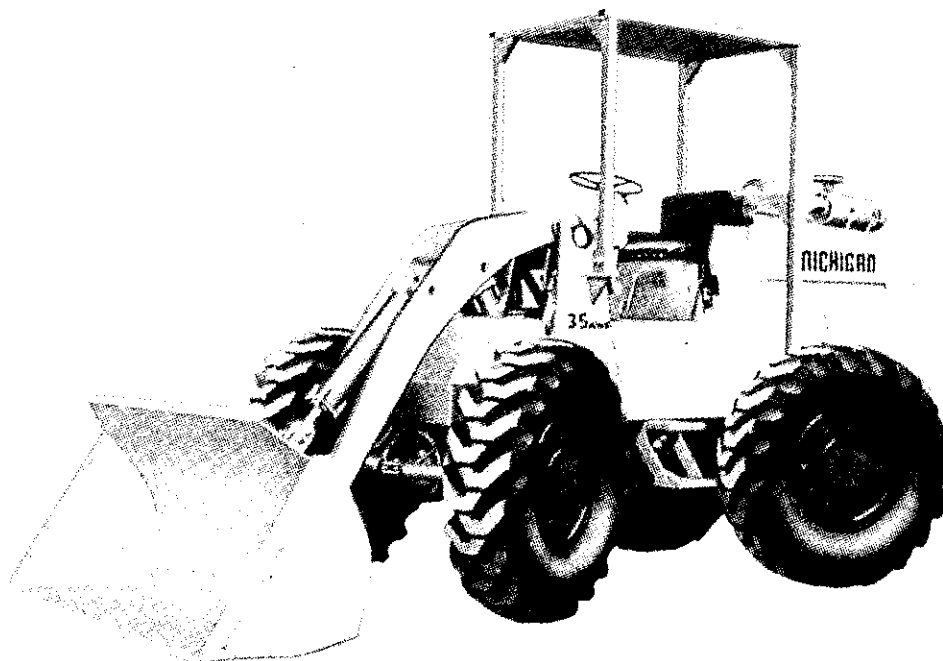


CLARK MODEL 35AWS

MICHIGAN

TRACTOR SHOVEL



MODEL SHOWN WITH OPTIONAL EQUIPMENT.

- Complete power train designed and manufactured by Clark
- Perkins 4.248 engine with 74 flywheel horsepower
- Hydraulic power steering with 3 steering modes
- Large capacity hydraulic system
- Air-over-hydraulic brakes on all wheels...automatically applied emergency brake
- General purpose, material handling and light material buckets...1, 1¼, 1½, 1¾ and 2 cubic yards (0,76/0,96/1, 15/1, 3/1,5 m³)

● ENGINE

Make	Perkins
Model	4.248
*Maximum horsepower	78
**Flywheel horsepower	74
Governed RPM	2300
Maximum torque, ft. lbs.	190 @ 1400
(kg-m)	(26,22 @ 1400)
Bore and stroke, in.	3.96 x 5.00
(mm)	(100,5 x 127,0)
No. of cylinders	4
Displacement, cu. inches	248.2
(litres)	(4,07)
Fuel tank capacity, gals.	28
(litres)	(106)
Electrical system (alternator)	12 volt, 42 amp

*Maximum horsepower of basic engine under S.A.E. standard J816 -- barometric pressure of 29.38 in. hg. (74,62 cm hg), 85°F (29,4°C) and maximum engine speed with fuel pump, water pump and lubricating oil pump.

**Net usable horsepower at engine flywheel under S.A.E. standard J816 -- barometric pressure of 29.38 in. hg. (74,62 cm hg), 85°F (29,4°C) and governed engine speed with fan, alternator, air cleaner and air compressor.

● POWER TRAIN

TORQUE CONVERTER: Clark industrial type. 3.1 to 1 multiplication factor.

TRANSMISSION: Clark countershaft type powershift, with four speeds forward, four speeds reverse. Travel speeds, MPH (km/hr):*

1st	2nd	3rd	4th
4.0	7.2	13.6	23.2
(6,4)	(11,6)	(21,9)	(37,3)

*Measured with 14.00-24 tires.

DIFFERENTIAL: Clark torque proportioning front and rear.

AXLES: Heavy-duty Clark planetary design with single-piece forged steel housing; all wheel drive, all wheel steer. Front axle fixed, rear axle oscillates a total of 24°. Total vertical wheel travel of 14" (356 mm) with all wheels remaining on ground.

PLANETARY DRIVES: Clark low-friction, roller bearing planetary in each wheel. Planetary units can be removed without removing wheels and brakes.

