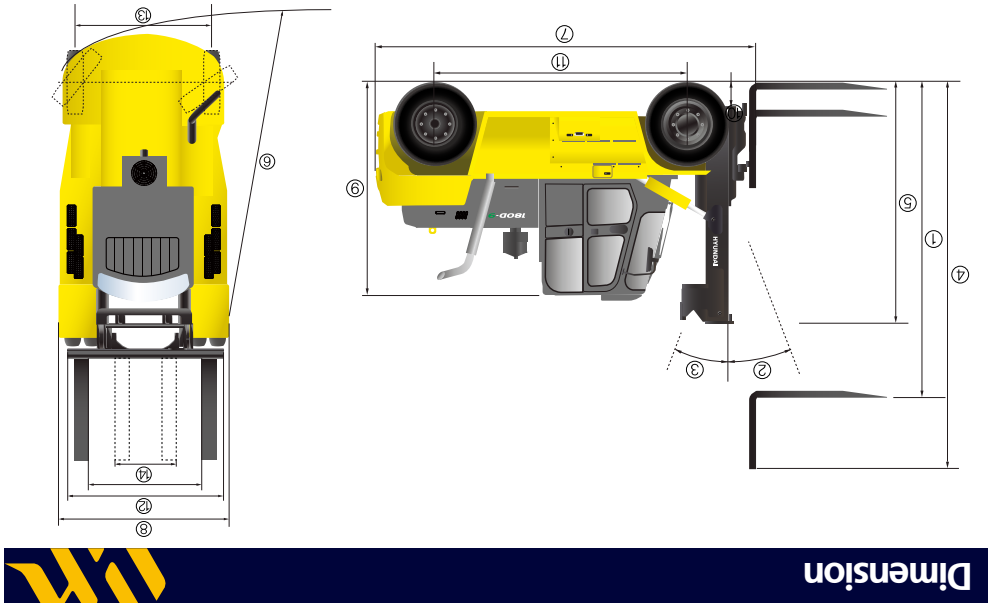


Engine	Basic		Identification	
	Displacement	Max. Torque	Load capacity	Manufacturer's type designation
Max. Torque	kgf · m/rpm	74.7 / 1,500	16,000	180D-9B
Engine power acc. to ISO 1585	ps/rpm	165.9 / 2,300	18,000	160D-9L
Manufacturer / Model	-	Cummins / Q5B6.7	kg	
Tires (front / rear)	-	12.00-20-20PR	mm/sec	
Tread (front ② / rear ③)	mm	1,860 / 2,034	mm/sec	
Ground clearance ⑩ / Wheel base ⑪	mm	245 / 3,750	mm/sec	
Height of overhead guard (cabin) ⑨	mm	3,075	mm/sec	
Length to face of forks ⑦ / Overall width ⑧	mm	5,564 / 2,540	mm/sec	
Service weight	kg	23,954	mm/sec	
Max. Drawbar pull, loaded	N	127,281	mm/sec	
Min. Turning Radius ⑥	mm	5,220	mm/sec	
Max. Gradeability, loaded	(%)	33 (18.3)	mm/sec	
Travel speed, unloaded	km/hr	35	mm/sec	
Extended height ④ / Lowered height ⑤	mm	4,665 / 3,200	mm/sec	
Tilting Angle (forward ③ / backward ③)	degree°	10 / 10	mm/sec	
Fork carriage width ⑫	mm	2,540	mm/sec	
Fork dimension, l x w x h mm	mm	2,450 x 100 x 250	mm/sec	
Lowering speed, loaded / unloaded	mm/sec	430 / 390	mm/sec	
Lift speed, loaded / unloaded	mm/sec	330 / 450	mm/sec	
Maximum lift height ①	mm	3,020	mm/sec	
Load center	mm	1,200	mm/sec	
Load capacity	kg	900	mm/sec	
Manufacturer's type designation	160D-9L		mm/sec	

Specification

Mast type	Overall mast height (lowered)	Free Lift	Tilting Angle	3-stage mast		2-stage mast	
				TS700	TS658	TS460	TS508
Load capacity	900mm LC	Fwd / Bwd	deg	7,034	6,584	4,634	5,084
				3,750	3,600	2,950	3,100
				2,338	2,188	1,538	1,688
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
Truck weight (unloaded)	1200mm LC	Fwd / Bwd	deg	2,338	2,188	1,538	1,688
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10
				10 / 10	10 / 10	10 / 10	10 / 10

