IC-CUSHION

GEN2™ Series

Cushion Tire Lift Trucks
LPG

C**15**C	3,000 lbs 1500 kg
C**18**C	3,500 lbs 1800 kg
C**20**sC	4,000 lbs 2000 kg

C15/18/20sC

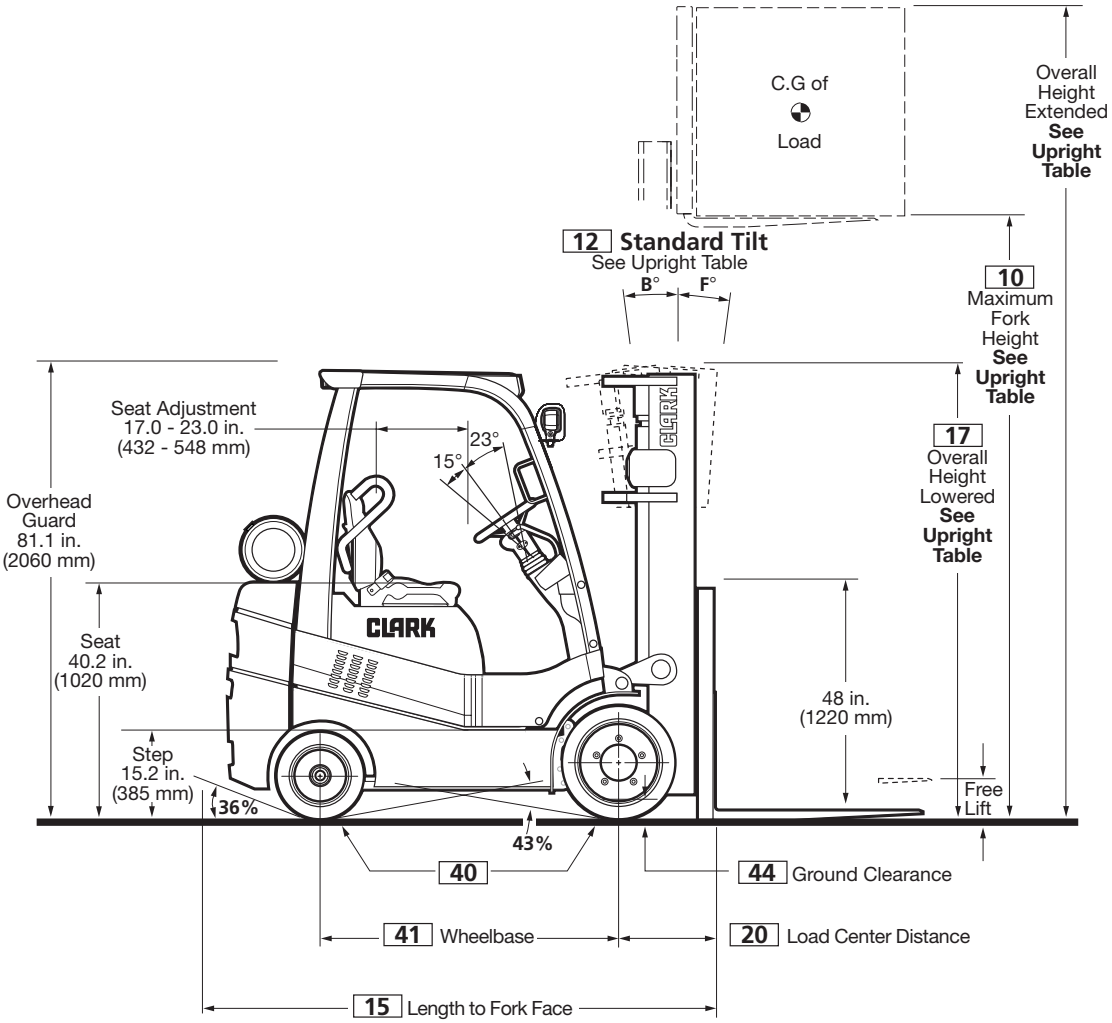
CLARK
BUILT TO LAST.