TIRES

Tubeless, nylon body	14.00-24, 8 PR (G-2)
Other tires available:	13.00-24, 8 PR (G-2)
	13.00-24, 10 PR (G-2)
	14.00-24, 10 PR (G-2)
	15.5-25, 8 PR (L-2)

STEERING SYSTEM

Full hydraulic power steering with Orbitrol® steering valve. Choice of all-wheel, all-wheel crab or front wheel only steering modes.

ANGLE OF STEER: Each direction 28°; total 56°.

PUMP: Gear-type design, torque converter mounted. Total pump output is 14.8 GPM (56,1 l/min) @ 2350 RPM and 1000 PSI (70,3 kg/cm²).

RELIEF PRESSURE: 1000 PSI (70,3 kg/cm²).

CYLINDERS: Four (4), double-acting with chrome plated piston rods. Bore and stroke — 2.5 x 7 in. (63,5 x 177,8 mm).

● BRAKES (SAE J237)

SERVICE: Four wheel air-over-hydraulic shoe type. Application of left pedal also neutralizes transmission in Forward only.

EMERGENCY: Axle-by-axle system. Automatically actuated by low air pressure or manually applied through dash-mounted control valve; audible and visual alarm.

PARKING: Mechanical on transmission output shaft.

HYDRAULIC SYSTEM

Closed and pressurized with a capacity of 15 gals (56,9 litres); oil supplied from sturdy plate steel reservoir with oil level sight glass. In-tank magnet provides extra protection.

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

BUCKET CONTROLS: Valve has three positions: rollback, hold, dump.

PUMP: Gear-type design, torque converter mounted. Total pump output is 28 GPM (106,1 l/min) @ 2350 RPM and 1850 PSI (129,5 kg/cm²).

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

RELIEF PRESSURE: 1850 PSI (129,5 kg/cm²).

CYLINDERS: One boom and one bucket, both double-acting.

Boom, bore & stroke — 6.00" x 24.37" (152,4 x 619,0 mm)

Bucket, bore & stroke — 5.00" x 21.00" (127,0 x 533,4 mm)

FILTER: Full-flow 25 micron located in steering system return line.

HYDRAULIC SPEEDS

Raising time (with load)	7.0 sec.
Lowering time (empty)	4.5 sec.
Dumping time (with load)	1.5 sec.
Total cycle	13.0 sec.

● SERVICE CAPACITIES

	U.S. Gal.	(litres)
Cooling system	6.5	(24,6)
Crankcase	2.3	(8,7)
Torque converter & transmission	4.5	(17,0)
Front & rear axle differential (each)	0.5	(1,9)
Front & rear wheel hubs (each)	0.625	(2,4)
Fuel tank	28.0	(106,0)
Hydraulic reservoir	11.0	(41,7)

● STANDARD EQUIPMENT

Drawbar and pin
Floormat
Horn
Lights; work, 2 front
tail, 2
stop, 2
Lockable radiator cap
Reverse Warning Alarm (SAE J994)*
ROPS (SAE J394)*
Seat belt (SAE J386)*
Steps, left & right access

*Optional outside U.S.A. and Canada.