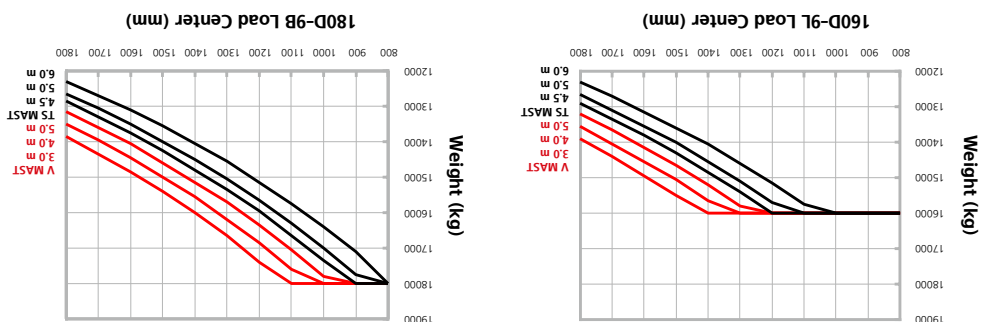
Mast specifications



Dimension

- Fork (L) (mm) : 1800, 2000, 2450, 3150
- Mast : Simplex Mast / Triplex Mast
- MCV : 3-Spool / 4-Spool /
- 5-Spool, Finger tip
- Sliding Carriage
- Separator Holder Type Fork Carriage
- Air Compressor
- Seat : Heat, Leather
- Bluetooth Hands Free
- Air Conditioner & Heater
- Load weight indicator
- Rear Wheel Angle Monitoring
- Bias / Radial Tire
- Beacon Lamp (LED)
- Rear View Camera
- RMS
- Top Wiper
- Cabin

Optional Items



Load Capacity



MOVING YOU FURTHER

160D-9L
180D-9B



Some of the photos may include optional equipment

Your satisfaction is our priority.

Proven technology! Hyundai 9 Series diesel forklift

The Hyundai 9 Series big diesel truck is ready for the customers.

Overwhelming the worksite with its superior performance and providing optimal fuel efficiency, the Hyundai 9 Series big diesel truck offers outstanding durability based on its application of high-quality hydraulic and functional components suitable for large and heavy load duties, as well as comfortable and pleasant driving space, and convenient after-sales management.

Excellent performance

- Eco-friendly, powerful, 278ps Cummins QSL9 engine
- Fully automatic ZF electronic transmission with 3 forward-reverse shifts
- Wet disc brake & DIC axle
- 3-stage TS mast (OPT)

Ensured safety at the logistics site

- Auto parking brake
- Real-time notification of rear wheel steering angle (OPT)
- Operator presence sensing system (OPSS)
- Speed limit setting
- Machine inclination warning

Comfortable and safe driving

- Deluxe cabin equipped with fully automatic air conditioning
- hydraulic pilot valve lever
- Load weight indicator (OPT)
- Password starting system

Convenient management

- One-touch electric motor-driven tilting cabin
- Notification of replacement of the consumable items
- Engine fault diagnosis





Power & Performance

High Efficiency, Optimal Performance

Robust, refined, and luxurious design-160D-9L, 180D-9B!
Offering increased power and fuel economy,
this model will be your best partner in
any work environment.



Some of the photos may include optional equipment

Powerful and economical Cummins QSB6.7 engine

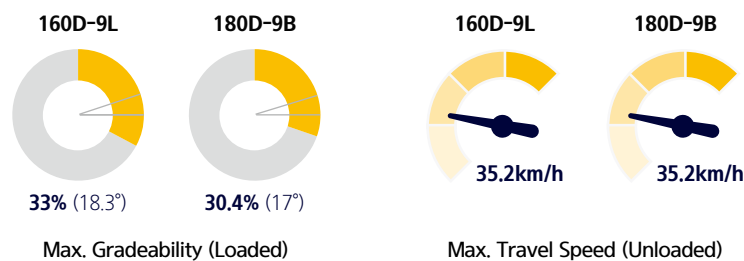
The six-cylinder VGT (variable-geometry turbocharger) QSB6.7 engine, equipped with the German Bosch's fuel system proven for its reliability and durability, shows lower vibration compared to other engines, delivers excellent cold-start performance, and does not emit white smoke in the winter. Moreover, its combination with the ZF transmission, optimized in fuel injection control and improved in driving efficiency, further enhances fuel efficiency and performance. In particular, you can experience increased power during operations due to its high torque at low and medium speeds, and DOC and SCR emission aftertreatment systems have been applied to satisfy Tier 4. (requires urea solution).



