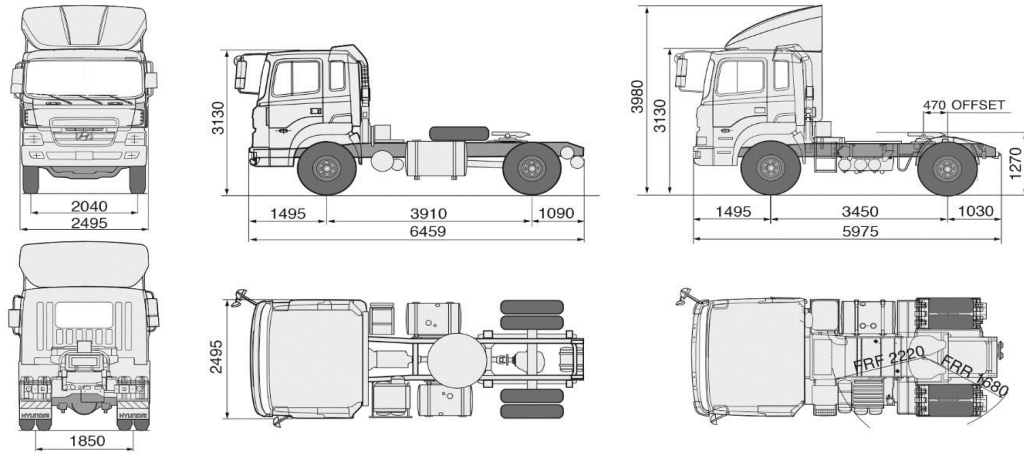


# HD450L/HD500/HD600L Tractor

HYUNDAI HD Series



HD450L / HD600L

HD500

Model	HD450L	HD500	HD600L
Vehicle Type		Tractor	
Cab Type		Sleeper Cab	
Wheel Base	Long	Short	Long
Drive System		LHD, 4 x 2	
Application Engines	<b>D6AC</b>	<b>D6CA38</b>	<b>D6CA41</b>
<b>Dimensions (mm)</b>			
Wheel Base	3,910	3,450	3,910
Length	6,495	5,975	6,495
Width		2,495	
Overall			3,130 (3,980) 24" Tire: 3,265 (4,115)
Height (Spoiler)		3,130 (3,980)	
Wheel Tread	Front / Rear	2,040 / 1,850	
Overhang	Front / Rear	1,495 / 1,030	1,495 / 1,090
Fitting Radius Front (F.R.F)	2,220	1,880	2,220
Fitting Radius REAR (F.R.R)	1,680	1,660	1,680
Fifth Wheel Loading Capacity (kg)	8,500	10,000*	8,500
Type		1 Axis	
Capacity		20,000	
Coupler	King Pin Diameter	SAE 2"	
Height	185	220 / 280	185
Ground Height	1,270	1,270	1,270
Min. Ground Clearance		250	
Min. Turning Radius	m	7.0	6.3 (24" Tire : 7.6)
<b>Weight (kg)</b>			
Tractor Weight	6,990	7,210	7,345
Front / Rear	4,535 / 2,455	4,735 / 2,475	4,740 / 2,605
** Max Gross Vehicle Weight		18,000	21,000
Front / Rear		6,500 / 11,800	8,000 / 13,000
Max. Gross Combination Weight	45,000		50,000

\*\* Max. GVW includes the front & rear axle loads based on the permissible tire load.