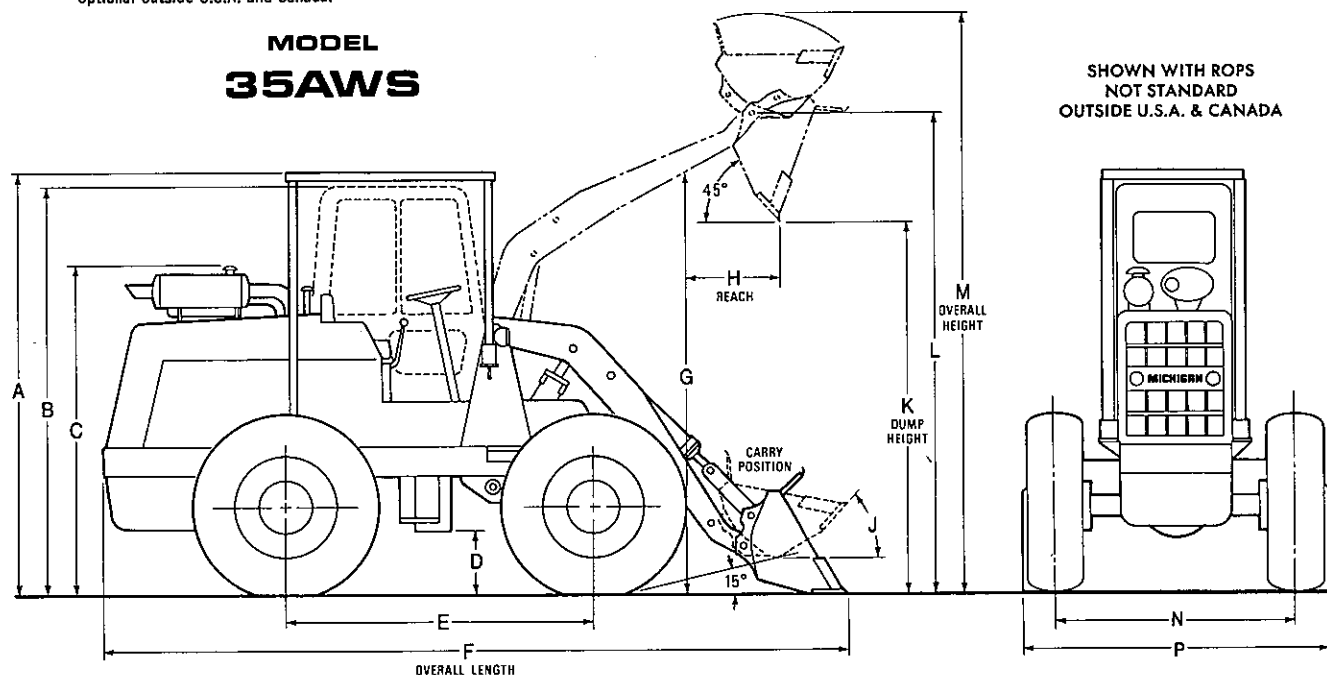
GAUGES: Air pressure
Torque converter temperature
Water temperature

WARNING
LIGHTS: Alternator
Brake
Engine oil pressure

BUZZER: Brake system air pressure

FILTERS: Air (dry-type)
Engine oil
Fuel
Hydraulic oil, return
Torque converter/transmission

MODEL 35AWS



MACHINE DIMENSIONS (with 1¼ cu. yd. bucket) △ SAE J732c and J742b (1969)

Tire Size	A	B	C	D	E	F	G	H	J	K	L	M	N	P
13.00-24, 8 PR G-2 (mm)	9' 9.5" (2985)	9' 4.5" (2858)	7' 4" (2235)	16.5" (419)	83.5" (2121)	*	9' 10.5" (3010)	24.2" (615)	40°	8' 5.5" (2578)	11' 1.5" (3391)	13' 7.5" (4153)	5' 7" (1702)	81.7" (2075)
13.00-24, 10 PR G-2 (mm)	9' 10.5" (3010)	9' 5.5" (2883)	7' 5" (2261)	17.5" (445)	83.5" (2121)	*	9' 11.5" (3035)	24.7" (627)	40°	8' 6.5" (2604)	11' 2.5" (3416)	13' 8" (4178)	5' 7" (1702)	81.5" (2070)
14.00-24, 8 PR G-2 (mm)	9' 10" (2997)	9' 5" (2870)	7' 4.5" (2248)	17" (432)	83.5" (2121)	*	9' 11" (3023)	25" (635)	40°	8' 6" (2591)	11' 2" (3404)	13' 8" (4166)	5' 7" (1702)	83" (2108)
14.00-24, 10 PR G-2 (mm)	9' 11" (3023)	9' 6" (2896)	7' 5.5" (2273)	18" (457)	83.5" (2121)	*	10' (3048)	24.5" (622)	40°	8' 7" (2616)	11' 3" (3429)	13' 9" (4191)	5' 7" (1702)	82.4" (2093)
15.5-25, 8 PR L-2 (mm)	9' 8.5" (2959)	9' 3.5" (2832)	7' 3" (2210)	15.5" (394)	83.5" (2121)	*	9' 9.5" (2985)	24" (610)	40°	8' 4.5" (2553)	11' 5" (3480)	13' 6.5" (4128)	5' 7" (1702)	83.8" (2129)

*See Operating Data

● OPTIONAL EQUIPMENT and approximate installed weights

	Lbs.	(Kg)		Lbs.	(Kg)
Bucket Teeth (8)	40	(18,1)	Rear Work Lights (2)	5	(2,3)
Cab (with lights)	475	(215,5)	ROPS (SAE J394)*	500	(226,8)
Forks, 38" (965 mm)	580	(263,1)	Windshield Wiper, Front	5	(2,3)
Hood Side Panels (2)	40	(18,1)	Winterization Group (heater, defroster)	30	(13,6)
3-Spool Valve, Piping & Controls	80	(36,3)			

*Optional outside U.S.A. and Canada.

