

Pneumatic Tire Diesel Forklifts

D-9V Series

70/80D-9V

15,500-17,500 lbs. capacity



HYUNDAI
MATERIAL HANDLING

PRODUCT FEATURES OVERVIEW

UP VALUE

70/80D-9V

As the industry moves forward, the D-9V Series sets a new benchmark for value and high performance.

- Optimized hydraulic system and new engine performance

70D-9V
12% ↑

Higher fuel-efficiency than 9 Series
80D-9V: 11%

- Low-noise engine and optimized cabin structure

70D-9V
5.4dB ↓

Lower noise level inside than 9 Series
80D-9V: 5.2dB

Comprehensive safety features

- **Auto Parking Brake**
 - Automatically applies the parking brake when the engine stops or when OPSS activates.
- **OPSS (Operator Presence Sensing System)**
 - Restricts travel, lift, and tilt functions when the operator leaves the driver's seat.
- **Seatbelt Interlock** **Option**
 - This system restricts operation if the seatbelt is not worn.
- **Road Slope Warning**
 - Audible and visual alarm if slope exceeds the preset threshold.
- **Password Start Limit**
 - Helps prevent unauthorized use by requiring an approved password for operation.
- **Travel Speed Limit**
 - The maximum driving speed can be set to prevent accidents caused by exceeding the speed limit

Environmentally friendly

- The Hyundai DN03 engine meets Tier 4 final emissions regulations and reduces operating costs through improved fuel efficiency, supporting both eco-friendly operation and lower total operating expense.

Innovations that lower cost and raise reliability and durability

Load-sensing hydraulics + 3.4L industrial engine

- **Benefit:** Improved fuel efficiency, 11-12% depending on application
- **Customer value:** Lower fuel operating cost, especially in high-travel duty cycles.

ZF 3WG94 transmission with upgraded TCU

- **Benefit:** More consistent shifting and smarter control under changing loads
- **Customer value:** Better operator feel, productivity, and reduced drivetrain stress.

HDX drive axle with reinforced differential and final reduction gears

- **Benefit:** Higher stiffness and durability in high-load work
- **Customer value:** Longer service life and reduced downtime.

ECONOMICAL PERFORMANCE



Greater driver comfort and productivity

- **New cab design improves convenience and serviceability**
 - Reduces visual distortion at the windshield edges.
 - Improved side visibility with glass-type side doors.
 - Better access to frequently used functions with repositioned console switches and light controls.
- **Full hydraulic brake with electronic inching system**
- **Air suspension seat with swivel option**
- **Improved RCV lever access**
 - Optimized lever position with a 5-degree inclined mounting.
- **New color monitor for improved visibility**
 - Clearer display of key truck information at a glance.

Simplified servicing access

- **Auto-tilting cab (up to 52° tilt angle)**
 - Interlock prevents cab tilting with the passenger door open, reducing risk of accidental damage.

Eco-friendly Hyundai (HDI) DN03 engine

The HDI DN03 is engineered for heavy-duty equipment and meets Tier 4 Final emissions regulations. Designed for high energy efficiency and long-term durability, it delivers strong low-to-mid range torque to improve work efficiency and support a quieter operating environment.



Model	70/80D-9V
Rated Power(hp/rpm)	110/2,300
Max. torque(lb-ft/rpm)	306/1,600
Aftertreatment	DOC+SCR

Lower operating and fuel costs

Fuel efficiency is significantly improved versus the previous 9 Series through an optimized engine and the application of a load-sensing hydraulic system.

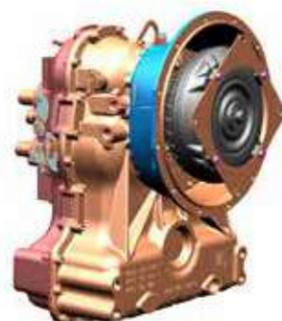


Higher fuel-efficiency than 9 Series
80D-9V: 11%

* Fuel economy is based on our internal tests (VDI 2198) and may be different from actual operation.

Smooth shifting, reliable ZF transmission

Shift timing and responsiveness are optimized for smooth, efficient operation. Reliability is enhanced with a non-contact shift lever design that is less affected by moisture.