165.9PS/2,300rpm
74.7kgf.m/1,500rpm

Gradeability and travel speed

With the best engine power, it delivers outstanding running performance and exceptional gradeability, ensuring stable operation at high speeds, on rough terrains and slopes.



ZF Full-automatic transmission

Due to optimized engine and performance of the transmission, acceleration performance in low-speed sections has improved and noise, heat generation has reduced. Also, it is possible to check the transmission status/failure etc. on the display window of the cluster.



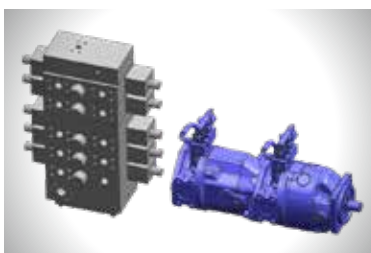
High capacity drive axle

The planetary gear type, high capacity drive axle enables outstanding power transmission and shows exceptional adaptability to sudden changes in torque. Also, wet-type multi-plate service brake delivers consistent braking power when operations are repeated.



Hydraulic steering axle

The hydraulic steering system always guarantees smooth and flexible steering, preventing over-run and kick-back. Taper roller bearings and ADI knuckles with excellent strength and wear resistance are used in consideration of heavy load operation. The newly added protector prevents damage of rear wheel hub bolts.



Load sensing hydraulic system

Hydraulic system consisting of a Bosch's swash plate piston pump and control valve optimizes energy consumption and increases durability of engine and transmission.



Increased mast tilting angle (OPT)

Tilting speed is improved by combining some hydraulic pressure generated from the secondary pump to the primary pump flow rate. The tilting angle of 15 degrees forward and 10 degrees backward increases work efficiency.

Low engine RPM conversion

Depending on the need, the driver can convert the engine to a low RPM. The RPM will return to its initial settings value once engine is stopped and restarted.

Engine mode control

Engine performance can be adjusted to suit the workload, simply by operating a switch mounted on the side panel.
STD mode : Light load operations (fuel saving mode)
PWR mode : Operations on slope requiring intense power



3-stage T/S mast for high lifting (OPT)

This model provides 7 types of 3-stage masts with lifting height of 4.6~7.0m, suitable for the indoor working conditions where the truck height can be restricted by the factory entrance height. The removable free lift cylinder (first cylinder) provides wider visibility.



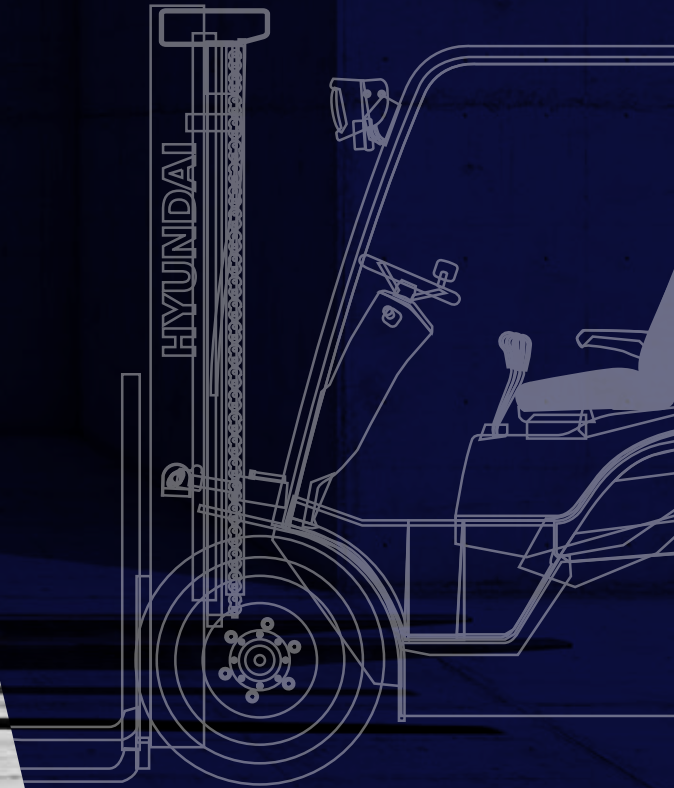
Easy & Comfort

Comfortable Workspace Intuitive Monitoring

Ergonomically designed workspace for operator provides the best comfort in any type of operation.



