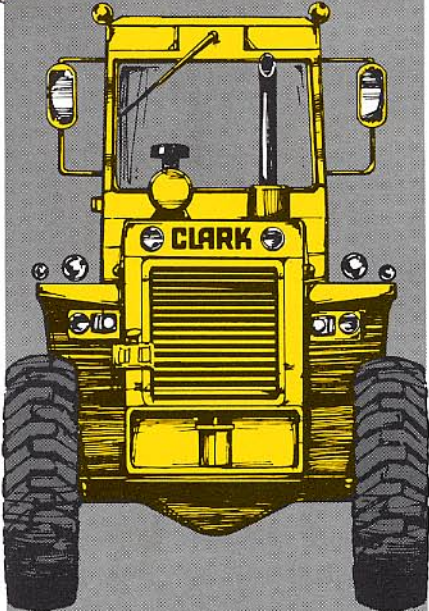
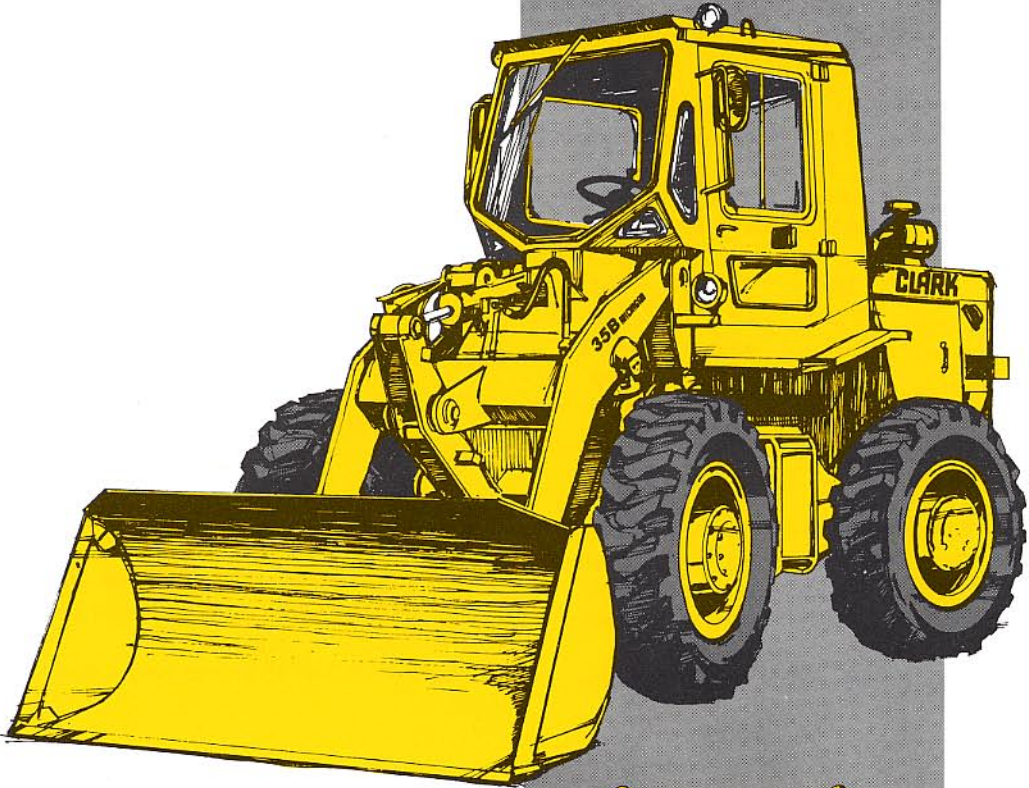
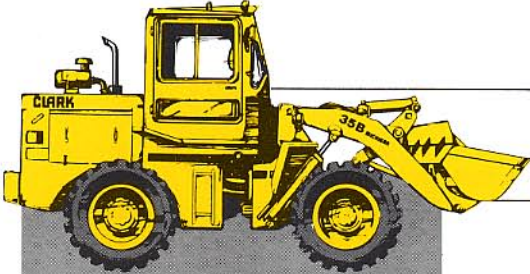


CLARK

35B MICHIGAN





ENGINE

Make	ISUZU
Model	D500PL
Maximum hp (kW)*	84 (63)
Flywheel hp (kW)**	74 (55)
Governed rpm	2200
Maximum torque, N•m	264 @ 1600
ft•lbf	195.3 @ 1600
kgf•	27,0 @ 1600
Bore and stroke, mm	98 x 110
in	3.86 x 4.33
Number of cylinders	6
Displacement, L	4,978
in ³	303.76
Electrical System (alternator)	24V, 25A

*Maximum horsepower of basic engine under SAE J816 – barometric pressure of 74,62 cm (29.38 in) Hg, 29.4° C (85° F) and maximum engine speed with fuel pump, water pump and lubricating oil pump.

