## Pneumatic Tire Lift Trucks Diesel

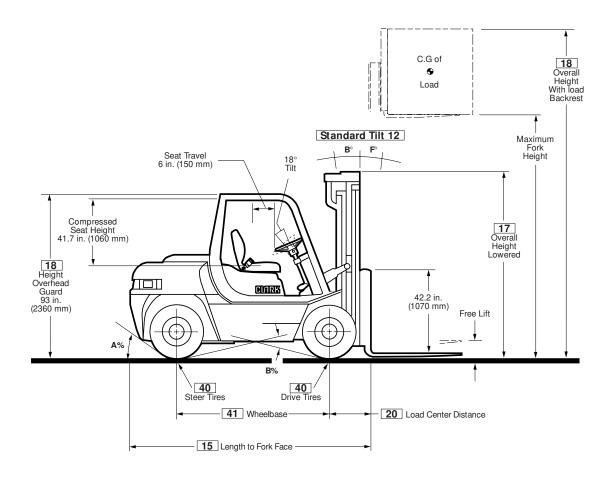
CMP50 CMP60 CMP70 CMP75S 11,000 lbs 5000 kg 13,500 lbs 6000 kg 15,500 lbs 7000 kg 16,500 lbs 7500 kg

# CMP50/60 70/75

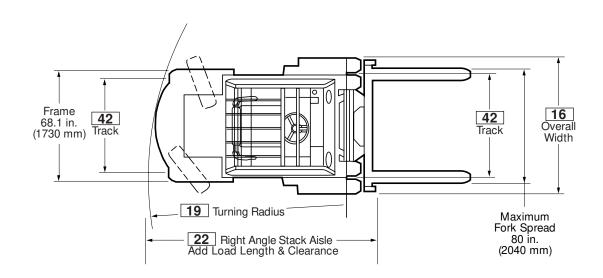
M Series



### For corresponding data see Specification Chart.



## CMP50/60/70/75



		Manufacture			Olevily	Olavila
l c	1	Manufacturer			Clark	Clark
General Information	2	Model	Manufacturer's Designation		CMP50	CMP60
Ë	3	Load Capacity		lbs(kg)	11,000 (5000)	13,500 (6000)
lg.	4	Load Center	Fork Face Load CG	in(mm)	24 (600)	24 (600)
1 =	5	Drive Unit	Туре		Diesel	Diesel
ler	6	Operator Type			Rider Counterbalanced	Rider Counterbalanced
Se.	7	Tire Type			Pneumatic	Pneumatic
	8	Wheels (x=driven)	Front/Rear		4x / 2	4x / 2
	9	Upright <sup>1,2</sup>	Maximum Fork Height, Full Capac	ity in(mm)	138 (3500)	138 (3500)
	10		Lift Height (preferred standard up	right) in(mm)	138 (3500)	138 (3500)
	11		Free Lift	in(mm)	4.3 (110)	4.3 (110)
ြ	12	Upright Tilt	Back/Forward (See Tilt Specifications)	degrees	10 / 15	10 / 15
ns	14	Fork	Std. Fork Size (T x W x L)	in(mm)	2.4 x 6 x 48 (60 x 150 x 1220)	2.4 x 6 x 48 (60 x 150 x 1220)
Basic Dimensions	15	Overall Dimensions	Length to Fork Face	in(mm)	137 (3470)	139 (3530)
ner	16	Overall Billionsions	Width over drive axle	in(mm)	83 (2115)	83 (2115)
۵	10		Height, Upright Lowered	in(mm)	108 (2750)	108 (2750)
Sic				` ′	, ,	, ,
Ba	40		Height, Upright Extended	in(mm)	186 (4725)	186 (4725)
	18	Tomation Deutino	Height, overhead guard	in(mm)	93 (2360)	93 (2360)
	19	Turning Radius	Out to the time of Date of the time of time of the time of time of the time of the time of tim	in(mm)	132 (3360)	134 (3410)
	20	Load Center Distance	Center of Drive Axle to Fork Face	in(mm)	24.8 (630)	24.8 (630)
$\vdash$	22	Right Angle Stack Aisle	Add Load Length and Clearance	in(mm)	157 (3990)	159 (4040)
	23	Stability	According to ANSI/DIN		Yes	Yes
	24	Speeds	Travel Speed, Max w/ Load	mph(kph)	16.6 (26.7)	16.3 (26.2)