ECO-FRIENDLY WITH GREATER
 PRODUCTIVITY AND DURABILITY

PERFORMANCE ^{UP}

The D-9V Series features innovations designed to drive down costs and raise productivity and profits.

Discover a forklift that deliver greater fuel economy, lower emissions, all with unrivaled performance.

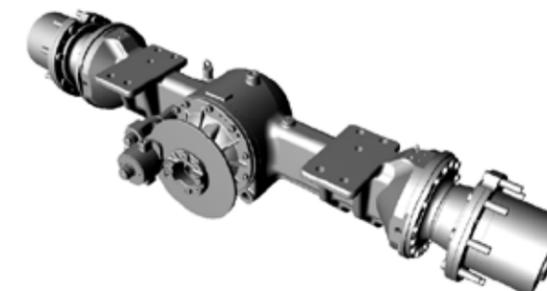
Engine output selection button

- ① The 70/80D-9V features a PWR/STD mode selector that lets operators match performance to the job, with STD delivering about 80% of PWR output for efficient everyday work.
- ② An Idle RPM Up/Down function also allows the operator to fine-tune engine speed in 25 RPM increments, helping provide additional output for slow lifting without.



Rugged HDX drive axle

The HDX drive axle improves rigidity in the differential and final reduction gears, and it increases auto parking brake holding power compared to previous models. To further enhance reliability, the axle mounting method has been updated to a vertical-type design.



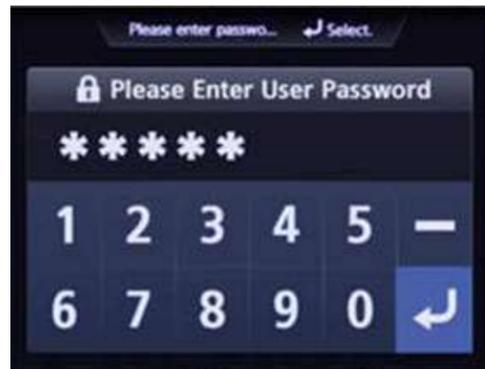
The 3-stage TS mast provides a wide, unobstructed view Option

Standard 3-stage masts can limit forward visibility due to a center primary cylinder. The 3-stage TS mast improves sight-lines by moving the primary cylinder to the left and right sides.



Authorized user start

Set a password to prevent unauthorized use and help deter theft. When enabled, the engine cannot be started without entering the password.



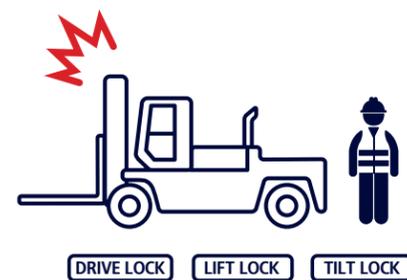
Auto-parking brake

When the engine stops or OPSS activates, the parking brake applies automatically to help prevent operator error. While the engine is running, the operator can also apply or release the parking brake using a dedicated button.



OPSS system

OPSS restricts travel, lift, and tilt when the operator leaves the seat to help prevent accidents.



Additional safety features and options

- Auto-tilt (Optional): Automatically maintains fork level relative to the ground for safer, more stable load handling.
- Seatbelt interlock (Standard): Prevents operation unless the seat belt is fastened, helping reduce the risk of secondary accidents.



ENHANCED SAFETY

UP SAFETY

At Hyundai, safety is our number one priority to protect the operators who drive our forklifts and everyone who works around them.

Speed limit

Maximum travel speed can be set to help prevent speeding related accidents. Even with the limit enabled, hill-climbing ability and mast operating performance are maintained at a high level.



Large side mirror with heating Option

A large side mirror mounted on the front fender provides a wider rear view. Integrated heated mirror wires help maintain visibility in rain or snow.



Standard road-slope indicator with optional overload alarm Option

Road slope is monitored and displayed in real time. If the preset limit is exceeded, the indicator turns red and a warning buzzer sounds. An optional load weighing system also alerts the operator in the event of overload.



Deluxe next-generation cabin

Shaped by customer feedback, the next-generation cab delivers improved driving comfort and consistent convenience in any working condition.

Noise in the driver's seat

The low-noise engine, combined with a cab design that minimizes resonance, reduces operator noise by 5.4 dB on the 70D-9V compared to the previous 9 Series model.