**Net usable horsepower at engine flywheel under SAE J816 – barometric pressure of 74,62 cm (29.38 in) Hg, 29.4° C (85° F) and governed engine speed with fan, alternator and air cleaner.



POWERTRAIN

TORQUE CONVERTER: High-efficiency industrial type; single-stage with 3.20:1 torque multiplication ratio.

TRANSMISSION: Countershaft type powershift with directional clutch modulation; three speeds forward, three speeds reverse. Travel speeds.*

Forward	1st	2nd	3rd
km/h	7,0	13,0	34,0
mph	4.35	8.08	21.13
Reverse	1st	2nd	3rd
km/h	7,5	14,0	34,5
mph	4.66	8.70	21.44

*Measured with 12 00-24, 8PR (L-2) tires.

DIFFERENTIAL: Clark torque proportioning front and rear.

AXLES: Heavy-duty planetary design with fabricated steel housing. Front axle fixed, rear axle oscillates a total of 24°. Vertical wheel travel of 282 mm (11.1 in) with all wheels remaining on ground.

PLANETARY DRIVES: Low-friction, roller bearing planetary in each wheel.



TIRES

Nylon body, tube type	12.00-24, 8PR (L-2)
Other tires available:	13.00-24, 8PR (L-2)
	15.5-25, 8PR (L-2)
	16.9-24, 10PR (L-2)

Other optional tires also available.



STEERING SYSTEM

Articulated frame; full hydraulic power steering with Orbitrol® steering valve.

ANGLE OF STEER: Each direction 35°; total 70°.

PUMP: Gear-type design, torque converter mounted. Total pump output is 72 L/min (19 gpm).

RELIEF PRESSURE: 13 238 kPa (1920 psi) (135 kgf/cm²) (132 bar).

CYLINDERS: Two (2) double-acting with chrome plated piston rods. Bore and stroke – 60 x 363 mm (2.36 x 14.29 in).



BRAKES (SAE J237)

SERVICE: Four wheel straight hydraulic split system self adjusted fully enclosed outboard mounted single wet disc, oil cooled. Application neutralizes transmission in forward only.

PARKING: Mechanical 312 mm (12.28 in) diameter disc brake on transmission output shaft.



HYDRAULIC SYSTEM

Closed and pressurized with a capacity of 95 L (25.1 U.S. gal); oil supplied from sturdy plate steel reservoir. Hand hole in tank for easy cleaning.

BOOM CONTROLS: Valve has four positions: raise, hold, lower, float.

BUCKET CONTROLS: Valve has three positions: rollback hold, dump. Automatic bucket positioner adjustable to any desired loading angle.

PUMP: Gear-type design, torque converter mounted. Total pump output is 122 L/min (32.23 gpm).

VALVE: Two spool with built-in pressure relief valve. Mounted on front frame for easy access.

RELIEF PRESSURE: 15680 kPa (2275 psi) (160 kgf/cm²) (157 bar).

CYLINDERS: Two (2) boom and one (1) bucket; all double-acting.

Boom, bore & stroke – 100 x 745 mm (3.94 x 29.33 in).

Bucket, bore & stroke – 110 x 400 mm (4.33 x 15.75 in).

FILTERS: Full-flow 15 micron return filter, in reservoir.



