CLARK

175 C
MICHIGAN

ENGINE

Make: Cummins Model: NT-855 C

Max. Horsepower hp (W)**	310 (231) at 2100 rpm
Flywheel Horsepower hp (kW)**	279 (208) at 2100 rpm
Net Horsepower kW (PS)*	215 (292) at 2100 rpm
Max. Torque Nm (lbft)**	1364 (1006) at 1500 rpm
Max. Torque Nm (lbft)*	1323 (976) at 1500 rpm
Bore & Stroke m/m (in)	139.7 x 152.4 (5.50 x 6.00)
Number of cylinders	6
Displacement L (in^3)	14,0 (855)
Electrical system (alternator)	24V, 75A

*Din 70020 **SAE 816b

DRIVETRAIN

Torque converter: Clark high-efficiency industrial type; single-stage with 3.09:1 torque multiplication ratio.
Transmission: Clark countershaft type powershift, with directional clutch modulation; four speeds forward, four speeds reverse.
Travel speeds*

1st	2nd	3rd	4th
6.3	11.1	18.5	32.8 km/h
3.9	6.9	11.5	20.4 mph

*Measured with 26.5 - 25 20PR (L-3) tires.

Differentials: Clark limited slip, front and rear.
Axles: Heavy-duty Clark planetary design with single-piece cast steel housing. Front axle fixed, rear axle oscillates a total of 23°. Vertical wheel travel of 427 mm (16.8 in) with all wheels remaining on ground.
Planetary drives: Clark low-friction, roller bearing planetary in each wheel.

TIRES

Tubeless, nylon body, loader/dozer type: 26.5 - 25, 20PR (L-3)
Other tires available:

26.5 - 25, 20PR (L-2, L-4, L-5)	26.5 - 25, XRDNA* Radial
26.5 - 25, 26PR (L-3, L-4, L-5)	26.5 - 25, XRA* Radial
29.5 - 25, 16PR (L-3)	29.5 - 25, XRA* Radial
29.5 - 25, 22PR (L-2, L-3, L-4)*	30/65R29, XRDA1 Radial
29.5 - 25, 28PR (L-4)	

*Rear axle oscillation limited to 16°; vertical wheel travel of 315 mm (12.4 in).

BRAKES (SAE J1152) (ISO 3450)

Service: Four wheel air-over-hydraulic, self-adjusting caliper discs. Application of left pedal also neutralizes transmission in **forward** only.
Secondary: Axle-by-axle system. Automatically actuated by low air pressure or manually applied through dash-mounted control; audible and visual alarm.
Parking: Mechanical on front axle input shaft.
Filtration: In-line air filter and dryer removes oil and moisture from brake air system.

STEERING SYSTEM

Articulated frame; full hydraulic power steering with speed sensor.
Angle of Steer: Each direction 35°; total 70°.
Pump: Tandem gear-type design, torque converter mounted; high volume at low engine rpm assures safe, responsive, steering. Rated output is 371 l/min (98 U.S. gpm) at 2100 engine rpm and 138 bar (2000 psi).
Relief Pressure: 165 bar (2400 psi).
Cylinders: Two double-acting with chrome-plated piston rods. Bore and stroke: 114.3 x 462.3 mm (4.5 x 18.2 in).