## Chassis Specifications

### Engine

Engine	D6AC	D6CA38	D6CA41
Type	Turbo Charger Intercooler 4 stroke-cycle, water-cooled, direct-injection diesel engine		
number of Cylinder	6 in-line		
Piston Displacement (cc)	11,149	12,920	12,900
Bore x Stroke (mm)	130x140	133x155	133x155
Compression Ratio	16.5 : 1		17.0 : 1
Max. Power** Euro I	340 / 2,200	-	-
(ps/rpm) Euro II	320 / 2,000	380 / 1,900	410 / 1,900
Max. Torque ** Euro I	140 / 1,400	-	-
(kg.m/rpm) Euro II	137 / 1,400	148 / 1,500	188 / 1,500
Cooling System	General Pressure type with thermostat, Forced circulation by centrifugal water pump		
Radiator	Corrugated fin type with pressure cap and condenser tank		
Battery	12V x 2, 150 AH at 20 Hr rates		
Electrical System Alternator	24V-60A		24V-80A
Starter	24V-5.5kW		24V-6.0kW
Injection pump	In-line type		ELI system
Fuel System Governor	All Speed type		Electronic Control
Fuel filter	Spin-on type		
Lubrication	Forced lubrication by gear pump		
Oil System Oil filter	Full flow and bypass type with paper element		
Oil cooler	Water cooled, plate fin type		
Oil grade	API service classification CF-4 or above		
Valve System	Single Overhead Valve, Two valves per cylinder		

\*\* Max. Power and Torque of engine may vary according to each country.

### Clutch

Engine	D6AC	D6CA38	D6CA41
Type	Hydraulic control with Air pressure assistance, Diaphragm spring, Single drive plate, Pre-		
Facing Material	non-Asbestos		
Facing Size (mm) Outside dia x Inside dia	0430 x 0242		

<b>Transmission</b>				
Model		<b>HD450L</b>	<b>HD500</b>	<b>HD600L</b>
Application Engines		<b>D6AC</b>	<b>D6CA38</b>	<b>D6CA41</b>
T/M Application	M12S 2X5	.	.	.
• : STD	H160S 2X5			
o : OPT	ZF16S151			
Model		<b>M12S 2x5</b>	<b>H160S 2x5</b>	<b>ZF16S151</b>
Type		10 forward and 2 reverse speed, 2nd to 10th synchronesh, 1st & reverse constant-mesh gears		16 forward and 2 reverse speed, 1nd to 16th synchronesh, reverse constant-mesh gears
Gear Ratio	1st (High / Low)		9.153 / 7.145	13.80 / 11.54
	2nd (High / Low)		4.783 / 3.733	9.49 / 7.93
	3rd (High / Low)		2.765 / 2.158	6.53 / 5.46
	4th (High / Low)		1.666 / 1.301	4.57 / 3.82
	5th (High / Low)		1,000 / 0.780	3.02 / 2.53
	6th (High / Low)			2.08 / 1.74
	7th (High / Low)			1.43 / 1.20
	8th (High / Low)			1.00 / 0.84
Gear Oil		8,105 / 6,327		12.92 / 10.80
T.G.S. (Transmission Gear Shift)		API service classification GL-4 or SAE service classification 80W (90 :Tropical zones only) Floor shift, Mechanical remote control		
<b>Rear Axle</b>				
Engine		D6AC	D6CA38	D6CA41
Type			Full floating type	
Capacity	kg		11,800	13,000
Final Reduction Gear	Type	Single Reduction, Hypoid gear		Single Reduction, Hypoid gear (THR20S : Hub Reduction)
	G/Ratio	4.875	5.143/4.875	3.909(T19H), 4.333(R190HS), 4.248 (THR20S)
<b>Front Axle</b>				
Type		Reverse Elliot type " 1 " beam		
Capacity	kg	6,550		8,000
<b>Tire &amp; Wheel</b>				
Type		Single Front, Dual Rear		
Tire	Front	12R22.5-16PR		12R22.5-16PR
	Rear			(12.00R24-18PR : OPT)
Wheel	Front	8.25 x 22.5-165		8.25 x 22.5-165
	Rear			(8.5V x 24 : OPT)

HYUNDAI HD Series\_ HD450L/500/600LTractor

**Steering**

Model	HD450L	HD500	HD600L
Engine	D6AC	D6CA38	D6CA41
Type	2-Spoke, Ball-nut type, Tilt & Telescopic steering column		
Tilting Angle	9°		
Turning Angle	Inner	49°	
	Outer	35°	