HYDRAULIC SPEEDS

Raising time (with load)	6.0 s
Dumping time (with load)	1.1 s
Lowering time (empty)	3.4 s
Total cycle	10.5 s



SERVICE CAPACITIES

	litres	U.S. gal
Cooling system	27,0	7.1
Crankcase	13,0	3.4
Torque converter & transmission	17,0	4.5
Front & rear axle differentials (each)	14,0	3.7
Front & rear wheel hubs (each)	6,0	1.6
Fuel tank	95,0	25.1
Hydraulic reservoir	82,0	21.7

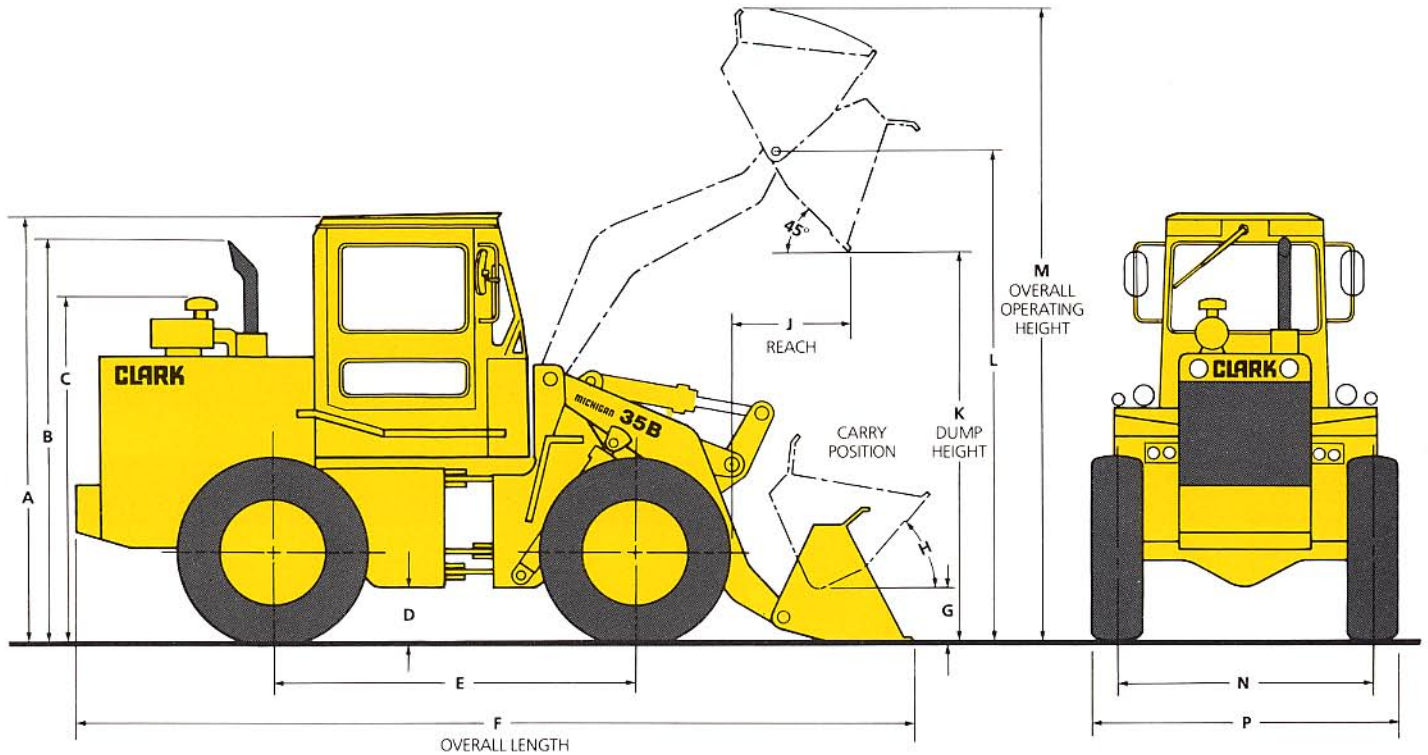
STANDARD EQUIPMENT

Bucket Positioner
 Bucket Seat, adjustable
 Drawbar
 Horn
 Lights, work (2 front, 1 rear)
 Lights, Tail/Stop with
 turn signals
 Panels, engine compartment

Rear-View Mirrors
 Steps, right & left access
INSTRUMENTS/GAUGES
 Battery Charging
 Engine Temperature
 Engine Oil Pressure
 Fuel Level
 Torque Converter Temperature
 Hourmeter

FILTERS

Air (dry-type)
 Engine Oil
 Fuel
 Hydraulic Oil, return
 Torque Converter/Transmission