HYDRAULIC SYSTEM

Closed and pressurized power-sensing, demand-type system with a capacity of 465.6 l (123 U.S. gal.); oil supplied from sturdy plate-steel reservoir. Access hole in tank for easy cleaning; in-tank magnet provides extra protection.
Boom controls: Valve has four positions: raise, hold, lower, float. Automatic kickout adjustable for any position between maximum boom reach and full lift height.
Bucket controls: Valve has three positions: rollback, hold, dump. Automatic bucket positioner adjustable to any desired loading angle.
Pump: Tandem gear-type design, torque converter mounted. Total pump output is 446.7 l/min (118 U.S. gpm) at 2100 engine rpm and 69 bar (1000 psi). Front and rear sections each rated at 223.3 l/min (59 U.S. gpm) at these conditions. Rear section contributes only up to approximately 124 bar (1800 psi).
Valve: Split spool with built-in pressure relief valve; actuated by remote mounted pilot valve. Mounted on front frame for easy access.
Relief Pressure: 180 bar (2600 psi)
Cylinders: Two boom and two bucket, all double-acting.
Boom, bore and stroke: 177.8 x 1092.2 mm (7.0 x 43.0 in)
Bucket, bore and stroke: 152.4 x 599.9 mm (6.0 x 23.6 in)
Filters: Full-flow 10 micron return filter (with 2 elements), located in hydraulic reservoir.

HYDRAULIC SPEEDS

	Sec.
Raising time (with load)	6.7
Dumping time (with load)	2.0
Lowering time (empty)	4.2
Total cycle	12.9

SERVICE CAPACITIES

	Litres	U.S. gal.
Cooling system	75.7	20.0
Midmount bearing	1.9	0.5
Crankcase	34.1	9.0
Torque converter & transmission	47.3	12.5
Front & rear axle differentials (each)	34.1	9.0
Front & rear wheel hubs (each)	12.3	3.25
Fuel tank	469.4	124.0
Hydraulic reservoir	389.9	103.0

*STANDARD EQUIPMENT

INSTRUMENTS/GAUGES: Air Cleaner Restriction Indicator. Air Pressure. Engine Coolant Temperature. Engine Oil Pressure. Hourmeter. Hydraulic Fluid Level Sight-Gauge. Torque Converter Oil Temperature. Transmission Fluid Level Sight-Gauge. Voltmeter.
WARNING LIGHTS/AUDIBLE ALARMS: Air Pressure. Horn. Parking Brake.
CAB, ROPS (SAE J1040) (ISO 3471): Acoustical Lining. Air Ducting, built-in. Doors, lockable with self-locking sliding glass windows. Electrical System (24V), circuit-breaker protected, prewired for optional accessories. Environmental Control; heater/defroster and pressurizer with three-speed blower fan. Floor Mats. Hand and Grab Safety Rails. Lights, interior, red and white. Safety Glass, tinted. Suspension seat, with seat belt (SAE J386). Walk-in, Walk-out feature. Windshield Washer, front. Wipers, front and rear.

ADDITIONAL STANDARD EQUIPMENT: Alternator (75A). Automatic Boom Kickout. Automatic Bucket Positioner. Brake System Air Dryer, maintenance free. Cab Access Steps and Handrails, left and right sides (SAE J185). Cast Aluminium Boom and Bucket Control Levers, console mounted. Drawbar, with pin. Hood Side Panels. Lifting Lugs. Lights, work (150 W), 4 front, 2 rear. Limited Slip Differentials, front and rear. Neutral Start Feature. Quick Connect Hydraulic Pressure Test Ports. Quick Start, engine. Rearview Mirrors, exterior. Secondary Brake System, low air pressure actuated. Service Platforms. Transmission Declutch. Transmission Modulation. Vandalism Lock, provision for Batteries, Engine Coolant, Engine Oil, Fuel, Hydraulic Oil, Torque Converter/Transmission Oil.

*Standard equipment will vary depending upon regulations and requirements for country of destination.

OPTIONAL EQUIPMENT

Air conditioner. Belly Guard, front frame. Belly Guard, rear frame. Bucket Teeth (8). Counterweight. Emergency Steering Kit, electric. Fenders, front. Reverse Alarm (SAE J994). ROPS Canopy (SAE J1040) (ISO 3471). Three-Spool Valve, Piping and Controls.