Some of the photos may include optional equipment



Ergonomic operating space

The ergonomically designed cabin was made for more space, a wider field of view and operator comfort. The smooth lever and pedal operation, adjustable tilting handle, suspension seat and deluxe cabin provide comfortable and efficient operation.



Some of the photos may include optional equipment



Full air suspension seat (OPT)

Ergonomically designed to support a comfortable posture, the full air suspension seat relieves fatigue and enables greater comfort for operation.

New style & centralized cluster

The TFT LCD color monitor indicates real-time driving information and changing vehicle stability depending on the work condition, thus allowing easy and efficient control for the operator. Diagnostic error codes allow easy trouble-shooting and the operator can select various performance modes.



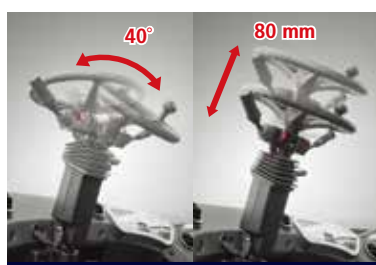
Main Functions

- Urea level gauge
- T/M information display
- Parking brake indicator
- Battery charging failure warning
- Brake system overheat warning
- Air cleaner filter warning
- Machine inclination warning
- Load weight indicator
- Steering wheel position
- Engine coolant temperature warning
- Engine check warning lamp
- Seatbelt warning
- Exchange consumable indicator
- Mast tilt angle indicator
- High beam indicator
- T/M error warning
- OPSS indicator
- Inching indicator



Ergonomic pedals

The high-quality floor mat and ergonomically designed pedal arrangement reduce operator fatigue and drastically improve productivity.



Adjustable steering wheel

The steering wheel can be pushed forward or backward, pushed in or out to suit the driver's body shape, providing an all the more comfortable work environment.



Responsive levers

Responsive levers with the latest hydraulic system enables micromanipulation and excellent performance.
(4-Lever : STD), (3/5 Lever : OPT)



Fully automatic air-conditioner (OPT)

The air-conditioner automatically adjusts temperature to the set temperature and provides more comfortable working environment for the operator.



Integrated communications controller

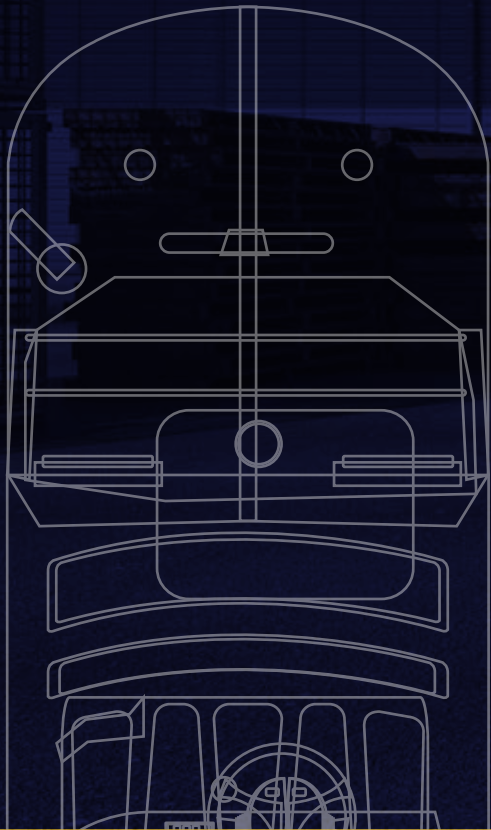
Cutting-edge communications technology enhances the operator convenience (Bluetooth hands-free, cellphone call, radio communication, USB/MP3 audio control functions).



Secure & Safety

Excellent visibility Advanced safety

The safely designed driver's space makes your operating more comfortable.



