

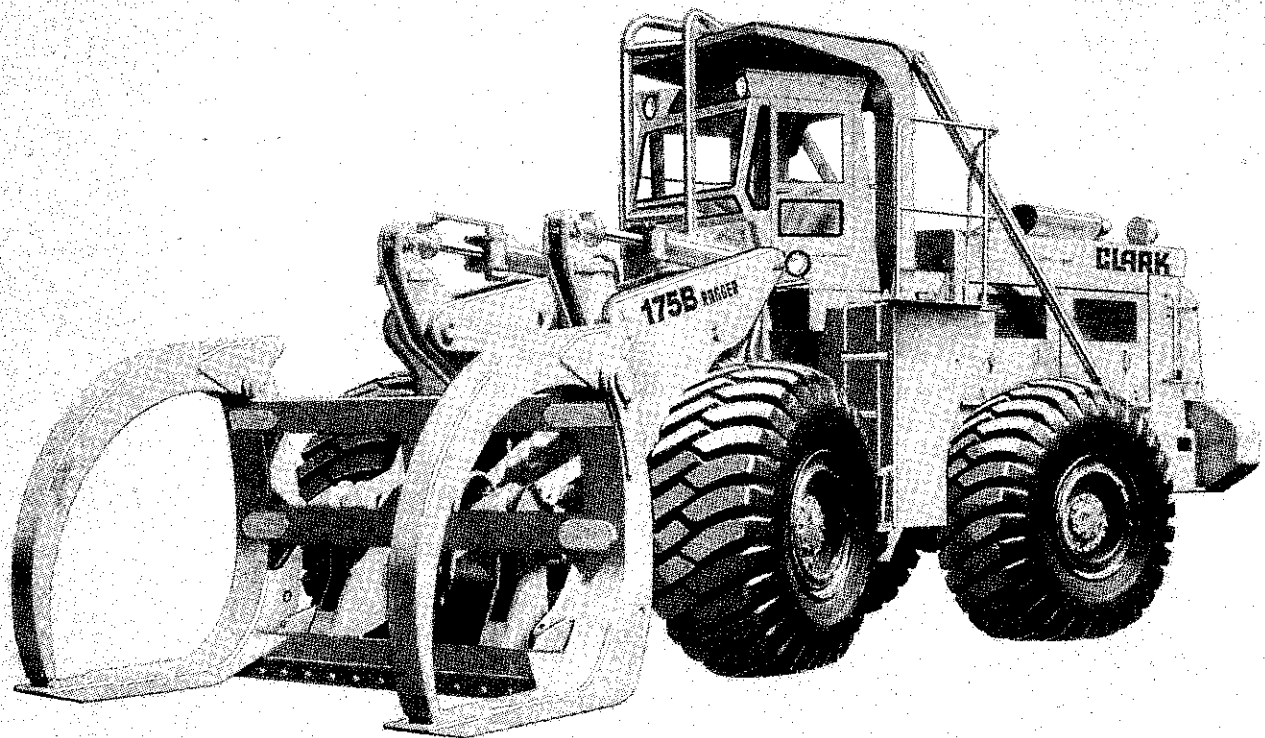
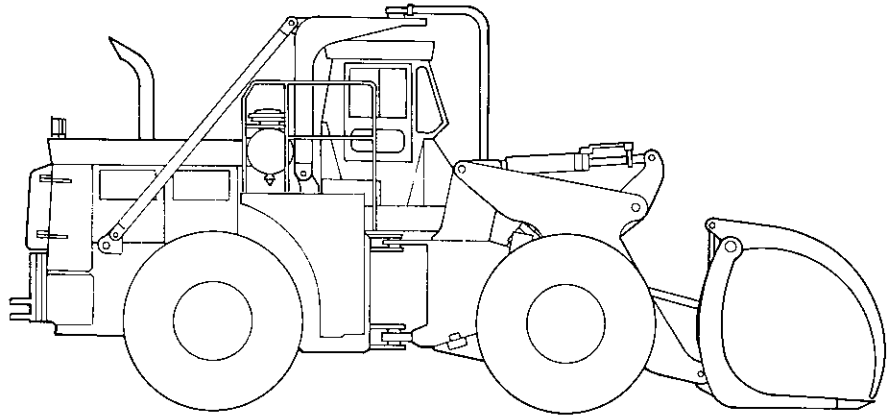
CLARK