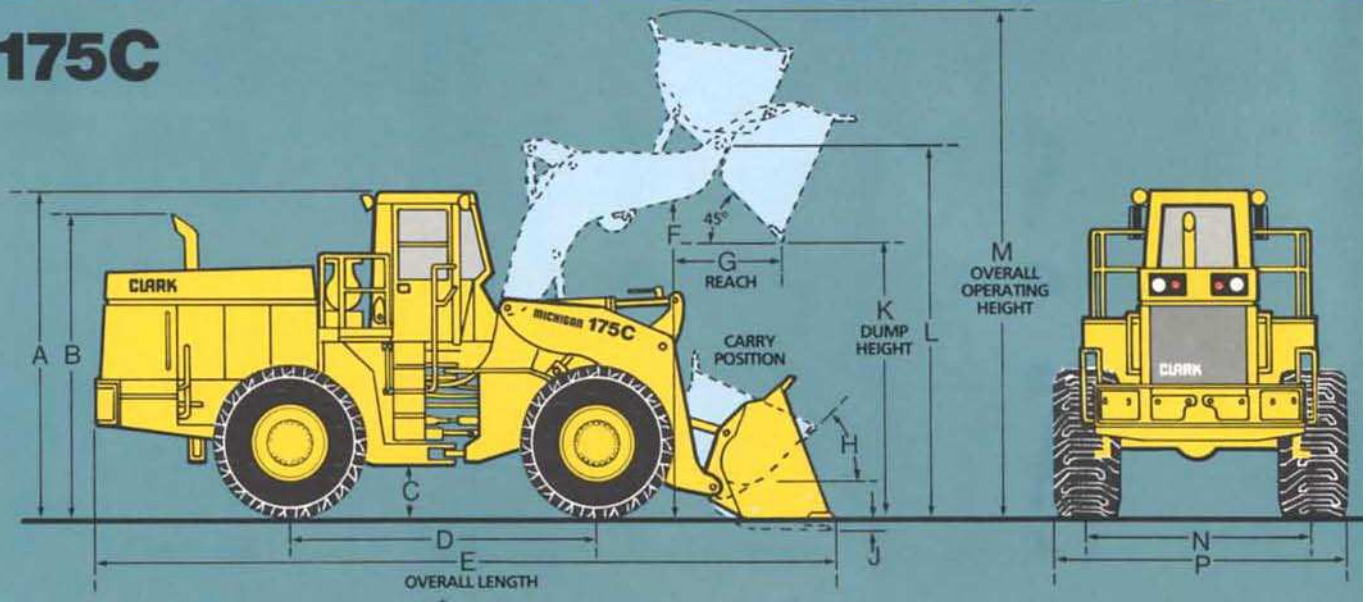
† Operating Data (with 26.5-25, 20PR (L-3) tires)

Data given below which conform to applicable standards recommended by the Society of Automotive Engineers, SAE loader ratings J732 and J742, are denoted in the text by ▲.

Changes in standard configuration may change machine dimensions or operating data. Refer to Supplemental Operating Data.

Bucket Type	Straight Edge Rock	Spade Nose Rock	General Purpose	Material Handling	Lig Ma
▲ Capacity, Rated (heaped)	3.8 5.0	3.8 5.0	4.2 5.5	4.6 6.0	5.0 6.5
▲ Rated (struck)	3.2 4.25	3.1 4.10.	3.6 4.70	3.9 5.09	4.2 5.5
▲ Cutting Edge Width	3150 124.0"	3150 124.0"	3150 124.0"	3150 124.0"	31 12
▲ Dump Height at Full Lift and 45° Discharge Angle*	3150 10' 4.0"	3010 9' 10.5"	3089 10' 1.6"	2997 9' 10"	29 9'
▲ Reach at Full Lift and 45° Discharge Angle*	1232 4' 0.5"	1405 4' 7.3"	1306 4' 3.4"	1399 4' 7.1"	14 4'
▲ Reach at 2134 mm (7') Height and 45° Discharge Angle*	1770 5' 9.7"	1867 6' 1.5"	1824 5' 11.8"	1880 6' 2"	19 6'
▲ Overall Length	8608 28' 3"	8811 28' 11"	8710 28' 7"	8842 29' 0"	89 29
▲ Overall Operating Height*	5856 19' 2.6"	5801 19' 0.6"	5669 18' 7.2"	5705 18' 8.6"	57 18
▲ Clearance Circle (bucket in carry position)	14.99 49' 2.5"	14.97 49' 1.5"	15.05 49' 4.5"	15.11 49' 7"	15 49
▲ Breakout Force	185.9 41,500	157.8 35,210	170.1 37,970	152.7 34,105	1 32
Effective Digging Force	290.0 65,195	288.1 64,763	289.0 64,966	286.2 64,330	28 63
▲ Static Tipping Load**, Straight	22,145 48,821	21,943 48,376	22,030 48,567	21,730 47,906	21 47
▲ Full (35°) Turn	19,868 43,801	19,672 43,369	19,784 43,616	19,483 42,952	19 42
▲ Operating Weight**, Total	26,231 57,829	26,339 58,067	26,209 57,780	26,303 57,988	26 58