	25		Travel Speed, Max w/o Load	mph(kph)	17.8 (28.6)	17.7 (28.4)
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)ce						
nar	26	Lift Speeds, Loaded/Empty	Standard	fpm(ms)	83/83 (.42/.42)	83/83 (.42/.42)
orr	28					
Performance <sup>1,3</sup>	29	Lower Speeds, Loaded/Empty	Standard	fpm(ms)	85/85 (.43/.43)	85/85 (.43/.43)
-						
	30	Drawbar Pull, Maximum	With Load	fpm(ms)	15,810 (70320)	15,870 (70580)
	31		Without Load	fpm(ms)	4,390 (19525)	4,230 (18815)
	32	Gradeability	At 1 mph (1.6 kph) with load (low range) %		42.9 / 23.6	43.2 / 21.5
	34	Service weight		lbs(kg)	18,585 (8430)	19,820 (8990)
ts,	35	Axle loading	With Load, Front	lbs(kg)	26,312 (11935)	29,490 (13375)
Weight	36		With Load, Rear	lbs(kg)	3,295 (1495)	3,560 (1615)
Me	37		W/O Load, Front	lbs(kg)	9,125 (4140)	8,865 (4020)
	38		W/O Load, Rear	lbs(kg)	9,460 (4290)	10,960 (4970)
	39	Tires	Number, Front/Rear		4 / 2	4 / 2
	40		Size, Front	in	8.25 x 15 - 14 ply rating	8.25 x 15 - 14 ply rating
				in		
	41	Wheelbase		in(mm)	86.6 / 2200	86.6 / 2200
	42	Track	Front/Rear	in(mm)	62/59 / 1580/1500	62/59 / 1580/1500
Chassis	44	Ground Clearance	Minimum at Center of Wheelbase	in(mm)	8.1/10.0 / 205/254	8.1/10.0 / 205/254
Жа	46	Service Brake	Туре	. ,	Power Assist Drum & Shoe	Power Assist Drum & Shoe
	47	Parking Brake	Actuation		Lever	Lever
		Steering	Туре		Hydrostatic	Hydrostatic
					,	,
	49	Engine	Manufacturer/Model		Perkins / 1004.42	Perkins / 1004.42
<b>6</b>	51		Rated Output <sup>2</sup>	HP/kW @ rpm	82/61 @ 2300	82/61 @ 2300
Drive Line			·	o-ft/Nm @ rpm	210/284 @ 1400	210/284 @ 1400
Ve	52		Speed, max Governed	rpm	2600	2600
Dri	53		Cylinders/Displacement	cu. inLiters	4 / 243-4.0	4 / 243-4.0
	54	Transmission	Manufacturer/Type, Speeds F/R	ou. III. EIIOIS	Clark/12000 Series, 3/3	Clark/12000 Series, 3/3
$\vdash$	57	Hydraulic Pressure	For Attachments		2,500 / 172	2,500 / 172
$\vdash$		Sound Level	Avg. at Operator's Ear per ASME B56.1	1.5 dB(A)	82	82
	1 20	Journa Lovei	Irry. at Operator a Lar per Admic Dob. I	1.5 GD(A)	02	J V L

