

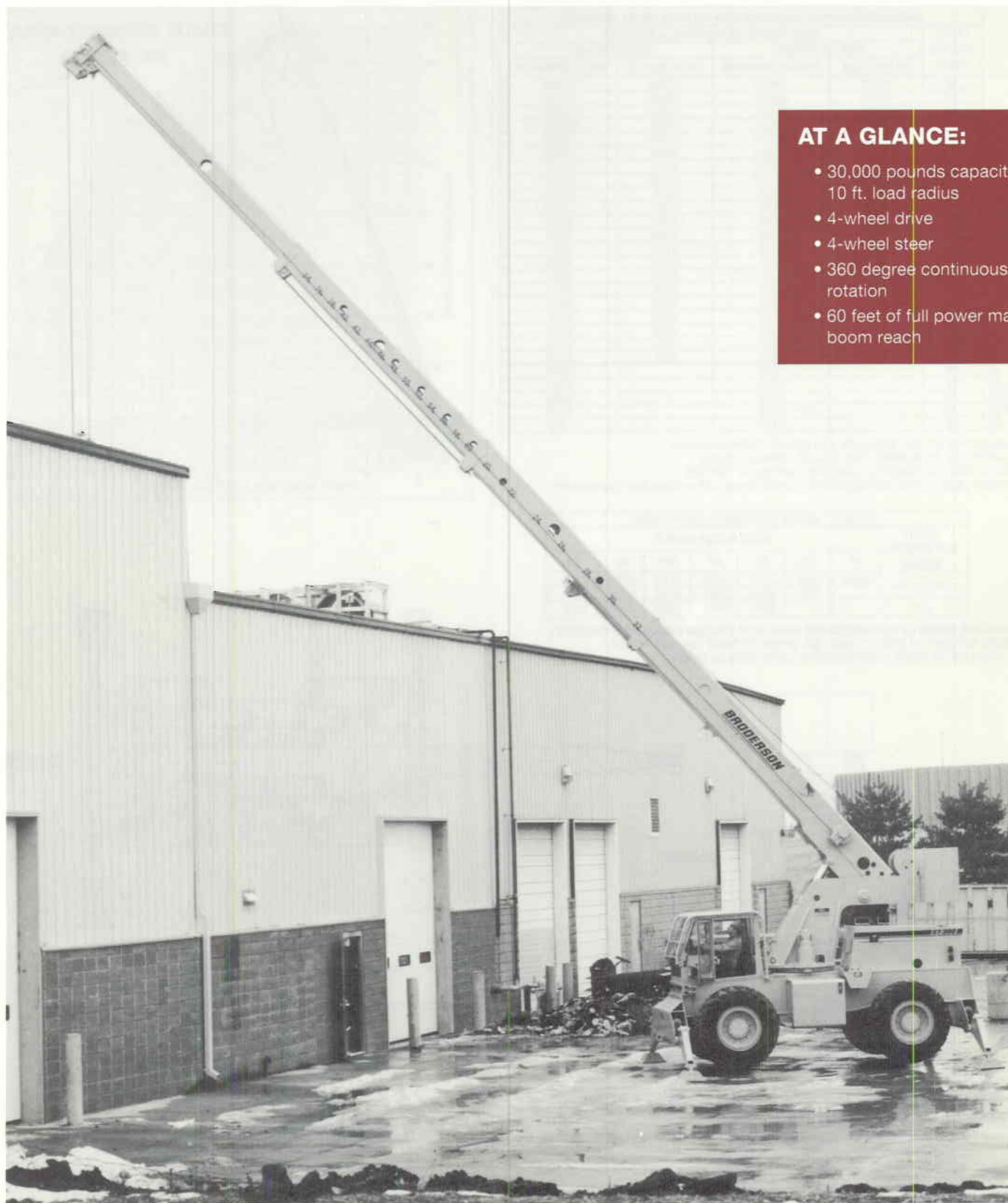


**TECH
SPEC**

RT-300

AT A GLANCE:

- 30,000 pounds capacity at 10 ft. load radius
- 4-wheel drive
- 4-wheel steer
- 360 degree continuous rotation
- 60 feet of full power main boom reach