Air suspension / swivel seat Option

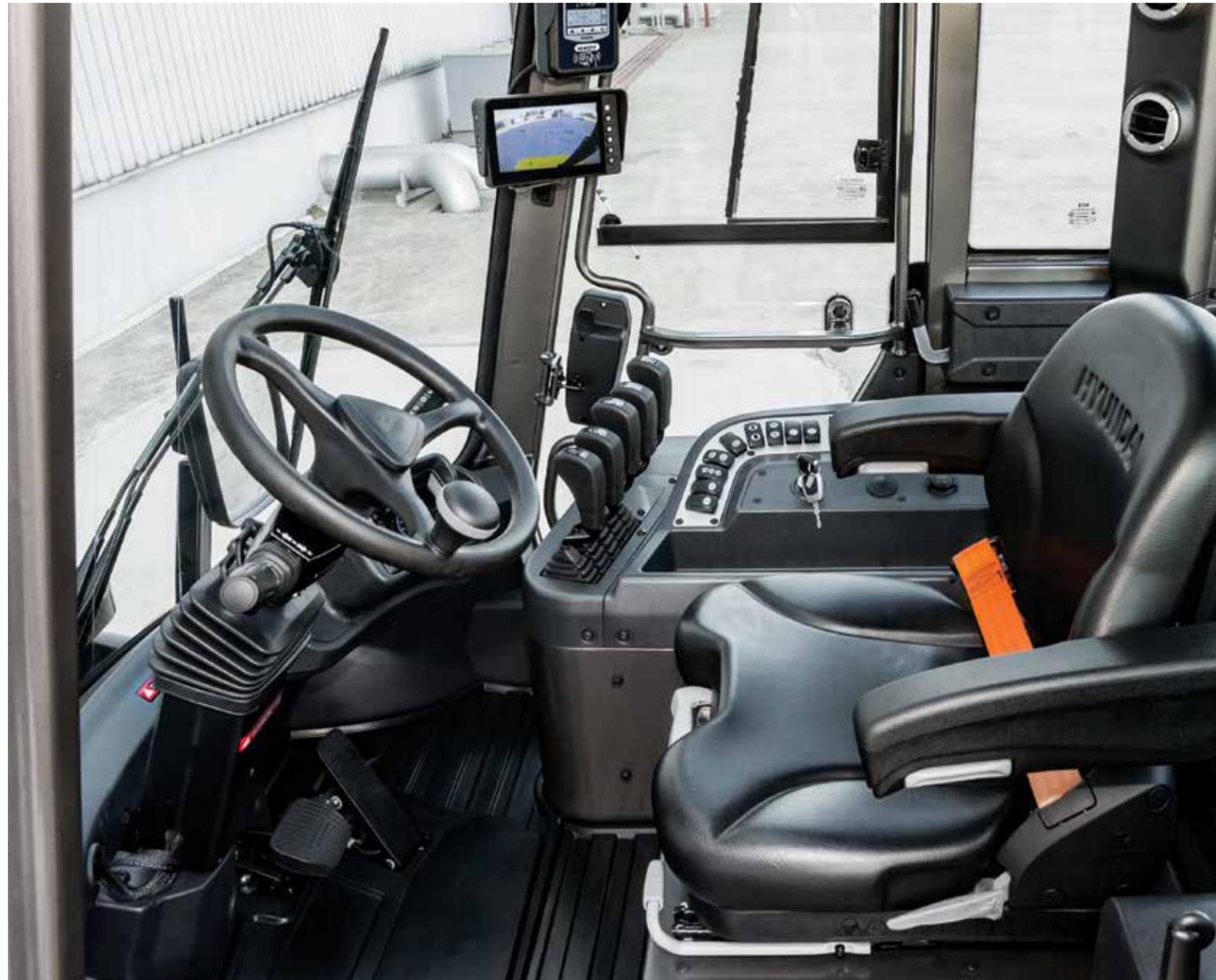
Optional features include an air suspension seat for improved ride comfort and a swivel seat that rotates 20° to the right and 20° to the left to support reverse driving and easier entry and exit. Standard seat: full-suspension Grammer™ seat.

* Basic specification: Full-suspension Grammer seat



Multi-functional LCD cluster

A new cluster improves visibility of key operating information. The integrated MCU allows settings and control functions to be managed through the LCD cluster, supporting efficient operation and enhanced safety.