175C



Machine Dimensions*

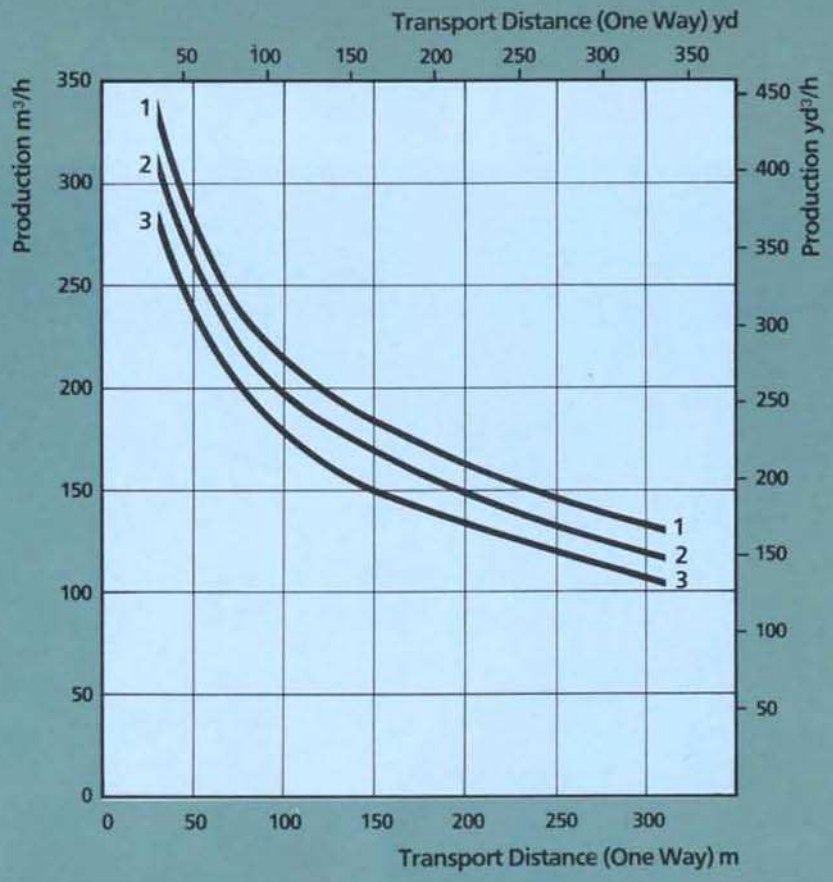
Tire Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P
26.5-25 (L-2, L-3)	3706 12'1.9"	3457 11'4.1"	536 1'9.1"	3429 11'3"	†	3564 11'8.3"	†	44°	97 3.8"	†	4277 14'0.4"	†	2268 7'5.3"	30 10
26.5-25 (L-4)	3741 12'3.3"	3493 11'5.5"	572 1'10.5"	3429 11'3"	†	3599 11'9.7"	†	44°	51 2.0"	†	4313 14'1.8"	†	2268 7'5.3"	30 10
26.5-25 (L-5)	3752 12'3.7"	3503 11'5.9"	582 1'10.9"	3429 11'3"	†	3609 11'10.1"	†	44°	30 1.2"	†	4323 14'2.2"	†	2268 7'5.3"	30 9'
29.5-25 (L-3)	3767 12'4.3"	3518 11'6.5"	597 1'11.5"	3429 11'3"	†	3625 11'10.7"	†	44°	36 1.4"	†	4338 14'2.8"	†	2337 7'8"	31 10
29.5-25 (L-4)	3802 12'5.7"	3553 11'7.9"	632 2'0.9"	3429 11'3"	†	3660 12'0.1"	†	44°	0 0	†	4374 14'4.2"	†	2337 7'8"	32 10