Data presented here conforms to applicable standards recommended by the Society of Automotive Engineers; SAE loader ratings — as governed by standard J732c and J742b (1969) — are denoted in the text by△

● **OPERATING DATA (with 14.00-24 tires)**

	General Purpose	General Purpose	Material Handling	Light Material	Light Material
Capacity, Rated (heaped), cu. yd. (m³)△	1.00 (0,7)	1.25 (0,9)	1.50 (1,1)	1.75 (1,3)	2.00 (1,5)
Rated (struck), cu. yd. (m³)△	.75 (0,6)	1.00 (0,8)	1.27 (1,0)	1.49 (1,1)	1.75 (1,3)
Cutting Edge Width, (mm)△	84.25 (2140)	84.25 (2140)	84.25 (2140)	86.25 (2191)	84.25 (2140)
†Dump Height @ Full Lift and 45° Discharge Angle (mm)△	8' 9" (2667)	8' 6" (2591)	8' 5" (2565)	8' 4" (2540)	8' 1" (2464)
†Reach @ Full Lift and 45° Discharge, in. (mm)△	1' 11.5" (597)	2' 1" (635)	2' 3" (686)	2' 4.7" (729)	2' 7.7" (805)
†Reach @ 45° Discharge Angle and 7' (2130 mm) Height, in. (mm)△	3' 2.8" (986)	3' 4.5" (1029)	3' 6.3" (1074)	3' 8" (1118)	3' 11" (1194)
Overall Length (mm)△	16' 6.5" (5042)	16' 10" (5131)	17' 1.5" (5220)	17' 5" (5309)	17' 11" (5461)
Overall Operating Height (mm)△	13' 4" (4064)	13' 8" (4166)	14' 0" (4267)	14' 3" (4343)	14' 6" (4420)
Clearance Circle (bucket in carry position) (mm)△	30' 6" (9296)	30' 8" (9347)	30' 10" (9398)	30' 11.5" (9436)	31' 2.5" (9512)
Breakout Force, lbs. (kg)△	9450 (4287)	9100 (4128)	8770 (3978)	8470 (3842)	7990 (3624)
Static Tipping Load, Straight, lbs. (kg)△	8600 (3901)	8415 (3817)	8225 (3731)	8000 (3629)	7860 (3565)
*Operating Weight, lbs. (kg) Total△	12,500 (5670)	12,580 (5706)	12,660 (5743)	12,780 (5797)	12,820 (5815)
Front△	4400 (1996)	4530 (2055)	4660 (2114)	4860 (2204)	4940 (2240)
Rear△	8100 (3674)	8050 (3651)	8000 (3629)	7920 (3593)	7880 (3574)
Operating Capacity, lbs. (kg)△	3750 (1701)	3750 (1701)	3750 (1701)	3750 (1701)	3750 (1701)

†Changes with tire size — refer to machine dimensions.

*Approximate; based on bucket shown plus 2000 lbs. (907 kg) counterweight and ROPS. A change in tire size or the addition (or removal) of optional equipment, attachments, counterweighting or hydroinflation of tires will affect both operating weight and tipping loads. These changes are shown below for certain selected items.

	CHANGE IN OPERATING WEIGHT		CHANGE IN TIPPING LOAD	
	lbs.	(kg)	lbs.	(kg)
13.00-24, 8 PR (G-2)	-80	(-36,3)	-40	(-18,1)
13.00-24, 10 PR (G-2)	-60	(-27,2)	-30	(-13,6)
14.00-24, 8 PR (G-2)	0	(0)	0	(0)
14.00-24, 10 PR (G-2)	40	(18,1)	20	(9,1)
15.5-25, 8 PR (L-2)	280	(127,0)	150	(68,0)
13.00-24, 8 PR (G-2) with 75% rear tire Ca Cl ₂ hydroinflation by volume	660	(299,4)	750	(340,2)
13.00-24, 10 PR (G-2) with 75% rear tire Ca Cl ₂ hydroinflation by volume	680	(308,4)	770	(349,3)
14.00-24, 8 PR (G-2) with 75% rear tire Ca Cl ₂ hydroinflation by volume	1020	(462,7)	1100	(499,0)
14.00-24, 10 PR (G-2) with 75% rear tire Ca Cl ₂ hydroinflation by volume	1060	(480,8)	1120	(508,0)
15.5-25, 8 PR (L-2) with 75% rear tire Ca Cl ₂ hydroinflation by volume	1180	(535,2)	1120	(508,0)
Cab	475	(215,5)	300	(136)
ROPS (removal)	-500	(-226,8)	-325	(-147)

Materials and Specifications Subject to Change Without Notice or Obligation

Ask Your Distributor About Clark Financing Programs

CLARK
EQUIPMENT