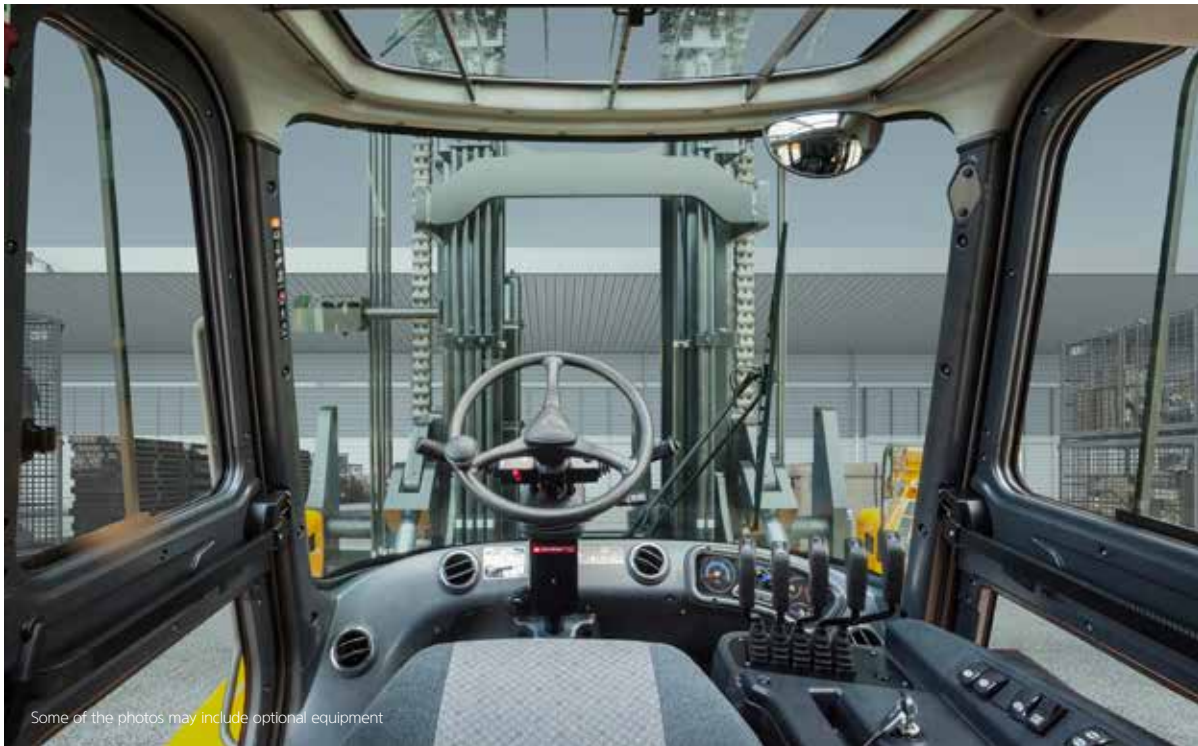
ADVANCED SAFETY

Some of the photos may include optional equipment

EXCELLENT VISIBILITY

Excellent visibility for safe operation

Optimized lift cylinder arrangement provides the operator with wider visibility.
A panoramic mirror expands the driver's rear view.

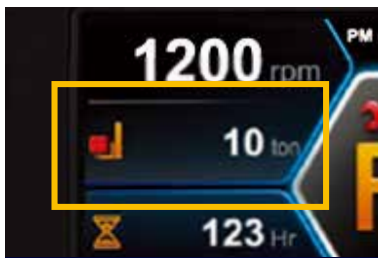


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Machine inclination warning system

The grade (left) and slope (right) sensors are built into the MCU and provide the grade and slope status information of the vehicle connected with the road surface condition in real time. Also, an alarm is emitted when the KS regulation is exceeded.



Load weight indicator (OPT)

When lifting a load, a change in hydraulic pressure of the lift line is converted to a measurement of weight displayed in real time, and a warning is given at the time of overload.



Steering wheel angle (OPT)

As a measurement of the steering angle sensor, which is installed on the kingpin of the rear axle, is displayed on the large cluster screen as an image, the operator can predict the direction of the vehicle without difficulty.

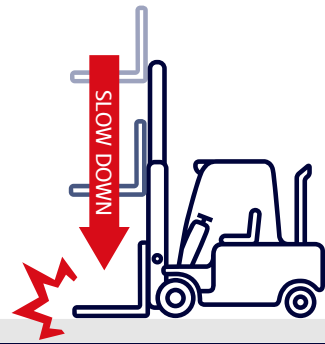
Safety features

The adoption of a high-sensitivity sensor and advanced safety system eliminates the risk of safety accidents.