†See Operating Data.

Production

Buckets
1 : 4.6 m³, 6.0 yd³
2 : 4.2 m³, 5.5 yd³
3 : 3.8 m³, 5.0 yd³

Production based on:
Loading shot rock
60 minute hour
100% bucket fill factor
0% grade
4% rolling resistance



Supplemental Operating Data

***Dimensions:** change with tires other than 26.5-25 (L-3); add or subtract as applicable:

	26.5-25(L-4, L-5)	26.5-25, XRDNA* Radial	26.5-25, XRA* Radial	29.5-25(L-2, L-3)	29.5-25(L-4)
Vertical, mm (in)	+ 45.7 (1.8)	+ 35.6 (1.4)	0 (0)	+ 66.0 (2.6)	+ 96.5 (3.8)
Horizontal, mm (in)	− 38.1 (1.5)	− 27.9 (1.1)	0 (0)	− 57.1 (2.25)	− 71.1 (2.8)

****Operating Weight:** is approximate and includes bucket shown plus 1315 kg (2900 lb) rear tire hydroinflation and ROPS cab. A change in tire size or the addition of either optional equipment or attachments will affect both operating weight and tipping loads. These changes are shown below for certain selected items.

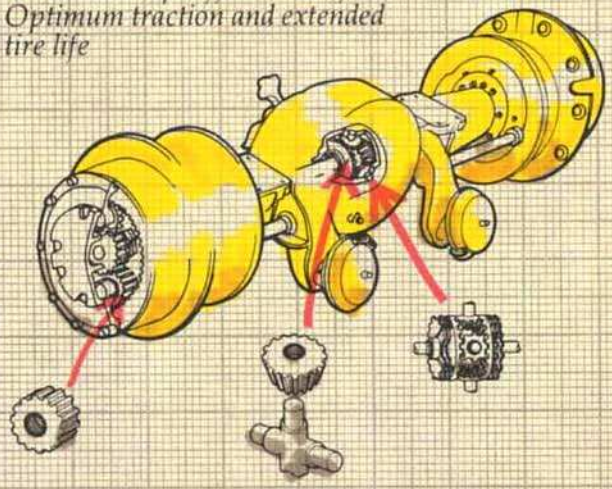
Tires	With Hydroinflation††				Without Hydroinflation			
	Operating Weight Change		Full Turn Tipping Load Change		Operating Weight Change		Full Turn Tipping Load Change	
	kg	lb	kg	lb	kg	lb	kg	lb
26.5-25, 20PR(L-2)	− 262	− 589	− 240	− 534	− 2139	− 4754	− 1941	− 4314
26.5-25, 20PR(L-3) **STD**	0	0	0	0	− 1874	− 4165	− 1701	− 3780
26.5-25, 20PR(L-4)	318	707	289	641	− 1556	− 3458	− 1413	− 3139
26.5-25, 20PR(L-5)	516	1146	468	1040	− 1359	− 3019	− 1233	− 2740
26.5-25, XRDNA* Radial	− 82	− 181	− 74	− 164	− 1956	− 4346	− 1775	− 3944
26.5-25, XRA* Radial	− 213	− 474	− 194	− 430	− 2088	− 4639	− 1896	− 4210
29.5-25, 22PR(L-2)	1390	3088	1261	2802	− 1325	− 2944	− 1202	− 2672
29.5-25, 22PR(L-3)	1636	3636	1485	3300	− 1078	− 2396	− 978	− 2174
29.5-25, 22PR(L-4)	2101	4668	1906	4236	− 614	− 1364	− 557	− 1238