OUTSTANDING OPERABILITY
ERGONOMICS

CONVENIENCE ^{UP}

The D-9V Series delivers greater efficiency and convenience to handle even the toughest working conditions.

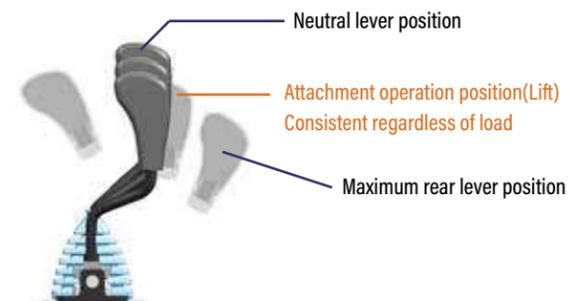
Easy-to-use steering wheel

Abrupt handling is improved with a handle that adjusts 3.3 inches up and down and 36° forward and backward. A reduced 1.3-inch diameter also improves operator comfort and control.



Improved fine control with RCV

The load-sensing MCV uses an independent load-sensing function to deliver consistent mast speed at the same lever position, regardless of load. Reduced spool opening pressure also expands the fine-control range for more precise operation.



Easy to operate inching and brake pedals feature conveniently placed air vents

Leg fatigue is reduced by switching the brake and inching pedals to a hanging type. Air conditioning performance is improved with two additional vents installed above the pedals.



Wide maintenance space

The cab tilts up to 52° for easy access to the powertrain, hydraulic, and electrical systems. The wing-type engine room cover also opens for quick access to the cooling system and routine engine service items.

Onboard diagnostics include consumables management

Failure details and history can be viewed on the cluster screen. When consumable replacement intervals are entered, the monitor displays which parts are due for replacement.



Item	Interval	Elapse	Count	Alarm
Axle Gear Oil	100	105	0	●
Transmissing Oil	100	105	0	●
Filter	100	105	0	●
Tank Air Breathe...	250	105	0	●
Engine Oil	500	105	0	●
Element	500	105	0	●



EASY SERVICE

MAINTENANCE^{UP}

The D-9V Series offers innovative features and systems designed to make maintenance faster and easier for reduced downtime and extended equipment life.

Convenient cabin tilting switch with safety system

The cab can be tilted automatically or manually using the cab tilting switch. If the right-side door is open, the system stops tilting to prevent door damage.



Protected fuse and relay box

Frequently serviced fuses and relays are housed in a separate airtight compartment outside the cab to help protect electrical reliability and reduce maintenance time.



Exhaust gas aftertreatment system maintenance

removing the cover behind the counterweight provides access to the exhaust aftertreatment system, allowing service without removing the counterweight.



Hi-MATE ^{Option}

Forklift operation and status, safety, and operator management can be monitored remotely using the Hi-MATE on-site management solution. The collected data supports planning and optimizing forklift utilization.



HIGHLIGHTS OF THE NEXT-GENERATION CABIN

Front sight

- Single curved glass: Reduces corner distortion for clearer visibility.
- Double-arm large wiper and rearview monitor for improved all-weather visibility.
- Dedicated 7-inch monitor for the rear camera.



Rear sight and air vents

- Flat glass provides clear visibility with minimal distortion.
- Single-arm wiper is standard.



Optimal air conditioning-multiple air vents

- Rear side: 2 vents on the left C-pillar and 2 vents on the right C-pillar.
- Dashboard: 2 top vents and 2 pedal-area vents.
- Windshield defogging: 2 dedicated de-misting outlets to help remove windshield moisture.



Upper window / sun visor

- Wiper and sun visor are standard equipment.
- High-insulation ceiling liner helps improve thermal and noise insulation.



Left and right sight

- Minimized blind spots for improved visibility
- Full-glass door design with no center filler and an increased glass area.



Hyundai Material Handling's Next-Tech Innovation — New Hi MATE

New Hi MATE is Hyundai Material Handling's integrated operational platform, bringing together the full power of connectivity technology. It goes beyond simple remote management to support data-driven decision-making across operations, maintenance, and safety.



Fleet Integration Management

Seamlessly connect your forklifts and operating system into one smart platform and manage your entire site at a glance, anytime, anywhere.



Smart Operations Analysis

Optimize your operations with monitoring of forklift activity and performance metrics.