BMC BRODERSON
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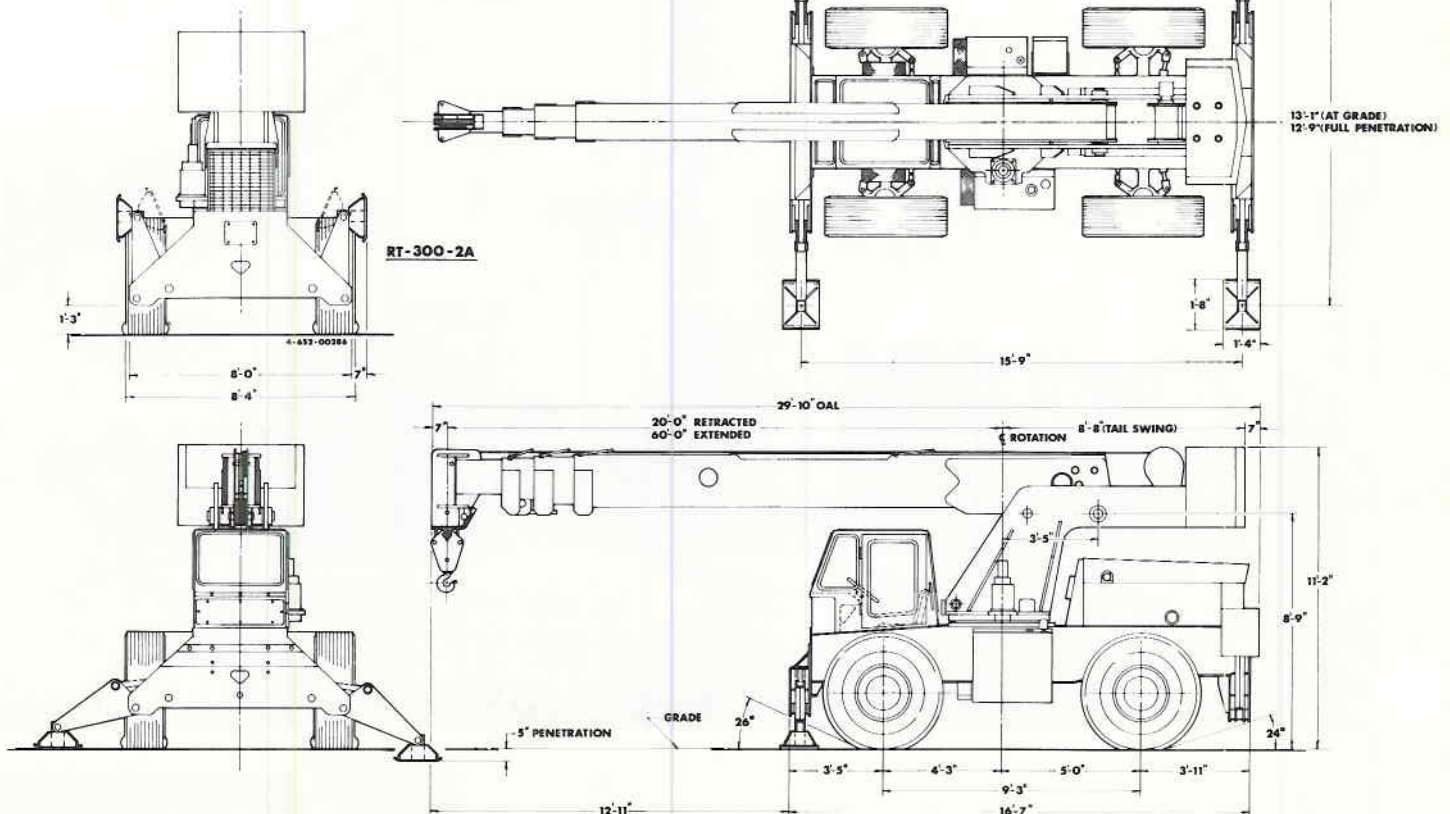
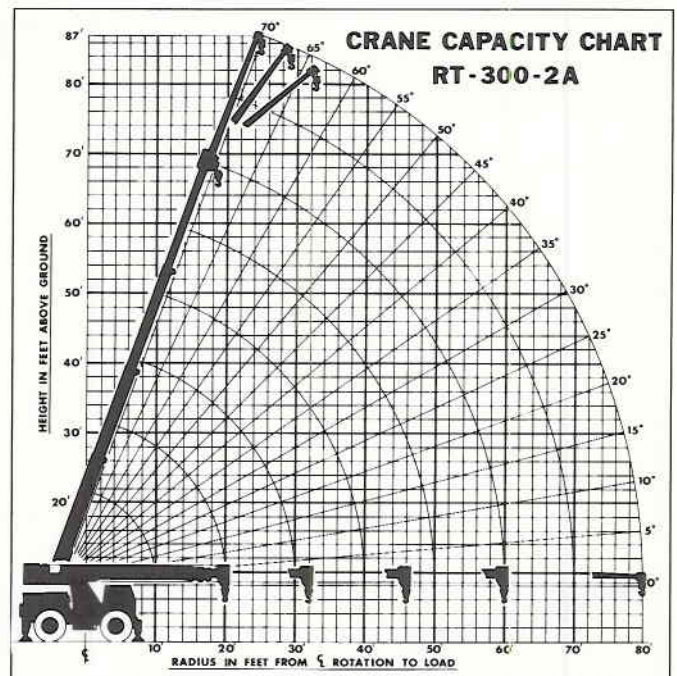
RT-300