††75% rear tire hydroinflation by volume

CLARK POWERTRAIN

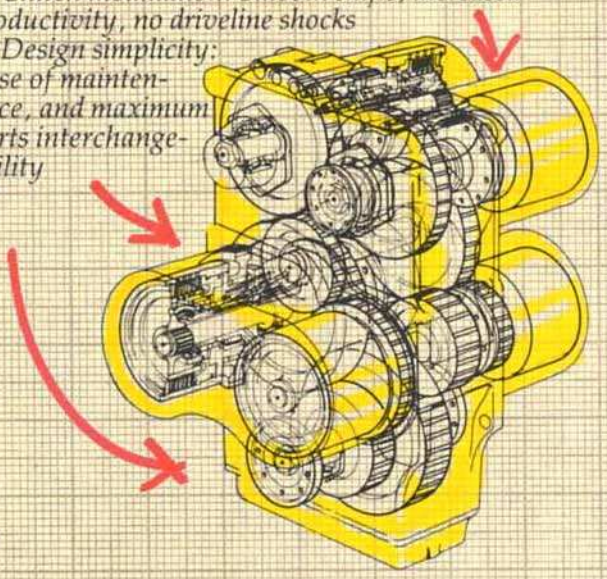
AXLES – Rugged, Proven, Reliable

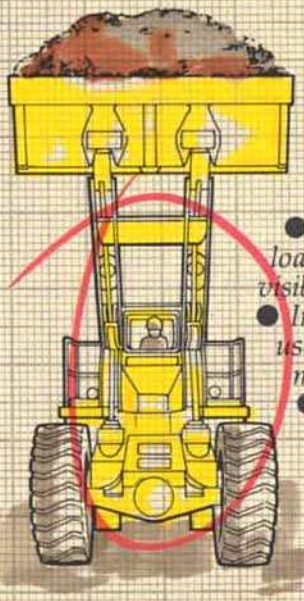
- *Single-piece cast-steel housing: Maximum strength*
- *Needle-roller bearings: Minimum friction and wear*
- *Limited slip differentials (front and rear): Optimum traction and extended tire life*



TRANSMISSION – Smooth, Simple, Dependable

- *Clutch modulation: Smooth shifts, increased productivity, no driveline shocks*
- *Design simplicity: Ease of maintenance, and maximum parts interchangeability*