KNIGHTSBRIDGE
mechanical handling ltd

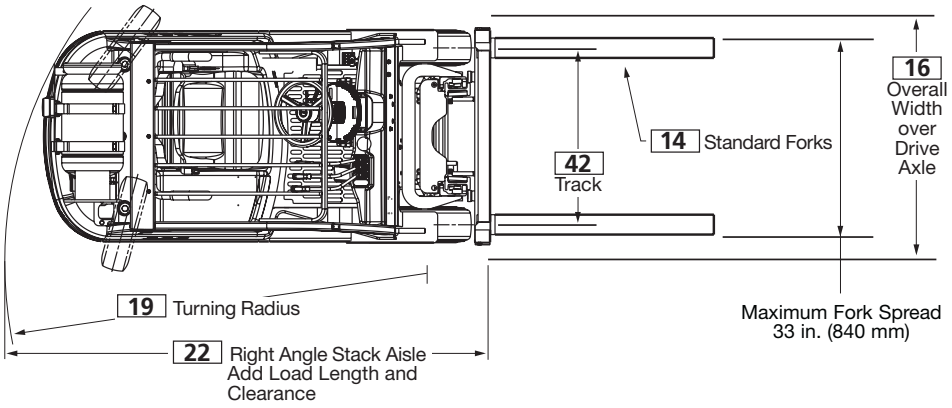
www.clarkmhc.com

DIMENSIONS

For corresponding data see Specification Chart.



C15/18/20sC



Upright Table

Maximum Fork Height in	mm	Overall Height[1] Lowered in	mm	Free Lift[3] w/o LBR in	mm	Standard[2] Tilt Spec B°/F°
C15/18/20sC Standard						
89	2265	67	1693	4.3	110	8/8
100	2545	72	1833	4.3	110	8/8
110	2795	77	1958	4.3	110	8/8
121	3085	83	2103	4.3	110	8/8
•129	3285	87	2203	4.3	110	8/8
143	3640	94	2380	4.3	110	8/8
160	4070	104	2653	4.3	110	5/6
172	4365	112	2853	4.3	110	5/6
183	4655	120	3048	4.3	110	5/6
203	5145	133	3378	4.3	110	4/3
C15/18/20sC Triple Stage						
156	3970	72	1833	49	1201	5/6
171	4345	77	1958	54	1326	5/6
•188	4780	83	2103	59	1471	5/6
204	5185	89	2253	65	1621	4/3
213	5400	92	2343	69	1711	4/3
219	5565	95	2413	72	1781	4/3
225	5720	98	2478	74	1846	4/3
237	6015	102	2603	79	1971	4/3
255	6470	110	2793	87	2161	2/0
279	7075	120	3048	97	2416	2/0
C15/18/20sC Hi-Lo						
115	2925	77	1955	54	1323	8/8
•127	3215	83	2115	60	1483	8/8
138	3515	89	2255	65	1623	8/8
145	3695	95	2405	71	1773	8/8
150	3810	98	2480	74	1848	8/8

- • Indicates preferred common specification.
- [1] For overall height raised with load backrest, add 48 in. (1220 mm) to maximum fork height.
- [2] Standard tilt shown. Contact Clark representative for information on optional tilt.
- [3] Freelift dimensions shown are without load backrest.

Other uprights available, contact a Clark representative.

Available Equipment

- **Wide Drive Tires**
- **Auxiliary valves**
- **Hose adaptations**
- **Sideshifters**
- **Hydraulic control options**
- **Combination stop/tail/backup lights**
- **Rear work light**
- **Turn signal lights**
- **Strobe lights**
- **Backup alarm**
- **Mirrors**
- **Convenience console**
- **Suspension seat, vinyl and cloth**
- **Reduced height overhead guard**
- **U.L. Type LPS construction**
- **Swing-Down LPG Tank Bracket**
- **Seat actuated engine shutdown**
- **Pre-cleaner – overhead guard mounted**
- **Air cleaner safety element**
- **Travel Speed Limit**
- **Bottler's tilt**
- **Tire Options**

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.

ASME 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 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 operator compartment**
- **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.

