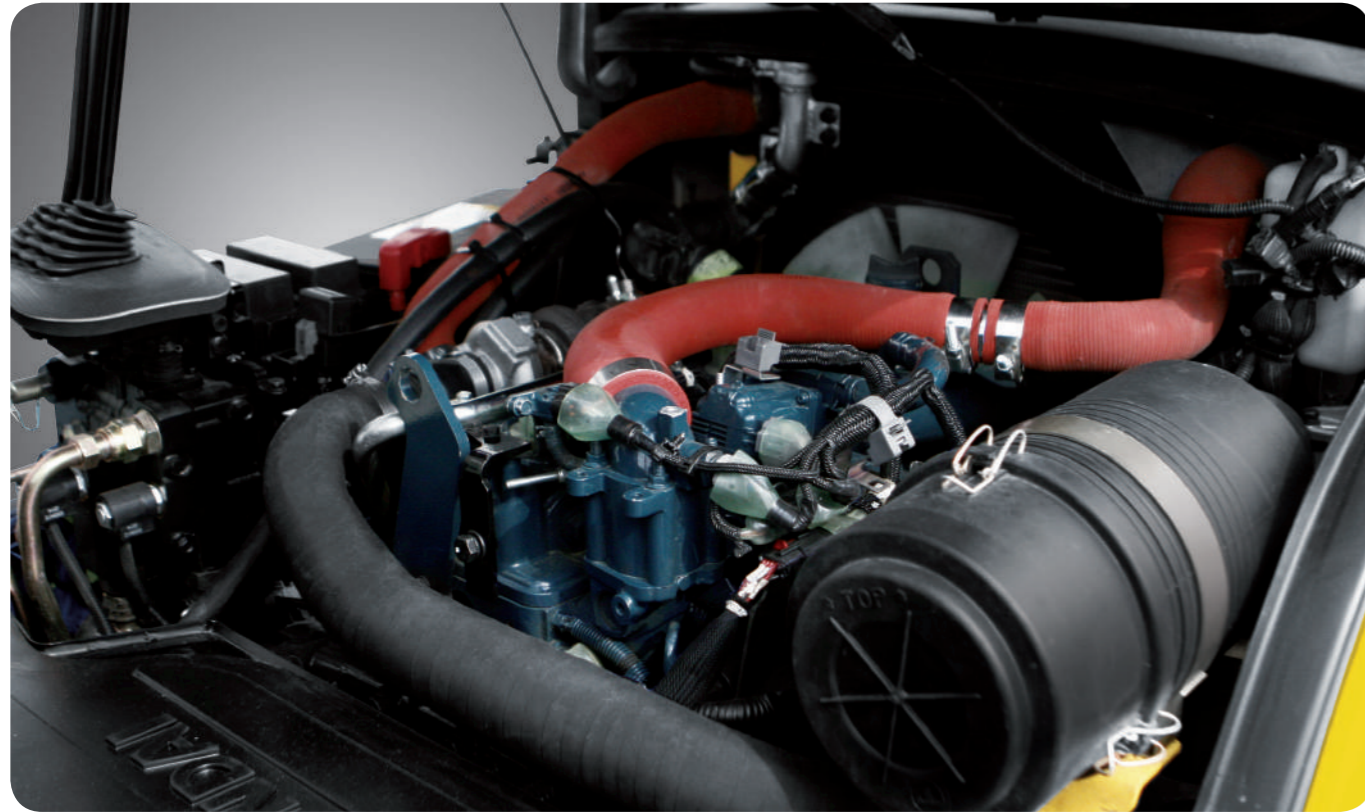
Safety Lamps & Rear Reflectors

Halogen headlights and rear LED combination lights offer the driver visibility in all circumstances. Rear reflectors mounted on the counterweight enhance safety for the driver and the application.

Fast and Easy Maintenance

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

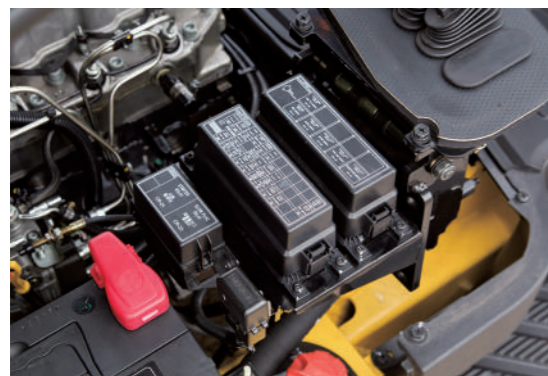
22/25/30/33D-9



Large Engine Hood

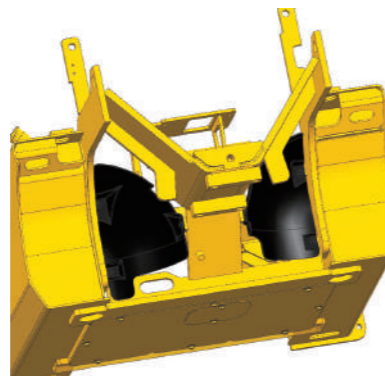
Easily accessible engine compartment assures fast and efficient maintenance. The enlarged air cleaner (8") provides extended service life.