Preventive Maintenance & Inspection

Stay ahead of downtime with real-time alerts on parts status, keeping your operation running without interruption.



Real-Time Safety Monitoring

Safeguard operators and equipment with proactive worksite monitoring and detailed safety records.



Remote Configuration Support

Stay up to date with remotely updated software and features that keep your forklifts performing at their best.

STANDARD & OPTIONAL FEATURES

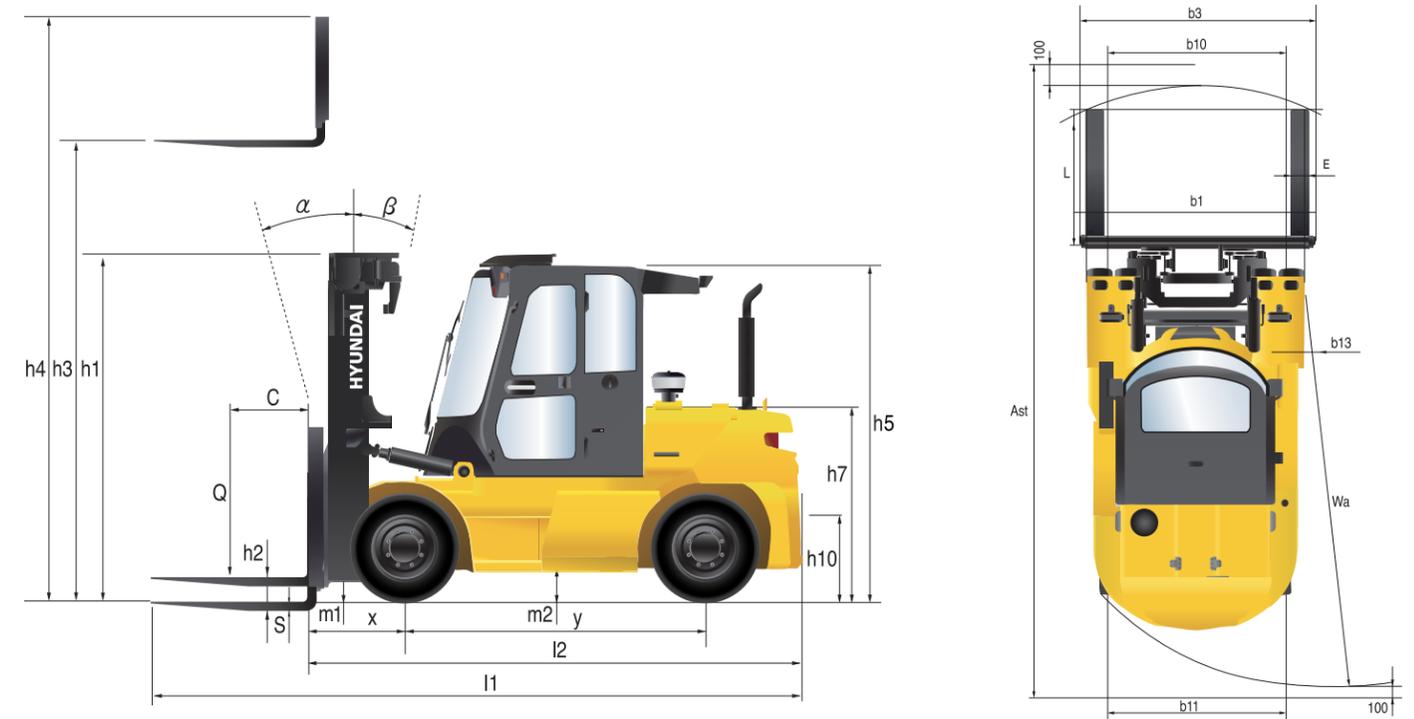
• STD / ○ OPT / - N/A

		ITEM	80B-X	90B-X			80B-X	90B-X		
OPERATION	Cabin	Cabin	●	●	HYDRAULICS	Lever	Manual Lever	●	●	
		Wiper for Top window	○	○			Fingertip (4, 5 Spool Only)	○	○	
	A/C	A/C + Heater	●	●		MCV & Hoses		4 Spool MCV + Attached piping for V mast	●	●
	Seat	Grammer™ seat + Seatbelt + Arm rest	○	○				MCV Option - 3, 5 Spool MCV	○	○
			●	●				Attachment hoses for All MCV & Masts	○	○
		Seat Accessories - Buckle SW, Backrest & Heater	○	○		TIRES	Tires	Pneumatic Tires	○	○
		Seat option - Air suspension seat (Armrest + Buckle SW + Heater)	○	○				Solid Tires	○	○
		Seat option - Swivel seat (Armrest + Buckle SW)	○	○				Non-Marking Tires	○	○
		Seat option - Fabric seat (Armrest + Buckle SW)	○	○				Front - Pneumatic Tires + Rear - Solid Tires	○	○
	etc.	Radio & USB	○	○				Front - Solid Tires + Rear - Pneumatic Tires	○	○
	Bluetooth Radio	●	●	Heavy Duty Tires (Pneumatic, Solid)	●			●		