175B

RANGER

LOG LOADER

- Complete powertrain designed and manufactured by Clark
- Large capacity, power-sensing hydraulic system... dual filtration
- Rugged, double-plate boom design with trunnion mounted cylinders
- Cummins NTA-855-C diesel with 279 flywheel horsepower or GM 8V-71N diesel with 273 flywheel horsepower
- Air-over-hydraulic brakes on all wheels... automatically or manually applied emergency brake



MODEL 175B

ENGINE

Make	GM	Cummins
Model	3V-71N	NTA-855-C
*Maximum horsepower	304	310
**Flywheel horsepower	273	279
Governed RPM	2100	2100
Maximum torque, lbs.-ft. (kg-m)	800 @ 1600 (110.6 @ 1600)	890 @ 1500 (123.1 @ 1500)
Bore and stroke, in.	4.25 x 5.00	5.50 x 6.00
(mm)	(108 x 127)	(139.7 x 152.4)
Number of cylinders	8	6
Displacement, cubic in. (litres)	567.4 (9.3)	855 (14.0)
Fuel capacity, U.S. gals. (litres)	116 (438)	116 (438)
Electrical system (alternator)	24 volts, 30 amps	24 volts, 30 amps

*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.

POWERTRAIN

TORQUE CONVERTER: Clark industrial type. 3.09 to 1 multiplication factor.
TRANSMISSION: Clark powershift, countershaft type 4-speed, full reversing.
Travel speeds, measured with 26.5-25, 26 PR (L-3) tires, MPH (km/hr):

1st	2nd	3rd	4th
4.0 (6.4)	8.0 (12.8)	13.0 (20.9)	22.0 (35.4)

AXLES: Clark all wheel drive, with planetary reduction in each wheel. Front and rear limited slip differentials. Total rear axle oscillation 24°.

HYDRAULIC SYSTEM

PUMPS: Gear type — three separate pumps, two tandem with power sensing valve, driven at engine speed, each with separate relief valve.

System operating pressure	2200 PSI	(154.7 kg/cm ²)
System capacity	115 U.S. gal.	(436 litres)
Reservoir capacity	95 U.S. gal.	(359 litres)

CYLINDERS: Double-acting

Boom (2)	7.00" dia. x 43.00"	(177.8 x 1092.2 mm)
Tilt (2)	6.00" dia. x 23.62"	(152.4 x 599.2 mm)
Top clamp (2)	5.00" dia. x 14.50"	(127.0 x 368.3 mm)
Steering (2)	4.50" dia. x 18.50"	(114.3 x 469.9 mm)

VALVE: Three spool main valve, operated by pilot valve with built-in relief valves.

HYDRAULIC SPEEDS

Raising time	6.0 sec.
Lowering time	4.3 sec.
Dump time	3.0 sec.
Clamp open time	2.4 sec.
Clamp close time	2.0 sec.

TIPPING LOAD

*Tipping load — straight, lbs. (kg)	47,000 (21 319)
*Tipping load — full turn, lbs. (kg)	41,000 (18 598)

*Tipping loads based on: (1) Unit at standard operating weight on firm, level surface. (2) Fork at maximum reach in rollback position.

LOG GRAPPLE (Medford M-17)

Length of forks	5' 0"	(1524 mm)
Overall width of forks	7' 10"	(2387 mm)
Maximum fork cross section	8" x 10"	(203 x 254 mm)
Maximum opening of clamp	10' 4"	(3148 mm)
Minimum closure of clamp	4' 6"	(1371 mm)
Rollback at ground	15°	
Rollback at carry	23°	
Maximum dump angle	45°	

OPERATING DIMENSIONS

TURNING RADIUS

Tip of fork at ground	25' 0"	(7620 mm)
Tip of fork at maximum reach	27' 8"	(8433 mm)
Outside rear tire	20' 1"	(6121 mm)
Tread, front and rear	6' 8"	(2032 mm)
Width over tires	9' 10"	(2997 mm)
Length, tractor less grapple	22' 5"	(6833 mm)
Height over steering wheel	10' 5"	(3175 mm)

BRAKES (SAE J237)

SERVICE: Four wheel air-over-hydraulic self-adjusting double caliper discs. Application of left pedal also neutralizes transmission.