SPECIFICATIONS

General Information	1	Manufacturer			Clark
	2	Model	Manufacturer's Designation		C15CL
				in(mm)	STD 129 (3285) ı TSU 188 (4780)
	3	Load Capacity		lbs(kg)	3000 (1500)
	4	Load Center	Fork Face to Load CG	in(mm)	24 (500)
	5	Drive Unit	Type		LPG
	6	Operator Type			Rider-Seated
	7	Tire Type			Cushion
	8	Wheels (X=Driven)	Front/Rear		2X/2
Basic Dimensions	9	Upright	Maximum Fork Height, Full Capacity	in(mm)	188 (4780)
	10		Lift Height (Preferred Upright)	in(mm)	129 (3285) ı 188 (4780)
	11		Free Lift, Empty	in(mm)	4.3 (110) ı 57.9 (1471)
	12	Upright Tilt	Back/Forward	deg	8/8 ı 5/6
	14	Forks	Std. Fork Size (T X W X L)	in(mm)	1.5x4x42 (40x100x1070)
	15	Overall Dimensions	Length to Fork Face	in(mm)	80.0 (2033) ı 80.2 (2036)
	16		Width over Drive Axle	in(mm)	37.0 (940)
	17		Height, Upright Lowered	in(mm)	86.7 (2203) ı 82.8 (2103)
			Height, Upright Extended (w/LBR)	in(mm)	169.5 (4305) ı 236.2 (6000)
	18		Height, Overhead Guard		81.1 (2060)
	19	Turning Radius	Outside	in(mm)	70.5 (1792)
	20	Load Center Distance	Center of Drive Axle to Fork Face	in(mm)	14.7 (375) ı 14.9 (378)
	22	Right Angle Stack Aisle	Add Load Length and Clearance	in(mm)	85.2 (2167) ı 85.4 (2170)
Performance	23	Stability	According to ASME/DIN		Yes
	24	Speeds	Travel Speed, Max w/Load	mph(km/h)	10.5 (16.9)
	25		Travel Speed, Max w/o Load	mph(km/h)	10.6 (17)
		Speed on grade, loaded	5% Loaded	mph(km/h)	10.0 (16.1)
			10% Loaded	mph(km/h)	9.2 (14.8)
			15% Loaded	mph(km/h)	4.7 (7.6)
	26	Lift Speeds, Loaded/Empty		fpm(m/sec)	112/120 (0.57/0.61) ı 106/114 (0.54/0.58)
	29	Lower Speeds, Loaded/Empty		fpm(m/sec)	88/82 (0.45/0.42) ı 84/79 (0.43/0.40)
	30	Drawbar Pull, Maximum	With Load	lbs(N)	3913 (17407)
	31		Without Load	lbs(N)	1807 (8041)
	32	Gradeability	Maximum With/Without Load	%	46.0/26.7
Weights	34	Service Weight		lbs(kg)	6056 (2746) ı 6424 (2913)
	35	Axle Loading	With Load, Front	lbs(kg)	7985 (3740) ı 8438 (3847)
	36		With Load, Rear	lbs(kg)	1071 (507) ı 986 (463)
	37		W/O Load, Front	lbs(kg)	2566 (1164) ı 3007 (1364)
	38		W/O Load, Rear	lbs(kg)	3490 (1583) ı 3417 (1550)
Chassis	39	Tires (Standard)	Number, Front/Rear		2/2
	40		Size, Front	in	18x6x12.125
			Size, Rear	in	14x4.5x8
	41	Wheelbase		in(mm)	48.0 (1220)
	42	Track	Front/Rear	in(mm)	31.1/32.4 (789/822)
	44	Ground Clearance	Minimum/at Center of Wheelbase	in(mm)	3.2 / 5.0 (82/127)
	46	Service Brake	Type		Drum
	47	Parking Brake	Type		Foot
		Steering	Type		Hydrostatic
Drive Line	49	Engine	Manufacturer/Model		Mitsubishi 4G63
	51		Rated Output	HP(KW)@rpm	39.5 (29) @ 2100
			Torque	lb-ft(Nm)@rpm	101 (137) @ 1800
	52		Speed, Max. Governed	rpm	2650
	53		Cylinders/Displacement	cu.in.(liters)	4 / 122 (2.0)
	54	Transmission	Manufacturer/Type, Speeds F/R		Clark/Powershift, 1/1
	57	Hydraulic Pressure	For Attachments	psi(bar)	2030 (140)
	58	Sound Level	Avg. at Operator's Ear Per ISO	dB(A)	80