**Service Brake**

Actuation	Full Air, Dual circuit fixed S cam with spring loaded chambers		
Size (mm)	Front	Drum dia. x Lining width x Lining thickness : $\phi 410 \times 156 \times 19$	
	Rear	Drum dia. x Lining width x Lining thickness : $\phi 410 \times 220 \times 19$	
Compressed air reservoir	105 $\ell$		
Total lining area	6,081 $\text{cm}^2$	9,639 $\text{cm}^2$	6,081 $\text{cm}^2$

**Parking Brake**

Actuation	Spring loaded type chamber on the rear wheel		
Size (mm)	Front	$\phi 410 \times 156 \times 19$	$\phi 410 \times 156 \times 19$
	Rear	$\phi 410 \times 220 \times 19$	$\phi 410 \times 220 \times 19$
Total lining area	6,081 $\text{cm}^2$	9,639 $\text{cm}^2$	6,081 $\text{cm}^2$

**Exhaust Brake**

Type	Air operated, butterfly valve type
------	------------------------------------

**Jake brake**

- Injection Cam operated type

**Suspension**

Type	Front	Multi Leaf Taper(OPT)	Taper Leaf	Taper Leaf (Multi : OPT, 24" Tire : Multi)
	Rear		Leaf	Leaf
Shock absorber	Hydraulic double acting telescopic type on the front axle			<- (24" tire : Hydraulic double acting telescopic type on the front)

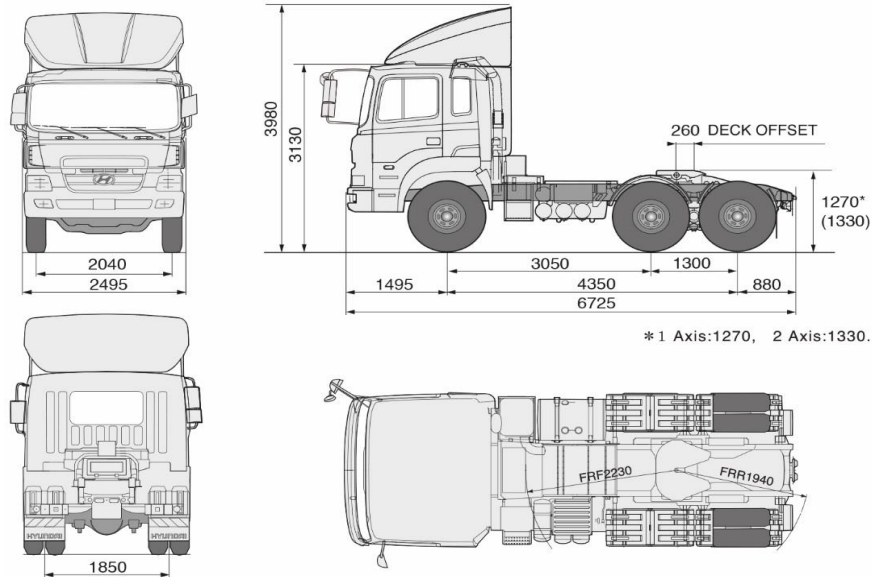
Exhaust system			
Model	HD450L	HD500	HD600L
Engine	D6AC	D6CA38	D6CA41
General	Conventional (horizontal) type muffler		
Tail pipe	Droptail type, blowing to chassis rearward		
Fuel tank			
Capacity	400 liter (steel), 800	350 liter (Steel),	350 liter (Steel), 380 liter (Al) 650
Material	liter(steel, 400+400)	380 liter (Aluminum)	liter(Steel)
Frame			
Type	“H” type frame with channel sectional side rail & cross members		
Main side rail (mm)	302 x 90 x 8 t	280 x 90 x 8 t	302 x 90 x 8 t

## Annotations

- 1) Empty vehicle weight and curb weight shown are to 3.5% variation to allow for production tolerance.
- 2) Empty vehicle weight and curb weight include weight of oil, fuel, coolant and spare tire carrier & bracket, spare tire but exclude standard tool set.
- 3) The vehicle specifications may differ per country.
- 4) For further information please contact the commercial vehicle export teams of HMC.
- 5) In order that product improvement may be introduced at any time, specifications are subject to change without prior notice.