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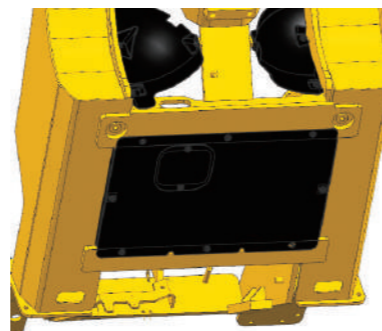
Waterproof & Dustproof Cover

Newly developed Waterproof and Dustproof fuse box and relay box eliminates premature failures and provides extended life.



Rear Tire Cover (Optional)

The rear tire cover with polyethylene material is well-suited for preventing foreign substances from clogging the radiator.



Under Cover (Optional)

The under cover protects the engine and components from dust and debris, extending component life.



Rear View Camera (Optional)



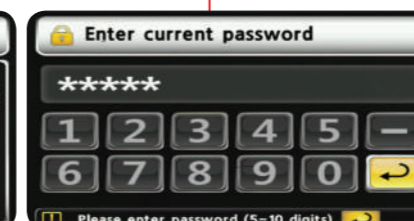
Parking Brake Switch

With auto parking function when the operator is not in the seat

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Maintenance Management				
Item	Interval	Elapse Count	Alarm	
Axle Planetary Ge...	100	2 0	0	
Transmission Oil	100	2 0	0	
Transmission Oil F...	100	2 0	0	
Hydraulic Tank Al...	250	2 0	0	
Air Cleaner Comp...	450	2 0	0	
Engine Oil Filter	500	2 0	0	

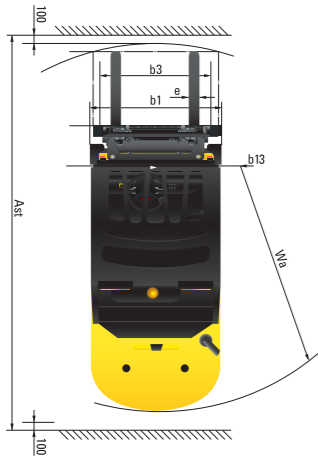
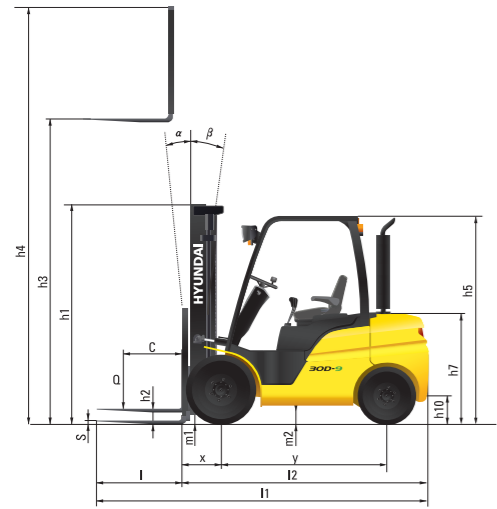
Maintenance Management Display