General Information	1	Manufacturer			Clark
	2	Model	Manufacturer's Designation		C18CL
				in(mm)	STD 129 (3285) ı TSU 188 (4780)
	3	Load Capacity		lbs(kg)	3500 (1800)
	4	Load Center	Fork Face to Load CG	in(mm)	24 (500)
	5	Drive Unit	Type		LPG
	6	Operator Type			Rider-Seated
	7	Tire Type			Cushion
	8	Wheels (X=Driven)	Front/Rear		2X/2
Basic Dimensions	9	Upright	Maximum Fork Height, Full Capacity	in(mm)	188 (4780)
	10		Lift Height (Preferred Upright)	in(mm)	129 (3285) ı 188 (4780)
	11		Free Lift, Empty	in(mm)	4.3 (110) ı 57.9 (1471)
	12	Upright Tilt	Back/Forward	deg	8/8 ı 5/6
	14	Forks	Std. Fork Size (T X W X L)	in(mm)	1.5x4x42 (40x100x1070)
	15	Overall Dimensions	Length to Fork Face	in(mm)	81.6 (2075) ı 81.8 (2078)
	16		Width over Drive Axle	in(mm)	37.0 (940)
	17		Height, Upright Lowered	in(mm)	86.7 (2203) ı 82.8 (2103)
			Height, Upright Extended (w/LBR)	in(mm)	169.5 (4305) ı 236.2 (6000)
	18		Height, Overhead Guard		81.1 (2060)
	19	Turning Radius	Outside	in(mm)	72.5 (1840)
	20	Load Center Distance	Center of Drive Axle to Fork Face	in(mm)	14.7 (375) ı 14.9 (378)
	22	Right Angle Stack Aisle	Add Load Length and Clearance	in(mm)	87.2 (2215) ı 87.4 (2218)
Performance	23	Stability	According to ASME/DIN		Yes
	24	Speeds	Travel Speed, Max w/Load	mph(km/h)	10.5 (16.9)
	25		Travel Speed, Max w/o Load	mph(km/h)	10.6 (17)
		Speed on grade, loaded	5% Loaded	mph(km/h)	9.9 (16.0)
			10% Loaded	mph(km/h)	6.0 (9.6)
			15% Loaded	mph(km/h)	4.0 (6.5)
	26	Lift Speeds, Loaded/Empty		fpm(m/sec)	110/120 (0.56/0.61) ı 104/114 (0.53/0.58)
	29	Lower Speeds, Loaded/Empty		fpm(m/sec)	88/82 (0.45/0.42) ı 84/79 (0.43/0.40)
	30	Drawbar Pull, Maximum	With Load	lbs(N)	3785 (16838)
	31		Without Load	lbs(N)	1763 (7845)
	32	Gradeability	Maximum With/Without Load	%	38.6/24.1
Weights	34	Service Weight		lbs(kg)	6529 (2962) ı 6897 (3129)
	35	Axle Loading	With Load, Front	lbs(kg)	8733 (4210) ı 9188 (4053)
	36		With Load, Rear	lbs(kg)	1296 (552) ı 1209 (473)
	37		W/O Load, Front	lbs(kg)	2411 (1094) ı 2852 (1294)
	38		W/O Load, Rear	lbs(kg)	4118 (1868) ı 4045 (1835)
Chassis	39	Tires (Standard)	Number, Front/Rear		2/2
	40		Size, Front	in	18x6x12.125
			Size, Rear	in	14x4.5x8
	41	Wheelbase		in(mm)	48.0 (1220)
	42	Track	Front/Rear	in(mm)	31.1/32.4 (789/822)
	44	Ground Clearance	Minimum/at Center of Wheelbase	in(mm)	3.2 / 5.0 (82/127)
	46	Service Brake	Type		Drum
	47	Parking Brake	Type		Foot
		Steering	Type		Hydrostatic
Drive Line	49	Engine	Manufacturer/Model		Mitsubishi 4G63
	51		Rated Output	HP(KW)@rpm	39.5 (29) @ 2100
			Torque	lb-ft(Nm)@rpm	101 (137) @ 1800
	52		Speed, Max. Governed	rpm	2650
	53		Cylinders/Displacement	cu.in.(liters)	4 / 122 (2.0)
	54	Transmission	Manufacturer/Type, Speeds F/R		Clark/Powershift, 1/1
	57	Hydraulic Pressure	For Attachments	psi(bar)	2030 (140)
	58	Sound Level	Avg. at Operator's Ear Per ISO	dB(A)	80