				Heavy Duty Tires (Non-Marking)	○			○		
MASTS & ATTACHMENTS	Mast	Standard Mast (2-Stage V Mast)	●	●	VISIBILITY	Lamp	Working Lamp - Front & Rear LED	●	●	
		3-Stage Mast (TF/TS Mast)	○	○		Mirror	L/H & R/H Back Mirror - Heated	○	○	
	Fork	Standard Fork (47.2 in.)	●	●		Camera	Camera	Rear Camera	○	○
		LUMBER Fork	○	○	CONVENIENCE			Load Weight Indicator	○	○
		Fork option - 47.2 in. - 94.5 in.	○	○			Accumulator	○	○	
	Tilt	15 (FWD) / 16 (REV)	●	●		SAFETY		Seatbelt Interlock	●	●
		6 (FWD) / 6 (REV), 15 (FWD) / 16 (REV)	○	○			Master Switch (Disconnect Main Power)	●	●	
	Carriage	Carriage option - Shift Type	●	●			Hi-MATE (General, Premium)	○	○	
		Carriage Option - Integral Shaft Type (F/P, S/S, F/P & S/S)	○	○			Hazard Switch	○	○	
		Carriage option - Hook Type	○	○			LED Beacon Lamp	○	○	
	*Carriage Size			OTHER		HYD Oil - VG46	●	●		
	- Wide Type (86.2 in.)	●	-			HYD Oil Option -VG68 for Tropical, VG15 for Cold Area	○	○		
	- Narrow Type (78.3 in.)	○	-			Frame - Under Cover	○	○		
Backrest	Load Backrest	●	●							
	Integral Side Shift	○	○							
Attachment	Fork Positioner - Independent	○	○							
	Side Shift & Positioner - Independent, Synchronized	○	○							

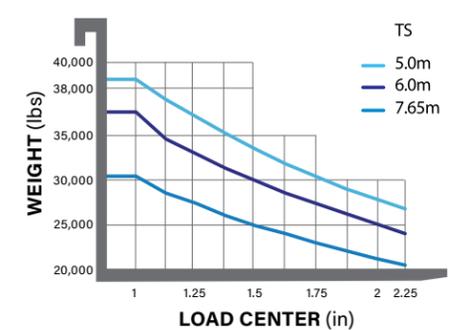
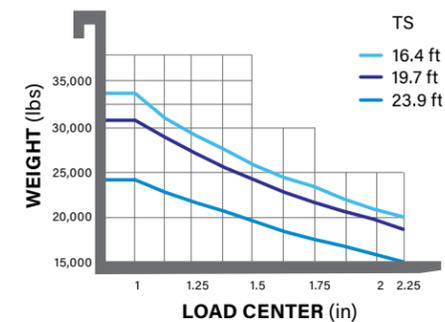
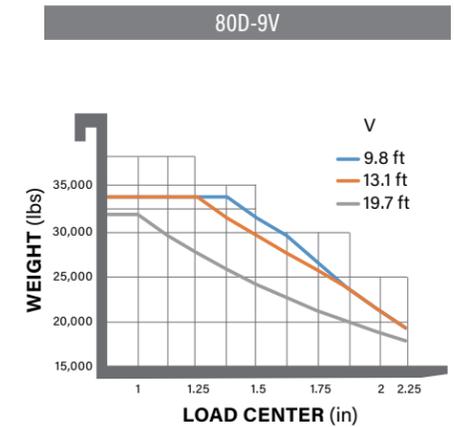
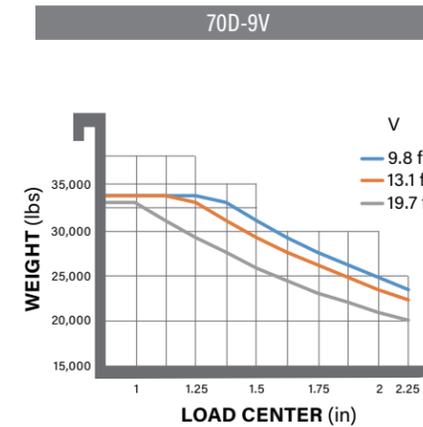
SPECIFICATIONS (70/80D-9V)