	1	Manufacturer	T		Clark	Clark
l e		Model	Manufacturer's Designation		CMP70	CMP75S
ati	2	* * * *	Manufacturer's Designation	Ha a (Lasa)		
۱Ĕ	3	Load Capacity		lbs(kg)	15,500 (7000)	16,500 (7500)
lf.	4	Load Center	Fork Face Load CG	in(mm)	24 (600)	24 (600)
<u> </u>	5	Drive Unit	Туре		Diesel	Diesel
General Information	6	Operator Type			Rider Counterbalanced	Rider Counterbalanced
පි	7	Tire Type			Pneumatic	Pneumatic
	8	Wheels (x=driven)	Front/Rear		4x / 2	4x / 2
	9	Upright <sup>1,2</sup>	Maximum Fork Height, Full Capacity	/ in(mm)	138 (3500)	138 (3500)
	10		Lift Height (preferred standard uprig	ght) in(mm)	138 (3500)	138 (3500)
	11		Free Lift	in(mm)	4.3 (110)	4.3 (110)
တ	12	Upright Tilt	Back/Forward (See Tilt Specifications)	degrees	10 / 15	10 / 15
l ö	14	Fork	Std. Fork Size (T x W x L)	in(mm)	2.4 x 6 x 48 (60 x 150 x 1220)	2.4 x 6 x 48 (60 x 150 x 1220)
Basic Dimensions	15	Overall Dimensions	Length to Fork Face	in(mm)	141 (3590)	142 (3610)
ij	16		Width over drive axle	in(mm)	83 (2115)	83 (2115)
]    -			Height, Upright Lowered	in(mm)	108 (2750)	108 (2750)
Basi			Height, Upright Extended	in(mm)	136 (4725)	136 (4725)
1"	18		Height, overhead guard	in(mm)	93 (2360)	93 (2360)
	19	Turning Radius		in(mm)	137 (3470)	139 (3530)
	20	Load Center Distance	Center of Drive Axle to Fork Face	in(mm)	24.8 (630)	24.8 (630)
	22	Right Angle Stack Aisle	Add Load Length and Clearance	in(mm)	162 (4100)	164 (4165)
	23	Stability	According to ANSI/DIN	· ·	Yes	Yes
	24	Speeds	Travel Speed, Max w/ Load	mph(kph)	16.0 (25.7)	15.8 (25.4)
	25		Travel Speed, Max w/o Load	mph(kph)	17.7 (28.4)	17.6 (28.3)
					· · ·	
Performance <sup>1,3</sup>						
au	26	Lift Speeds, Loaded/Empty	Standard	fpm(ms)	73/83 (.37/.42)	73/83 (.37/.42)
=	28	, , ,		1 ( /	,	,
ert	29	Lower Speeds, Loaded/Empty	Standard	fpm(ms)	85/85 (.43/.43)	85/85 (.43/.43)
1						
	30	Drawbar Pull, Maximum	With Load	fpm(ms)	15,960 (70990)	16,0200 (71255)
	31		Without Load	fpm(ms)	4,060 (18060)	3,940 (17525)
	32	Gradeability	At 1 mph (1.6 kph) with load (low r	ange) %	43.1 / 19.4	42.7 / 19.4
	34	Service weight		lbs(kg)	21,210 (9620)	21,210 (9620)
ţ\$	35	Axle loading	With Load, Front	lbs(kg)	32,660 (14815)	32,660 (14815)
Weights	36		With Load, Rear	lbs(kg)	3,980 (1805)	3,980 (1805)
Me	37		W/O Load, Front	lbs(kg)	8,600 (3900)	8,600 (3900)
	38		W/O Load, Rear	lbs(kg)	12,610 (5720)	12,610 (5720)
	39	Tires	Number, Front/Rear		4 / 2	4 / 2
	40		Size, Front	in	8.25 x 15 - 14 ply rating	8.25 x 15 - 14 ply rating
				in		
	41	Wheelbase		in(mm)	86.3 (2200)	86.3 (2200)
	42	Track	Front/Rear	in(mm)	62/59 (1580/1500)	62/59 (1580/1500)
Chassis	44	Ground Clearance	Minimum at Center of Wheelbase	in(mm)	8.1/10.0 (205/254)	8.1/10.0 (205/254)
Жа	46	Service Brake	Туре		Power Assist Drum & Shoe	Power Assist Drum & Shoe
	47	Parking Brake	Actuation		Lever	Lever
		Steering	Туре		Hydrostatic	Hydrostatic
L						
	49	Engine	Manufacturer/Model		Perkins / 1004.42	Perkins / 1004.42
<u>e</u>	51		Rated Output <sup>2</sup>	IP/kW @ rpm	82/61 @ 2300	82/61 @ 2300
Drive Line			Torque lb-	ft/Nm @ rpm	210/284 @ 1400	210/284 @ 1400
ive	52		Speed, max Governed	rpm	2600	2600
۵	53		Cylinders/Displacement	cu. inLiters	4 / 243-4.0	4 / 243-4.0
	54	Transmission	Manufacturer/Type, Speeds F/R		Clark/12000 Series, 3/3	Clark/12000 Series, 3/3
	57	Hydraulic Pressure	For Attachments		2,500 / 172	2,500 / 172
	58	Sound Level	Avg. at Operator's Ear per ASME B56.11.	5 dB(A)	82	82