# HD700/HD1000 Tractor

HYUNDAI HD Series



	HD700	HD1000
Model	HD700	HD1000
Vehicle Type		Tractor
Cab Type		Sleeper Cab
Wheel Base		Short
Drive System		LHD, 6 x 4
Application Engines	D6AC	D6CA3H D6CA41
<b>Dimensions (mm)</b>		
Wheel Base		4,350 (3,050 + 1,300)
Overall	Length	6,685
	Width	2,495
	Height	3,130 (3,980 : with spoiler)
Wheel Tread	Front / Rear	2,040 / 1,850
Overhang	Front / Rear	1,495 / 840
Overhang (Frame)	Front / Rear	1,420 / 820
Fitting Radius Front (F.R.F)		2,230
Fitting Radius REAR (F.R.R)		1,940
Fifth Wheel Loading Capacity (kg)		20,000
Coupler	Type	1Axis (STD), 2 Axis (OPT)
	Capacity	16,500 (2"), 36,000 (3.5")
	King Pin Diameter	SAE 2" (STD), 3.5" (OPT)
	Ground Height	1,270 (1 Axis), 1,330 (2 Axis)
Min. Ground Clearance	Offset	260
		250
	Min. Turning Radius	m
<b>Weight (kg)</b>		
Tractor Weight	8,780	8,930
** Max Gross Vehicle Weight	Front / Rear	4,300 / 4,480
	Front / Rear	31,700 / 25,200
Max. Gross Combination Weight		70,000

\*\* Max. GVW includes the front & rear axle loads based on the permissible tire load.

### Chassis Specifications

#### Engine

Engine	D6AC	D6CA3H	D6CA41
Type	Turbo Charger Intercooler 4 stroke-cycle, water-cooled, direct-injection diesel engine		
Number of Cylinder	6 in-line		
Piston Displacement (cc)	11,149		12,920
Bore x Stroke (mm)	130 x 140		133 x 155
Compression Ratio	16.5 : 1		17 : 1
Max. Power** (ps/rpm)	EuroI	340 / 2,200	-
	EuroII	320 / 2,000	380 / 1,900
Max. Torque ** (kg.m/rpm)	EuroI	140 / 1,400	-
	EuroII	137 / 1,400	160 / 1,500
Cooling System	General Pressure type with thermostat, Forced circulation by centrifugal water pump		
	Radiator Corrugated fin type with pressure cap and condenser tank		
	Battery 12V x 2, 150 AH at 20 Hr rates		
Electrical System	Alternator	24V-60A	24V-80A
	Starter	24V-5.5kW	24V-6.0kW
Fuel System	Injection pump	In-line type	EUI system
	Governor	All Speed type	Electronic Control
	Fuel filter	Spin-on type	
Oil System	Lubrication	Forced lubrication by gear pump	
	Oil filter	Full flow and bypass type with paper element	
	Oil cooler	Water cooled, plate fin type	
Valve System	Oil grade API service classification CF-4 or above		
Valve System	Single Overhead Valve, Two valves per cylinder		

\*\* Max. Power and Torque of engine may vary according to each country.

#### Clutch

Engine	D6AC	D6CA3H	D6CA41
Type	Hydraulic control with Air pressure assistance, Diaphragm spring, Single dry plate, Pre-Damper		
Facing Material	Non-Asbestos		
Facing Size (mm) Outside dia x Inside dia	ø430 x ø242		