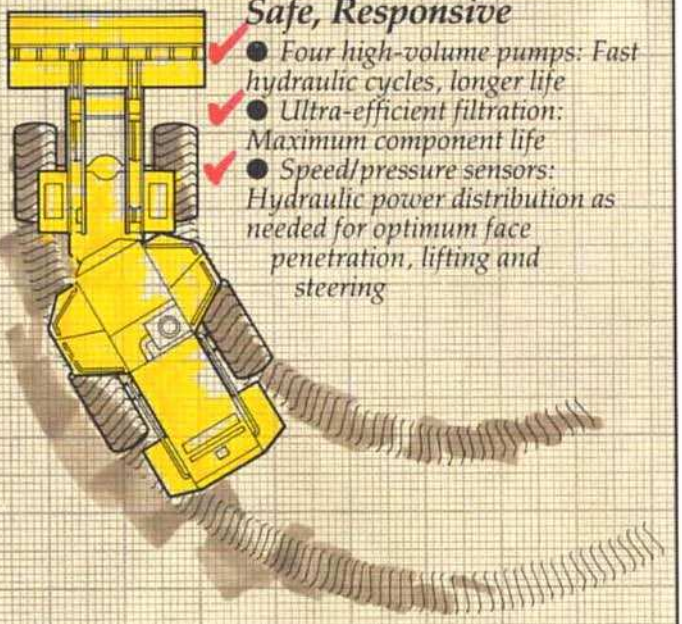


BOOM – Strong, Solid, Durable

- *Rugged double-plate construction: Maximum rigidity and protection of components*
- *Crosstube location: Even load distribution and optimum visibility*
- *In-line linkage: Optimum use of hydraulic forces, minimum torsion on boom*
- *Trunnion-mounted cylinders: Maximum speed and lifting capacity to full height, minimum piston rod flexing*

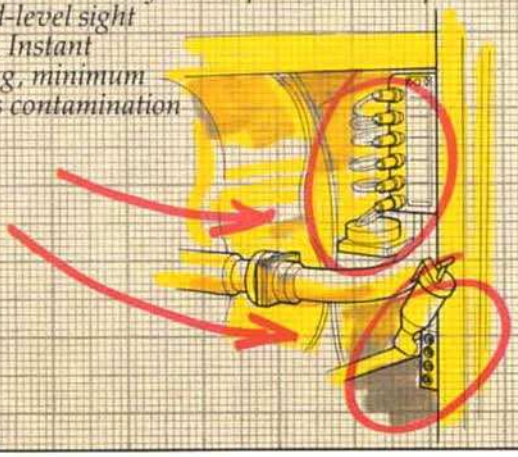
HYDRAULICS – Cycle-sensitive, Safe, Responsive

- *Four high-volume pumps: Fast hydraulic cycles, longer life*
- *Ultra-efficient filtration: Maximum component life*
- *Speed/pressure sensors: Hydraulic power distribution as needed for optimum face penetration, lifting and steering*



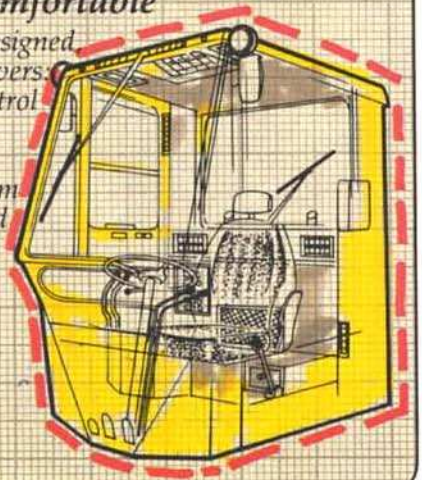
MAINTENANCE – Quick, Easy, Convenient

- *Centralized grease fittings: Convenient service of difficult lubrication points*
- *Quick-connect hydraulic pressure check ports*
- *Fluid-level sight gauges: Instant checking, minimum systems contamination*



OPERATOR COMPARTMENT – Quiet, Safe, Comfortable

- *Ergonomically-designed low-effort control levers: Precise machine control without fatigue*
- *Sound-insulated ROPS cab: Maximum operator comfort and safety*
- *Color-coded instrumentation: Convenient, positive monitoring*



CLARK

Clark Michigan Company Quality Assurance Policy

The policy of the Clark Michigan Company is to achieve and maintain a reputation for leadership in the quality of its products and product services.
The objective of Clark Michigan Company is to produce and market construction machinery equipment and supporting services that equal or exceed its competitors' quality, and satisfy customer needs and expectations. Clark Michigan Company will also assure that all materials, parts, assemblies or sub-assemblies supplied by other Clark divisions or by outside vendors meet the set forth quality requirements.
The Clark Michigan Company is structured to develop, implement and monitor a quality assurance system covering engineering, testing, manufacturing and services to assure a quality product, supported by skilled trained personnel and high parts availability.
The quality assurance system is constantly reviewed, revised and reissued to assure that Clark Michigan Company and its dealer network continue to provide the highest standards of quality.

CLARK Construction Machinery Group

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