Clark CMP 50/60/70/75S Series pneumatic tire trucks are designed to provide high levels of reliability through the use durable components and rugged construction. Suited to demanding applications such as handling building materials and concrete products and in warehousing and stevedoring operations where diesel power, reliable planetary drive axle, and 3-speed transmission provide superior gradeability and durability. Trucks are equipped with Clark-Hurth 3-speed powershift transmissions and powerful Perkins 1004.42 Series diesel engines. These trucks are supplied with an high level of standard features.

#### **Operator Control & Comfort**

The CMP 50/75S Series trucks incorporate an isolated operator cell supported on rubber mounts to reduce vibration and sound transmission to the operator seat and controls. Two open steps enable easy access to the cabin. A rubber floor mat makes footing secure. Seat deck-mounted hydraulic control levers reduce fatigue through minimal movement. Forward/backward movement of the electric directional control enables "finger tip" operation of the powershift transaxle; speed range is selected by rotating the grip on the control. Two-pedal inchbrake system provides excellent control and comfort. Left pedal is for inch and brake operation; right pedal for brake only. Durable seat with thick contoured cushions provide excellent support. The seat belt includes a retractor with non-cinching feature. Seat has 6inches (150 mm) of front-to-back travel to accommodate small and large operators. travel to accommodate small and large operators. Rearhinged, clamshell hood with gas cylinder assist makes access for daily inspection convenient. High visibility upright and overhead guard improve operator vision during travel and stacking operations. Operator display monitor includes: Indicator lights for engine oil pressure, battery charge, transmission temperature, park brake "on", turn signal indicators and panel test light. Five-digit hour meter and analog engine temperature gauge hour meter and analog engine temperature gauge and fuel gauge are provided on the display.

#### Diesel Engine

Perkins 1004.42, 4.0L 4-cylinder engines have iron block and cylinder head, 5 main bearing crankshaft and an internal dynamic balancer system that smoothes engine vibration. Valve guides, exhaust valve seals and dry type cylinder sleeves are replaceable. New generation design incorporates low smoke, fuel efficient direct fuel injection and manifold type Thermostart system. Vertical exhaust is standard. Engine Accessories/Capacities: Trucks are 12-volt negative ground. Starters are equipped with heavy-duty clutch and anti-restart system. Batteries are 860 CCA at 0°F (-18 °C). All utilize heavy-duty air cleaners with pre-cleaners for added engine protection. Cooling system capacity is 16 qts. (16.9 L). Crankcase capacity is 2 gals. (7.6 L); Fuel tank capacity is 18 gal. (68 L). Service Access: Clamshell hood gives full access for inspections and service. Single piece floorpanel is removable without tools. Filters are easily serviced and located to prevent spillage. Radiator is accessed, and removed easily, without counterweight or major component removal.

#### Transmission

Clark-Hurth 12000 Series three-speed powershift transmission designed for reliability under maximum load and severe operating conditions. An oil cooler located in the engine radiator extends transmission life. Clark-Hurth EGS electric shift control provides controlled shift operation and protects the transmission from damage. Mechanical linkage is eliminated. Transmission clutch packs incorporate hydraulic modulation and cushioning systems to smooth engagement and protect internal components under rapid direction reversals. Highly accessible transaxle control, auxiliary gear drive for hydraulic pump and spin-on full-flow lubricant filter simplify service.

#### **Drive Axle**

A heavy duty ZF planetary drive axle improves tractive effort as maximum wheel torque is developed at the drive wheels, eliminating axleshaft wind-up and reducing loads on other drive components.

#### **Brakes**

Hydraulic-operated service brakes actuate self-adjusting drum and shoe assemblies at the drive wheels. Brakes can be actuated from either left or right foot pedals. Left foot pedal also provides inching control. Disc/caliper-type parking brake on transmission is left hand-operated, and operator adjustable. Brake system reservoir is easily accessed on the front cowl.