MACHINE DIMENSIONS, mm (with 1,2 m³ bucket)*

Tire Size	A**	B	C	D	E	F	G	H	J	K	L	M	N	P
12.00-24 (L-2) in	2895 114.0	2615 103.0	2255 88.8	355 14.0	2350 92.5	5490 216.1	355 14.0	50°	1000 39.4	2660 104.7	3390 133.5	4425 174.2	1665 65.6	2030 79.9
13.00-24 (L-2) in	2920 115.0	2640 103.9	2280 89.8	380 15.0	2350 92.5	5490 216.1	380 15.0	50°	980 38.6	2685 105.7	3415 134.4	4450 175.2	1665 65.6	2030 79.9
15.5-25 (L-2) in	2920 115.0	2640 103.9	2280 89.8	380 15.0	2350 92.5	5490 216.1	380 15.0	50°	980 38.6	2685 105.7	3415 134.4	4450 175.2	1665 65.6	2050 80.7
16.9-24 (L-2) in	2920 115.0	2640 103.9	2280 89.8	380 15.0	2350 92.5	5490 216.1	380 15.0	50°	980 38.6	2685 105.7	3415 134.4	4450 175.2	1665 65.6	2120 83.5

*Per SAE J732 & J742 Dimensional drawing shown with soft cab. **Add 90 mm (3.54 in) for integral ROPS cab.

OPTIONAL EQUIPMENT and approximate installed weights

	kg	lb		kg	lb
Awning Canopy	60	132	Fenders, front	25	55
Backhoe with 0,1 m ³ (3.5 ft ³) bucket	1430	3153	Fork Attachment	670	1474
Bucket, 1,0 m ³ (1.31 yd ³) (without teeth)	395	871	Logger Attachment (includes 3-spool valve & piping kit)	900	1984
Bucket Teeth (7)	40	88	ROPS	310	683
Cab	210	462	ROPS Cab	560	1235
3-Spool Valve & Piping	20	44			

OPERATING DATA (with 12.00-24 tires)

Data presented here conforms to applicable standards recommended by the Society of Automotive Engineers: SAE loader ratings J732 and J742. Changes in standard configuration may change machine dimensions or operating data. Refer to Supplemental Operating Data.

Bucket Type		General Purpose	General Purpose
Capacity, Rated (heaped)	m ³	1,00	1,20
	yd ³	1.31	1.57
Rated (struck)	m ³	0,85	1,00
	yd ³	1.11	1.31
Cutting Edge Width	mm	2120	2120
	in	83.46	83.46
†Dump Height @ Full Lift and 45° Discharge Angle	mm	2660	2660
	in	104.71	104.71
†Reach @ Full Lift and 45° Discharge	mm	1000	1000
	in	39.37	39.37
†Reach @ 45° Discharge Angle and 2130 mm (7 ft Height)	mm	1380	1380
	in	54.33	54.33
Overall Length	mm	5490	5490
	in	216.14	216.14
†Overall Operating Height	mm	2620	2620
	mm	103.15	103.15
Clearance Circle (bucket in carry position)	m	10,2	10,2
	ft	33.15	33.15
Breakout Force	kN	47,4	47,4
	lbf	10,582	10,582
	kgf	4,800	4,800
Static Tipping Load, Straight	kg	4300	4200
	lb	9,480	9,259
Full (35°) Turn	kg	3800	3700
	lb	8,377	8,157
Operating Weight*, Total	kg	6540	6610
	lb	14,418	14,572

†Changes with tire size; refer to Machine Dimensions.

*Includes all items listed as Standard Equipment plus full fuel tank, ROPS canopy and 70 kg (154 lb) operator. A change in tire size or the addition (or removal) of optional equipment or attachments will affect both operating weight and tipping loads. These changes are shown below for certain selected items.

	CHANGE IN OPERATING WEIGHT		CHANGE IN FULL TURN STATIC TIPPING LOAD	
	kg	lb	kg	lb
13.00-24, 8PR (L-2)	113	249	65	143
13.00-24, 12PR (L-2)	136	300	80	176
15-5.25, 8PR (L-2)	277	610	160	353
Cab, Steel	-210	-463	-65	-143
ROPS, Open (removal)	-310	-683	-96	-212

Specifications subject to change without notice or obligation
Illustrations used in this publication may show optional equipment

Bul. TCM35B
FEB. 84