IDENTIFICATION				
	Manufacturer	Hyundai		
	Manufacturer's type designation	70D-9V	80D-9V	
1.1	Drive: electric (battery or mains), diesel, gasoline, LPG, manual	Diesel	Diesel	
1.2	Type of operation: hand, pedestrian, standing, seated, order-picker	Seated	Seated	
1.3	Load capacity / rated load	lb	15,500	17,500
1.4	Load center distance	c (in)	24	24
1.5	Load distance, center of drive axle to fork	x (in)	24	27.2
1.6	Wheelbase	y (in)	90.6	98.4
WEIGHTS				
2.1	Service weight	lb	22,306	25,470
2.2	Axle loading, loaded front / rear	lb	33,270 / 4,467	37,988 / 5,119
2.3	Axle loading, unloaded front / rear	lb	9,685 / 12,619	11,250 / 14,220
WHEELS, CHASSIS				
3.1	Tires		Pneumatic	Pneumatic
3.2	Tires size, front		8.2 5x 15 - 14PR	9.00 x 20 - 14PR
3.3	Tires size, rear		8.2 5x 15 - 14PR	9.00 x 20 - 14PR
3.5	Wheels, number front rear (x=driven wheels)		4 x 2	4 x 2
3.6	Track width, front	b10 (in)	62.1	64.3
3.7	Track width, rear	b11 (in)	63.1	66.9
BASIC DIMENSIONS				
4.1	Mast/fork carriage tilt forward / backward	degrees	15 / 10	15 / 10
4.2	Lowered mast height	h1 (in)	99	105.3
4.3	Free lift	h2 (in)	5.5	5.7
4.4	Lift height	h3 (in)	119.3	119.7
4.5	Extended mast height	h4 (in)	170.1	172.2
4.7	Overhead load guard (cab) height	h6 (in)	102.2	105.5
4.8	Seat height / standing height (SIP)	h7 (in)	60.5	65
4.12	Coupling height	h10 (in)	20	23.7
4.19	Overall length	l1 (in)	191.9	203.5
4.20	Length to face of forks	l2 (in)	144.7	156.3
4.21	Overall width	b1 (in)	82.2	86.4
4.22	Fork dimension	H x W x L (in)	2.5 x 5.9 x 47.2	2.7 x 7.0 x 47.2
4.23	Fork carriage ISO 2328, class/type A,B		Class IV	Class IV
4.24	Fork-carriage width (with backrest)	b3 (in)	81.4	89
4.31	Ground clearance, under mast	m1 (in)	7.7	9.8
4.32	Ground clearance, center of wheelbase	m2 (in)	8.8	11.9
4.34.1	Aisle Width for Pallets 1000x1200 Crossways	ast (in)	206.7	220.1
4.34.2	Aisle Width for Pallets 800x1200 Lengthways	ast (in)	214.6	228.0
4.35	Turning Radius	wa (in)	135.3	145.7
PERFORMANCE				
5.1	Travel speed, loaded / unloaded	mph	18.5 / 21.0	17.2 / 21.2
5.2	Lift speed, loaded / unloaded	ft / min	89 / 94	86.6 / 98.4
5.3	Lowering speed, loaded / unloaded	ft / min	98.4 / 98.4	98.4 / 98.4
5.6	Max. drawbar pull, loaded / unloaded	lb	17,435 / -	17,026 / -
5.8	Max. gradeability, loaded / unloaded	%	45.6 / -	38.3 / -
5.10	Service brake		Hydraulic	Hydraulic
ENGINE				
7.1	Engine Manufacturer / Type		Hyundai DN03 Diesel	Hyundai DN03 Diesel
7.2	Engine Power Acc. to ISO 1585	hp @ rpm	110 @ 2,300	110 @ 2,300
7.3	Maximum Torque	lb-ft @ rpm	306 @ 1,600	306 @ 1,600
7.4	No. of Cylinders / Displacement	# / cc	4 / 3,409	4 / 3,409
7.5	Fuel Consumption Acc. to VDI Cycle	gal/hr	1.2	1.2
ADDITIONAL DATA				
8.1	Type of drive control		Full Auto	Full Auto
8.2	Operating pressure, system / attachments	psi	3,046 / 2,031	3,046 / 2,031
8.3	Oil volume for attachments	GPM-US	29	29