#### Steering

Heavy fabricated steer axle incorporates an integral double-acting steer cylinder providing equal steering rate. Single-piece steer knuckles supported by tapered roller bearings provide high durability with low maintenance requirements. Full hydrostatic operation reduces mechanical links and eliminates kick-back. The axle is mounted in "silent block" cushion mounts that absorb shock and improve comfort. They require no maintenance.

#### Hydraulic System

A single hydraulic pump is transmission driven, providing both durability and accessibility. Full-flow filter is located in the hydraulic tank providing continuous filtration. Hydraulic tank cover incorporates return line fittings, dipstick, and breather filter connection. Adjustable hydraulic valve eliminates unnecessary oil flow, energy loss and heat generation. Integral-with-frame hydraulic tank dissipates hydraulic oil heat. Fluid capacity 29 U.S. gals. (110 L).

#### Upright Assembly

High visibility two-stage designs and are configured to provide maximum forward visibility. Interlocking rail/nested roller upright design utilizes specially rolled inner rail and channel section outer rails for high strength under heavy load conditions and greater tolerance to unbalanced load conditions. Uprights incorporate negative rail drop feature that enables upright rollers to be easily accessed for adjustment. Shaft type fork carriage incorporates six main rollers and four thrust rollers. Tilt cylinders incorporate spherical bushings at their mounting points to extend seal life by maintaining axial cylinder loads. Hydraulic counterbalance valve prevents improper tilt cylinder operation, flow limiting valves protect against rapid carriage descent in the event of a line failure, and a lowering control regulates lowering speeds. Shaft type forks are upset forged and have adjustable fork locks.

#### Additional Features/ Available Equipment

Color is high visibility Clark Green with dark gray operator cell and upright. Wheels are bright white. Operator Manual is permanently attached to truck. Standard features include: recessed towpin, (4) builtin lift eyes, headlights, tail lights, and turn signals. Clark's *Employer's Guide to Material Handling Safety* and operator safety video are provided with truck. Available equipment includes: integral sideshifter, steel cab with heater, rear work light, strobe light, audible alarm, mirrors, auxiliary hydraulic functions and attachments. Contact a Clark representative for additional information.

#### **Upright Table\***

Maximum Fork Height		Overall Height Lowered		Overall Height Raised	
in	mm	in	mm	in	mm
High Vi: 138 177 217	sibility Tv 3500 4500 5500	108 128 148	2750 3250 3750	186 225 265	4270 5720 6720

Free lift for all lift heights is 4.3 in. (110 mm).

#### Tilt Specifications

Upright MFH(in / mm)	Tilt -B°/ F°
Standard Upright thru 145 in (3683 mm) 146 in (3705mm) thru 217 in (5500 mm)	10°/ 15° 10°/ 10°

#### **Grade Clearance**

Model	<b>A</b> %	В%
CMP 50	41	43
CMP 60	38	43
CMP 70	34	43
CMP 75S	31	43

#### **Notes**

Production engines and driveline components may vary in output and/or efficiency by ±5%. The performance shown represents nominal values which may be obtained under typical operating conditions of a machine.

Clark products and specifications are subject to change without notice.

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#### ANSI/ASM E and Insurance Classification

Standard truck meets all applicable mandatory requirements of ASME-B56.1 Safety Standard for Powered Industrial Trucks and Underwriters Laboratories requirements as to fire hazard only for G, GS, LP and LPS classifications. For further information contact a Clark representative.

#### For Your Safety

Before operating a lift truck, an operator must:
• Be trained and authorized

- Read and understand the operator's manual
- Not operate a faulty lift truck
- Not repair a lift truck unless trained and authorized
- Have the overhead guard and load backrest extension in place

During operation, a lift truck operator must:

- Wear a seat belt
- Keep entire body inside truck cab
- Never carry passengers or lift people
- Keep truck away from people and obstructions
- Travel with lift mechanism as low as possible and tilted back

To park a lift truck, an operator must:

- Completely lower forks or attachments
  - Shift into neutral
- Turn key off Set parking brake
- Contact your Clark dealer for operator training information.

GENERAL DATA

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your authorized CLARK	dealer	is:
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