HYUNDAI HD Series\_ HD700/1000 Tractor

**Transmission**

Model		HD700		HD1000
Application Engines		D6AC		D6CA3H
T/M Application		M12S 2X5		D6CA41
• : STD		H160S 2X5		
o : OPT		ZF16S151		
Model		M12S 2x5	H160S 2x5	ZF16S151
Type		10 forward and 2 reverse speed, 2nd to 10th synchromesh, 1st & reverse constant-mesh gears		16 forward and 2 reverse speed, 1st to 16th synchromesh, reverse constant-mesh gears
1st (High / Low)		9.153 / 7.145		13.80 / 11.54
2nd (High / Low)		4,783 / 3,733		9.49 / 7.93
3rd (High / Low)		2,765 / 2,158		6.53 / 5.46
4th (High / Low)		1,666 / 1,301		4.57 / 3.82
Gear Ratio		1,000 / 0.780		3.02 / 2.53
6th (High / Low)		-		2.08 / 1.74
7th (High / Low)		-		1.43 / 1.20
8th (High / Low)		-		1.00 / 0.84
Reverse		8,105 / 6,327		12.92 / 10.80
Gear Oil		API service classification GL-4 or SAE service classification 80W (90 ;Tropical zones only)		
T.G.S. (Transmission Gear Shift)		Floor shift, Mechanical remote control		

**Rear Axle**

Type		Full floating type		
Capacity		kg 13,000 x 2		
Final Reduction Gear		Type Single Reduction, Hypoid gear		
G/Ratio		5.571	4.875	3.909 / 4.333

**Front Axle**

Type		Reverse Elliot type " I " beam		
Capacity		kg 6,550		

**Tire & Wheel**

Type		Single Front, Dual Rear		
Tire		Front / Rear 12R 22.5 - 16PR		
Wheel		Front/ Rear 8.25T x 22.5-165		

**Steering**

Type		2-Spoke, Ball-nut type, Tilt & Telescopic steering column		
Tilting Angle		9 °		
Turning Angle		Inner 49 °		
		Outer 35 °		



<b>Service Brake</b>			
Model		<b>HD700</b>	<b>HD1000</b>
Engine		<b>D6AC</b>	<b>D6CA3H</b> <b>D6CA41</b>
Actuation		Full Air, Dual circuit fixed S cam with spring loaded chambers	
Size (mm)	Front	Drum dia. x Lining width x Lining thickness : $\phi 410 \times 156 \times 19$	
	Rear	Drum dia. x Lining width x Lining thickness : $\phi 410 \times 220 \times 19$	
Compressed air reservoir		140 $\ell$	145 $\ell$ 140 $\ell$
Total lining area		9,639cm <sup>2</sup>	12,162cm <sup>2</sup> 9,639cm <sup>2</sup>
<b>Parking Brake</b>			
Actuation		Spring loaded type chamber on the rear wheel	
Size (mm)		Drum diameter x Lining width x Lining thickness : $\phi 410 \times 220 \times 19$	
Total lining area		7,166cm <sup>2</sup>	
<b>Exhaust Brake</b>			
Type		Air operated, butterfly valve type	
<b>Jake brake</b>			
		-	Injection Cam operated type
<b>Suspension</b>			
Type	Front	Semi-elliptic, laminated leaf springs with shackle link (Multi leaf spring)	
	Rear	Taper leaf Spring	
Shock absorber		Semi-elliptic, laminated leaf springs with shackle link (Multi leaf spring)	
		Hydraulic double acting telescopic type on the front axle	
<b>Exhaust system</b>			
General		Conventional (horizontal) type muffler	
Tail pipe		Droptail type, blowing to chassis rearward	
<b>Fuel tank</b>			
Capacity		350 liter (Steel), 380 liter (Aluminum)	
Material		Steel (STD), Aluminum (OPT)	
<b>Frame</b>			
Type		"H" type frame with channel sectional side rail & cross members	
Main side rail (mm)		Depth x Flange x Thickness : 280 x 90 x 8t	

## Annotations

- 1) Empty vehicle weight and curb weight shown are to 3.5% variation to allow for production tolerance.
- 2) Empty vehicle weight and curb weight include weight of oil, fuel, coolant and spare tire carrier & bracket, spare tire but exclude standard tool set
- 3) The vehicle specifications may differ per country.
- 4) For further information please contact the commercial vehicle export teams of HMC.
- 5) In order that product improvement may be introduced at any time, specifications are subject to change without prior notice.