DIMENSIONS (70/80D-9V)



LOAD CAPACITY



MAST SPECIFICATIONS (70D-9V)

Mast Type	Maximum Fork Height	Overall Height				Free Lift Height		Tilt Angle		Load Capacity (24 in LC)		Truck Weight (unloaded)
		Lowered	Extended		w/o Load Backrest	w/ Load Backrest	Fwd	Bwd	w/o Side Shift	w/ Side Shift		
			w/o Load Backrest	w/ Load Backrest								
		in	in	in	in	in	in	deg	deg	lb	lb	
2-Stage Limited Free Lift	*V300	119	99	166	170	6	6	15	10	15,500	14,200	22,312
	V330	131	105	178	182	6	6	15	10	15,500	14,200	22,417
	V350	139	109	185	190	6	6	15	10	15,500	14,200	22,487
	V370	147	113	193	198	6	6	15	10	15,500	14,200	22,557
	V400	159	119	205	209	6	6	15	10	15,500	14,200	22,680
	V450	178	131	225	229	6	6	15	10	15,500	14,200	23,183
	V500	198	140	245	249	6	6	15	10	15,500	14,200	23,359
	V550	218	150	264	269	6	6	15	10	15,500	14,200	23,534
	V600	237	160	284	288	6	6	15	10	15,500	14,100	23,706
	V700	277	180	323	328	6	6	15	6	14,300	13,250	23,963
3-Stage Full Free Lift	TF/TS450	180	101	227	229	54	50	15	10	15,500	14,200	23,642
	TS500	199	101	247	248	61	58	15	10	15,500	14,200	23,845
	TS560	220	117	268	269	69	66	15	10	14,750	13,750	24,090
	TS600	239	125	286	288	77	74	15	10	14,300	13,300	24,283
	TS730	289	144	336	338	97	94	15	6	11,650	10,900	25,254

MAST SPECIFICATIONS (80D-9V)

Mast Type	Maximum Fork Height	Overall Height				Free Lift Height		Tilt Angle		Load Capacity (24 in LC)		Truck Weight (unloaded)
		Lowered	Extended		w/o Load Backrest	w/ Load Backrest	Fwd	Bwd	w/o Side Shift	w/ Side Shift		
			w/o Load Backrest	w/ Load Backrest								
		in	in	in	in	in	in	deg	deg	lb	lb	
2-Stage Limited Free Lift	*V300	120	105	171	171	6	6	15	10	17,500	16,200	22,312
	V330	131	111	183	183	6	6	15	10	17,500	16,200	22,417
	V350	139	115	191	191	6	6	15	10	17,500	16,200	22,487
	V370	147	119	199	199	6	6	15	10	17,500	16,200	22,557
	V400	159	125	211	211	6	6	15	10	17,500	16,200	22,680
	V450	179	137	230	230	6	6	15	10	17,500	16,200	23,183
	V500	198	147	250	250	6	6	15	10	17,500	16,200	23,359
	V550	218	156	270	270	6	6	15	10	17,500	16,200	23,534
	V600	238	166	289	289	6	6	15	10	16,750	15,300	23,706
3-Stage Full Free Lift	TF/TS450	180	108	232	231	56	57	15	10	17,500	16,200	23,642
	TS500	200	116	252	251	64	65	15	10	17,500	16,200	23,845
	TS550	219	124	272	271	72	72	15	10	17,500	16,200	24,090
	TS600	239	132	291	291	79	80	15	10	16,050	14,750	24,283
	TS765	301	156	354	353	104	105	15	2	13,200	12,100	25,254