SPECIFICATIONS

SPECIFICATIONS

General Information	1	Manufacturer			Clark
	2	Model	Manufacturer's Designation		C20sCL
				in(mm)	STD 129 (3285) ı TSU 188 (4780)
	3	Load Capacity		lbs(kg)	4000 (2000)
	4	Load Center	Fork Face to Load CG	in(mm)	24 (500)
	5	Drive Unit	Type		LPG
	6	Operator Type			Rider-Seated
	7	Tire Type			Cushion
	8	Wheels (X=Driven)	Front/Rear		2X/2
Basic Dimensions	9	Upright	Maximum Fork Height, Full Capacity	in(mm)	160 (4070)
	10		Lift Height (Preferred Upright)	in(mm)	129 (3285) ı 188 (4780)
	11		Free Lift, Empty	in(mm)	4.3 (110) ı 57.9 (1471)
	12	Upright Tilt	Back/Forward	deg	8/8 ı 5/6
	14	Forks	Std. Fork Size (T X W X L)	in(mm)	1.5x4x42 (40x100x1070)
	15	Overall Dimensions	Length to Fork Face	in(mm)	82.7 (2103) ı 82.9 (2106)
	16		Width over Drive Axle	in(mm)	37.0 (940)
	17		Height, Upright Lowered	in(mm)	86.7 (2203) ı 82.8 (2103)
			Height, Upright Extended (w/LBR)	in(mm)	169.5 (4305) ı 236.2 (6000)
	18		Height, Overhead Guard		81.1 (2060)
	19	Turning Radius	Outside	in(mm)	73.5 (1866)
	20	Load Center Distance	Center of Drive Axle to Fork Face	in(mm)	14.7 (375) ı 14.9 (378)
	22	Right Angle Stack Aisle	Add Load Length and Clearance	in(mm)	88.2 (2241) ı 88.4 (2244)
Performance	23	Stability	According to ASME/DIN		Yes
	24	Speeds	Travel Speed, Max w/Load	mph(km/h)	10.5 (16.9)
	25		Travel Speed, Max w/o Load	mph(km/h)	10.6 (17)
		Speed on grade, loaded	5% Loaded	mph(km/h)	9.9 (15.9)
			10% Loaded	mph(km/h)	5.6 (9.0)
			15% Loaded	mph(km/h)	3.7 (5.9)
	26	Lift Speeds, Loaded/Empty		fpm(m/sec)	104/120 (0.54/0.61) ı 100/114 (0.51/0.58)
	29	Lower Speeds, Loaded/Empty		fpm(m/sec)	88/82 (0.45/0.42) ı 84/79 (0.43/0.40)
	30	Drawbar Pull, Maximum	With Load	lbs(N)	3776 (16799)
	31		Without Load	lbs(N)	1730 (7698)
	32	Gradeability	Maximum With/Without Load	%	35.6/22.6
Weights	34	Service Weight		lbs(kg)	6842 (3104) ı 7210 (3271)
	35	Axle Loading	With Load, Front	lbs(kg)	9526 (4507) ı 9984 (4172)
	36		With Load, Rear	lbs(kg)	1316 (598) ı 1226 (496)
	37		W/O Load, Front	lbs(kg)	2301 (1044) ı 2742 (1244)
	38		W/O Load, Rear	lbs(kg)	4541 (2060) ı 4468 (2027)
Chassis	39	Tires (Standard)	Number, Front/Rear		2/2
	40		Size, Front	in	18x6x12.125
			Size, Rear	in	14x4.5x8
	41	Wheelbase		in(mm)	48.0 (1220)
	42	Track	Front/Rear	in(mm)	31.1/32.4 (789/822)
	44	Ground Clearance	Minimum/at Center of Wheelbase	in(mm)	3.2 / 5.0 (82/127)
	46	Service Brake	Type		Drum
	47	Parking Brake	Type		Foot
		Steering	Type		Hydrostatic
Drive Line	49	Engine	Manufacturer/Model		Mitsubishi 4G63
	51		Rated Output	HP(KW)@rpm	39.5 (29) @ 2100
			Torque	lb-ft(Nm)@rpm	101 (137) @ 1800
	52		Speed, Max. Governed	rpm	2650
	53		Cylinders/Displacement	cu.in.(liters)	4 / 122 (2.0)
	54	Transmission	Manufacturer/Type, Speeds F/R		Clark/Powershift, 1/1
	57	Hydraulic Pressure	For Attachments	psi(bar)	2030 (140)
	58	Sound Level	Avg. at Operator's Ear Per ISO	dB(A)	80