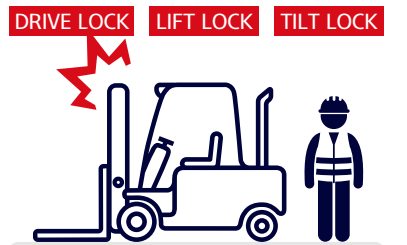
Auto parking brake

If the operator leaves the seat while the gear lever is in neutral, the parking brake is automatically engaged to secure safety, and released upon the operator's return to the seat.



Fork Safety Features

The down-safety valve prevents forks from dropping down in case of sudden damage of hydraulic line.



Operator presence sensing system

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

Speed limit setting

The operator can set and limit the maximum speed from 10km/h to 30km/h.

Password starting system

The operator can set a password to prevent vehicle theft and possible safety accidents in case the vehicle is used by an unauthorized person.
(Up to 10 passwords can be set.)



Increased night work efficiency

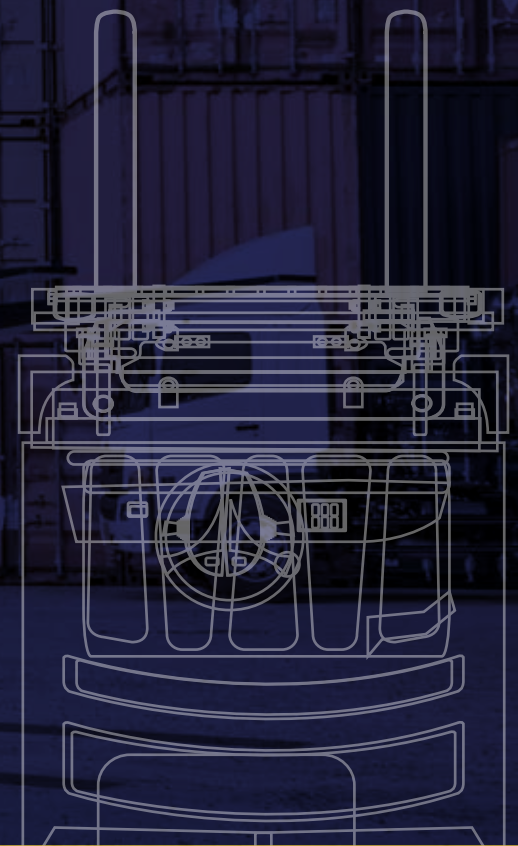
Four work lamps on the upper side of the mast, two headlamps on the frame fender, and two work lamps on the upper side of the counterweight enable efficient nighttime and indoor operations.



Maintenance & Convenience

Fast and Easy Maintenance & Convenience Features

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



Some of the photos may include optional equipment

Fully opening tilting cabin and hood

The tilting cabin that has been dramatically improved in its maintainability functions with a separate electric motor and hydraulic pump. By opening the cabin, which can be tilted to a maximum of 54 degrees, and the engine hood, which can be opened to the left or right, all functional components installed inside the chassis can easily be examined and serviced.



Some of the photos may include optional equipment



Automatic tilting system

The cabin tilting system allows the operator to tilt the cabin with a single switch up to 54 degrees, thus enabling easy maintenance of functional devices located under the driver seat.



Cabin air cleaner filter

The air cleaner filter blocks external dust and noise from the cabin, and continuously supplies clean air indoor to maintain fresh air in the driving space.



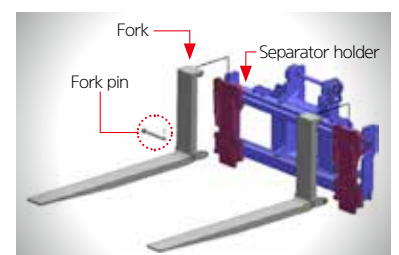
Convenient air cleaner

Air cleaner filter with large capacity enables longer filter life span. The operator can access the air filter easily by simply opening the engine hood.



Up-to-date cooling system

Variable speed and remote controlled fans reduce required engine power and noise, while the aluminum cooler improves durability and heat output.



Separator holder carriage (OPT)

To improve handling and easily switch forks and other attachment, separator holder system is adopted as option. It is possible to install various attachments easily.



Rear view camera (OPT)

A rear view camera and monitor are linked to the reverse gear, ensuring safer rear work environment.



Battery master switch

Damage is prevented during inspection/ maintenance of electronic units, and battery discharge.



Engine fault diagnosis

Details of engine fault diagnosed by the engine control unit (ECU) can be checked on the cluster.



Maintenance management

Replacement cycle of consumable items can be checked on the monitor, thus preventing performance deterioration of major functional parts due to failure to notice deterioration.