Fuel Cap with Key

New 9 Series

Dimension

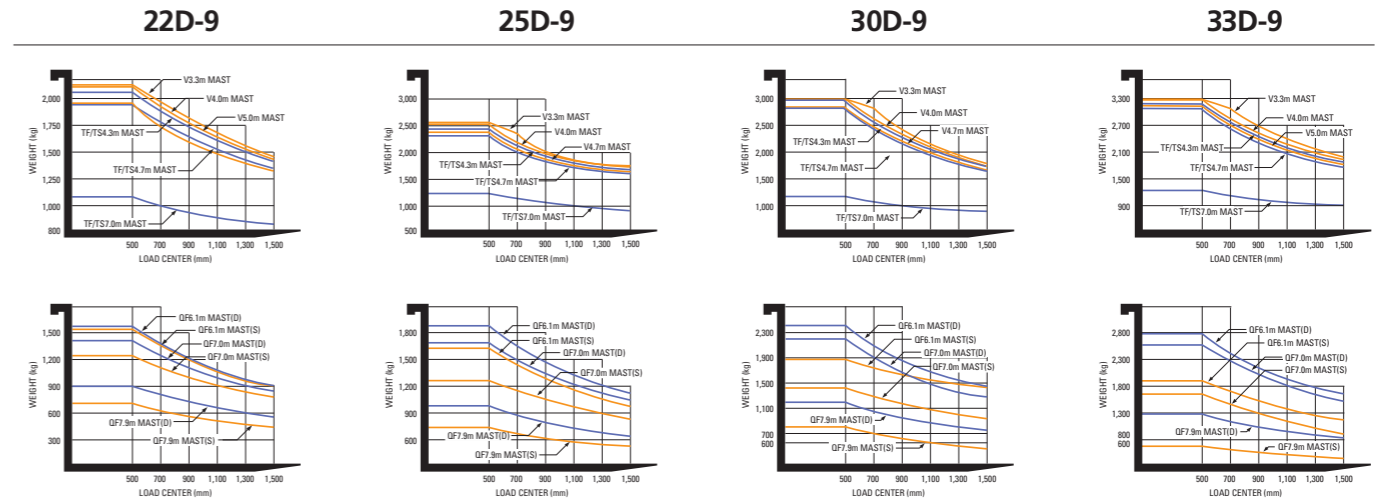


Specification

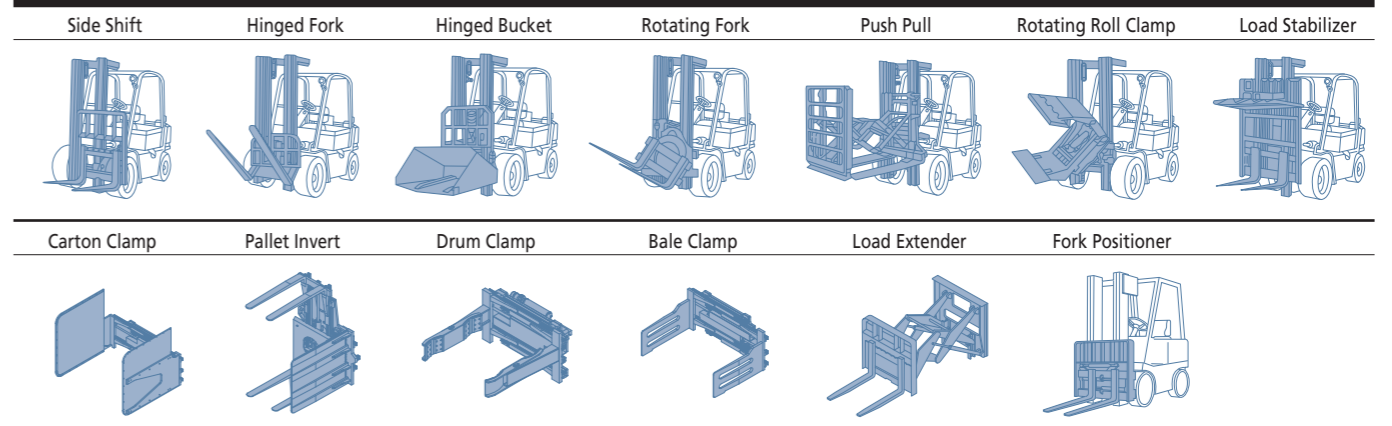
Identification					
1.1	Manufacturer	Hyundai	Hyundai	Hyundai	Hyundai
1.2	Manufacturer's model designation	22D-9	25D-9	30D-9	33D-9
1.3	Drive: electric (battery or mains), diesel, petrol, fuel gas, manual	DIESEL	DIESEL	DIESEL	DIESEL
1.4	Type of operation: hand, pedestrian, standing, seated, order-	seated	seated	seated	seated
1.5	picker	lb 4400	5000	6000	6500
1.6	Load capacity / Rated load	c in 24	24	24	24
1.8	Load center distance	x in 18	18	18	48
1.9	Load distance, center of drive axle to fork	y in 65	65	67	67
Weights					
2.1	Service weight	lb 7877	8572	9440	10055
2.2	Axle loading, loaded front / rear	lb 10380 / 1349	12273 / 1802	14054 / 1997	15007 / 2324
2.3	Axle loading, unloaded front / rear	lb 3684 / 4193	3527 / 5044	3675 / 5765	3589 / 6466
Wheels, Chassis					
3.1	Tires ; Pneumatic(P), Solid(S), Non-marking(N)	P	P	P	P
3.2	Tires size, front	7.00 - 12, 14PR	7.00 - 12, 14PR	28X9 - 15, 14PR	28X9 - 15, 14PR
3.3	Tires size, rear	6.50 - 10, 14PR	6.50 - 10, 14PR	6.50 - 10, 14PR	6.50 - 10, 14PR
3.4	Number of wheels front / rear (x=driven wheels)	2x / 2	2x / 2	2x / 2	2x / 2
3.5	Track width, front	in 39	39	40	40
3.6	Track width, rear	in 39	39	39	39
Basic Dimensions					
4.1	Mast / fork carriage tilt forward / backward (α / β) degrees	6 / 10	6 / 10	6 / 10	6 / 10
4.2	Lowered mast height	h1 (in) 86	86	86	86
4.3	Free lift	h2 (in) 6.1	6.1	6.1	6.1
4.4	Lift height	h3 (in) 130	130	130	130
4.5	Extended mast height	h4 (in) 177	177	177	177
4.7	Overhead guard height (cabin)	h5 (in) 85 (2170)	85 (2170)	86 (2190)	86 (2190)
4.8	Seat height / standing height rel. to SIP	h7 (in) 47	47	48	48
4.12	Coupling height	h10 (in) 12	12	13	13
4.19	Overall length	l1 (in) 143	144	147	149
4.20	Length to face of forks	l2 (in) 101	103	105	108
4.21	Overall width	b1 (in) 47	47	48	48
4.22	Fork dimensions(hook type)	l / e / s (in) 1050 x 100 x 45	1050 x 100 x 45	1050 x 122 x 45	1050 x 122 x 45
4.23	Fork carriage ISO 2328, class / type A,B	2A	2A	3A	3A