CLARK GEN2 SERIES cushion tire trucks are designed for long life in diverse applications such as bottling, manufacturing, recycling, warehousing and distribution. These LPG powered trucks provide very high levels of operator comfort, performance, reliability, ease of service and low noise and have set the ergonomic standard for operator compartment design.

Operator Comfort / Convenience

These trucks feature the well-respected operator compartment design of the Gen2 series, providing a quiet, comfortable and spacious environment for operators of all sizes. The large floor area is free of obstructions, has a thick molded floor mat for comfort and noise abatement and is easily removable with no tools. The large open step area and grab handle on the left side provide convenient entry and exit. Foot controls feature a two-pedal inch-brake system with low height and short travel pedals. Left pedal is for inching and brake operations, right pedal is for service brakes only. Left foot parking brake is designed for hand or foot release.

Hydraulic control valve levers are cowl-mounted. Directional control is left hand fingertip operated and electrically actuated. Direction reversals are hydraulically cushioned. The vinyl safety seat with retractable seat belt and lateral restraint is proven effective. Six inches (150 mm) of forward and backward adjustment, and separate back and seat cushions with molded bolsters for comfort. A tilt steering column locks in one of six positions and 38° total travel. The small diameter, thick section steering wheel is easily operated with one hand, and positioned slightly left of operator center for comfortable and productive operation with the left hand, while allowing right hand operation of the hydraulic levers. Clamshell hood, direct acting latch and gas strut allow easy access for daily inspections.

Instrument Panel

The instrument panel features a full LED/digital display with visual and audible engine monitoring warnings. Functions being monitored include water temperature, engine oil pressure, transmission oil temperature, alternator charge, low LPG fuel and maintenance timer. The state-of-the-art instrument panel incorporates many protection devices for the drive train and electrical system. An automatic engine shutdown system continuously monitors engine oil pressure, engine coolant temperature and transmission oil temperature. Also included is a digital hour meter and neutral start switch. There are warning prompts for the seat belt, parking brake, ignition key, headlights and service engine light. The panel incorporates a diagnostic system to assist with fuel system maintenance and fault indication for the electrical system.

Engine

Featuring a Mitsubishi model 4G63, 2.0 liter (122 c.i.) 4-cylinder overhead cam engine with internal dynamic balancers for reduced vibration and an EPA 2004 compliant LPG fuel system with diagnostics. Camshaft and balancers are cog belt driven. Cast iron deep skirt block with aluminum cylinder head, 5-main bearing crankshaft, hydraulic valve lifters and electronic ignition reduce maintenance requirements. This engine is well known for low maintenance and long service life.