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

PARKING: Mechanical on front axle input shaft.

TIRES

Tubeless, nylon, rock tread	26.5-25, 26PR (L-3)
Other tires available:	29.5-25, 22PR (L-3)

WEIGHT (Approx.)

*Operating, lbs. (kg)	59,000 (26 762)
**Operating, lbs. (kg)	56,000 (25 402)
***Shipping, lbs. (kg)	51,000 (23 134)
****Shipping, lbs. (kg)	52,500 (23 814)

*With 2900 lbs. (1315 kg) rear tire hydroinflation and 5,500 lbs. (2495 kg) counterweight. **Less belly guards, ROPS & seatbelt. ***Less log grapple. ****Less belly guards, ROPS & seatbelt, with log grapple.

STANDARD EQUIPMENT

Reverse Warning Alarm* (SAE J994); ROPS Canopy* (SAE J394) with Front Operator's Guard and Seat Belt* (SAE J386); Safety Brakes* (SAE J237); Belly Guards (front & rear); Boom Kickout*; Caps, lockable (fuel, hydraulic, radiator); Counterweight; Differential, Limited Slip (front and rear); Drawbar; Leveler; Grille Guard; Horn; Instrument Panel, lockable; Lights, Work (2 2 rear); Lights, Tail/Stop; 3-Spool Valve and Piping; Wire Mesh Side Panel.

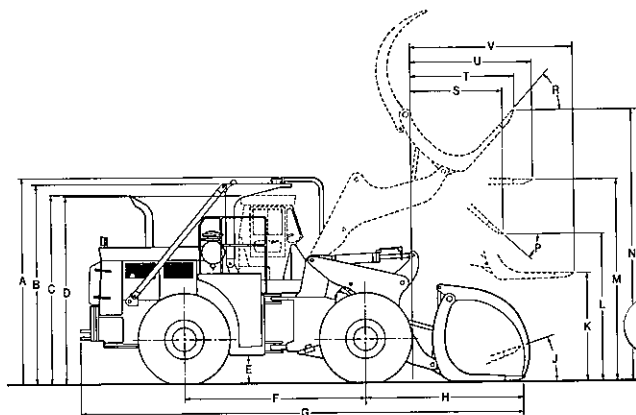
*Optional outside U.S.A. and Canada.

GAUGES: Air pressure; ammeter; engine temperature, oil pressure, hourmeter; torque converter temperature.

FILTERS: Engine oil, fuel, air (dual-element dry type); hydraulic oil (suction and return); torque converter/transmission.

OPTIONAL EQUIPMENT

Acoustical Kit, Cockpit; Air Conditioner; Alternator (GM, 65 amp; Cum, 75 amp); Auxiliary Steering (electric); Cab (non-ROPS) (includes safety glass and acoustical lining); Cab Headlights; Counterweight (in lieu of hydroinflation); Solid Hood Side Panels; ROPS Cab (SAE J394) (includes tinted glass, acoustical lining, front wiper, headlights); Spark Arrestor Muffler; Suspension Seat; Windshield Wipers (front and rear); Winterization Group (heater, defroster, evaporator).



DIMENSIONS AND SPECIFICATIONS BASED ON MEDFORD M-17 LOG FORK AND 26.5-25, 26PR (L-3) TIRES.

	A	B	C	D*	E	F	G**	H	J	K	L	M	N	P	R	S	T	U	V
(mm)	12' 11"	12' 6"	11' 8"	11' 7"	1' 4"	11' 3"	29' 6"	10' 2"	19°	6' 11"	10' 3"	13' 4"	18' 3"	35°	55°	6' 2"	5' 4"	7' 2"	9' 5"
	(3937)	(3810)	(3556)	(3531)	(405)	(3428)	(8992)	(3100)		(2109)	(3124)	(4063)	(5563)			(1834)	(1626)	(2185)	(2877)

*For non-ROPS cab, deduct 4" (101.6 mm) **Add 14" (356 mm) for Cummins-powered model

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE OR OBLIGATION

ASK YOUR DISTRIBUTOR ABOUT CLARK FINANCING PROGRAMS

CLARK Construction Machinery Division

Bulletin R175B
8M-BP (10/76)
Printed in U.S.A.