4.24	Fork-carriage width	b3 (in) 43	43	43	43
4.31	Ground clearance, loaded, under mast	m1 (in) 5.1	5.1	5.7	5.7
4.32	Ground clearance, centre of wheelbase	m2 (in) 6.2	6.2	7.1	7.1
4.33	Aisle width for pallets 1,000x1,200 crossways (LxW)	Ast (in) 156	158	161	163
4.34	Aisle width for pallets 800x1,200 lengthways (WxL)	Ast (in) 164	166	169	171
4.35	Turning radius	Wa (in) 90	92	95	97
4.36	Smallest pivot point distance	b13 (in) 28	28	29	29
Performance Data					
5.1	Travel speed, unloaded	mph 11.5	11.5	12.4	12.4
5.2	Lift speed, loaded/ unloaded	ft/min 112 / 126	110 / 126	93 / 104	91 / 104
5.3	Lowering speed, loaded/unloaded	ft/min 98 / 89	98 / 89	98 / 89	98 / 89
5.5	Drawbar pull, loaded	in 5908	5921	5379	5386
5.7	Gradient performance, loaded	% 45.8	40.7	31.4	29.0
5.9	Acceleration time, loaded/ unloaded(10m)	sec -	-	-	-
5.10	Service brake	FOOT	FOOT	FOOT	FOOT
Engine					
6.1	Engine manufacturer / type	kubota v3307	kubota v3307	kubota v3307	kubota v3307
6.2	Engine power acc. to ISO 1585	hp/rpm 67 / 2300	67 / 2300	67 / 2300	67 / 2300
6.3	Maximum Torque	ft-lb/rpm 168.5 / 1500	168.5 / 1500	168.5 / 1500	168.5 / 1500
6.4	No. of cylinder / cubic capacity	EA/cc 4 / 3331	4 / 3331	4 / 3331	4 / 3331
6.5	Fuel consumption acc. To VDI cycle	g/h 0.81	0.85	0.9	0.95
Other Details					
8.1	Type of drive control	PowerShift	PowerShift	PowerShift	PowerShift
8.2	Operating pressure, system / attach	bar 182 / 162	182 / 162	196 / 162	196 / 162
8.3	Oil volume (hydraulic)	l 36	36	38	38
8.4	Sound pressure level (at driver's ear according to DIN 12053)	dB(A) 80	80	80	80
8.5	Trailer coupling, type DIN	PIN	PIN	PIN	PIN

22/25/30/33D-9

Load Capacity



Various Applications for Unit



Optional Items

- Fork(in)
 - 22/25D-9 : 36, 42, 48, 54, 60, 72
 - 30/33D-9 : 42, 48, 60, 72
- Sideshift, , Fork positioner
- Tire : Pneumatic(STD)/ Solid(superelastic) / Non-marking / Dual drive (solid or pneumatic)
- M.C.V : 4-Spool
- Auto Fork Leveling System
- Rear View Camera
- Enclosed Cab with Heat
- Beacon Lamp (Bulb or LED) (Amber, Red, Blue)
- Rear work Lamp
- F-N-R & Horn Knob switch
- Rear Horn