Engine Accessories/Capacities

Trucks are 12-volt negative ground incorporating a heavy-duty starter with anti-restart system and a 50 amp alternator with integral regulator. The battery is rated at 430 CCA at 0°F (-18°C). Clean air intake is achieved by a high capacity air cleaner with raised air inlet; an automatic dirt ejector and air restriction indicator provide extended service life. An optional supplemental safety element and pre-cleaner can easily be added without other changes. Electrical relays and automotive type blade fuses are conveniently located in a covered cowl mounted fuse panel. Moisture resistant electrical connectors and fusible links are located outside the main harness for ease of access. Air and oil filters are easily accessible for service and located to prevent spillage. The hydraulic sump breather is remotely located to prevent spillage. All fluid level checks are easy to access. Crankcase capacity with filter is 4.0 qts. (3.8L). An LPG tank bracket with double straps is designed for 33.5 lb (15.2 kg) tanks.

Transaxle

Featuring a Clark Model TA-12 single-speed, full reversing, powershift transaxle. This rugged and proven Clark transaxle is an integral unit with high ratio, industrial torque converter, full-floating drive axles and drum/shoe brakes. Equipped with electrically controlled directional control, fully modulated clutch packs and a precise inching control system. Test ports, fluid check and full-flow oil filter are easily accessible. An integral oil cooler is located in the open core radiator.

Brakes

Self-energizing, hydraulic-actuated drum and shoe type service brakes. Two-pedal system with integral inching and brake pedal on the left side and service brake pedal on the right. Heavy cast iron brake shoes, drums and backing plates with openings for lining inspection and adjustment. All components are asbestos-free. The brakes are accessed by removing the wheel hub, axle shaft and brake drum. The left foot parking brake pedal actuates the service brakes at both drive wheels, with electric transmission interrupt, and fingertip release. The transmission is disengaged when the parking brake is applied.

Hydraulics

A single gear driven pump provides fluid for hydraulic functions and steering. The priority-demand steering system conserves energy by supplying hydraulic fluid on demand-only basis. The hydraulic tank is integral with the truck frame with an in-tank screen, and the in-tank return line filter is easily serviced without spill. A quick-connect pressure port allows convenient pressure checks. All pressure fittings use O-ring face seals for positive sealing. Sump tank capacity is 6.3 gal. (24 L).

Steering

Steering is full hydrostatic with tilt wheel, utilizing a compact axle beam and integral double-acting steer cylinder. High strength spindle assemblies incorporate kingpins and double metal sealed bearings to provide rugged, easily serviced assemblies. The steering linkage uses spherical bearings, double shear link pins and grease fittings. Rubber isolation mounts support the axle, absorb shock and reduce noise.

Upright

Clark designed high visibility uprights are available as standard, Hi-Lo, and triple stage in a wide range of lift heights. Upright rails are all-roller construction with canted rollers to absorb both normal and side-thrust loads. The ITA Class II fork carriage includes six main rollers and additional side thrust rollers. The load backrest provides excellent visibility. Hydraulic cushioning between stages aids in smooth, quiet operation. Self-lubricating trunnion bushings and simplified roller access improve serviceability. A hydraulic tilt lock valve to prevent cavitation; integral flow limiting valves prevent rapid carriage descent in the event of a line failure; and lowering control valves allow faster lowering speeds when empty or with light loads. Tilt cylinders incorporate self-aligning spherical bushings at both ends for extended seal life. Optional hose adaptations provide optimum visibility through the upright.

Additional Features

Single auxiliary valve, two headlights mounted on the overhead guard, and a 48” high load backrest. The auxiliary hydraulic flow can be easily adjusted at the main valve to suit various attachments. With the one-piece hood and quickly removeable floorplate, all routine maintenance checkpoints can be easily accessed. An open-core radiator with integral oil cooler is standard. An automatic engine shutdown system protects driveline components. Hydraulic fittings are O-ring face seal. Color is Clark Green with non-glare matte black trim and white wheels. Tow pin located in the counterweight. The operator manual is permanently attached in the back of the safety seat.

Available Equipment

Various options include wide drive tires, auxilliary valves and hose adaptations, sideshifters, hydraulic control options, stop/tail/backup lights, rear work light, turn signal lights, strobes, backup alarm, mirrors, convenience console, various seat options, air cleaner safety element, and pre-cleaner.

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C15/18/20sC Specification Sheet
59-894-0123 Printed in USA CC0805

your authorized CLARK dealer is:

KNIGHTSBRIDGE
mechanical handling ltd