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE				
LOAD RADIUS FEET	MAIN BOOM CAPACITIES IN POUNDS			
	360° ROTATION		OVER FRONT	
	ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS
MAIN BOOM	10	19150	30000	26300
	12	14050	28500	22500
	14	11800	25950	17950
	16	9000	22500	14500
	18	7500	19500	11850
	20	6150	17050	9900
	22	5050	14550	8100
	24	4050	12350	6750
	26	3300	10550	5650
	28	2800	9100	4750
	30	2250	8000	4150
	32	1800	7150	3550
	34	1500	6400	3150
	36	1200	5800	2850
	38	1050	5350	2650
	40	900	4950	2400
	44	700	4250	1900
	48		3600	1600
	52		3150	1300
	56		2750	1050
	60		2300	850
BOOM EXTENSION	64		1950	2300
	68		1750	2300
	72		1500	2250
	76		1300	1950
	80		1100	1700

CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS.
CAPACITIES ON RUBBER ARE 75% OF TIPPING LOADS.
CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING.
OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITY.

20 FOOT - BOOM EXTENSION CAPACITIES							
BOOM EXTENSION ANGLE	MAIN BOOM ANGLE						
	0°	15°	30°	40°	50°	60°	70°
0°	2300	2400	2700	3100	3700	4800	6200
15°		2300	2400	2600	2900	3400	4100
30°			2300	2400	2500	2700	3100

CAUTION: BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.
BOOM EXTENSION DEDUCT: 500 LBS. WHEN STOWED ON BASE BOOM.
1000 LBS. IN WORK POSITION WITH LOAD ON MAIN BOOM.



**General:**

Weight:	
Total	44,000 Pounds
Front Axle	21,500 Pounds
Rear Axle	22,500 Pounds
Road Speed	19 Mile Per Hour (Max.)
Gradeability	70 Percent on Concrete
Angle of Approach	26 Degrees
Angle of Departure	24 Degrees
Turning Radius:	
Outside Tire C/L Radius	14 Feet 11 Inches
Vehicle Clearance	
Circle (Dia.)	34 Feet 0 Inches
Drawbar Pull	24,700 Pounds

Engine:

	Standard	Optional	Optional
Make	John Deere	Cummins	John Deere
Model	6059D	6BT5.9	6059T
Type	Diesel	Turbo Diesel	Turbo Diesel
C.I.D.	359	359	359
Max. Torque	287@1400 RPM	400@1600 RPM	397@1600 RPM
Rated HP	120@2500 RPM	152@2500 RPM	165@2500 RPM

Fuel Tank:

50 Gallon Capacity

Transmission:

Make	Rockwell International
Model	T135L53
Type	5-Speed Powershift With Torque Converter, Oil Cooler and Filter

Gear Ratios:

	Forward	Reverse
First	7.72:1	7.72:1
Second	4.59:1	2.82:1
Third	2.83:1	1.50:1
Fourth	1.68:1	
Fifth	.89:1	

Axles:**Front and Rear Axles:**

Make	Clark
Model	12S0736
Gear Ratio	19.54:1

Steering:

Hydraulic steering unit with two, 3.5 inch cylinders attached to each axle. Allows limited steering when engine is not running. Steering wheel and selector valve control 3-mode steering: Crab, Round, and 2-wheel Front Axle Steer.

Brakes:

Service	4-Wheel Drum Type with Hydraulic Booster
Parking	Spring-Applied and Hydraulically-Released Mounted On Transmission

Tires:

Standard	17.5 x 25, 20-Ply Rating Mud Lug.
Optional	14 x 24, 20-Ply Rating Rock Lug.

Outriggers:

Four independently controlled outriggers of swing-down design. Hydraulic cylinders are equipped with directly-connected holding valves.

Operators Compartment:

Operator control station provides one-position access to all chassis and crane controls.

Electrical System:

12 Volt DC System

Instrument Group:

Fuel, transmission oil temperature, ammeter, engine oil pressure, water temperature gauges, and hourmeter.

Hydraulic System:

Triple vane pump, direct driven by engine crankshaft. Rated 10, 30 and 50 GPM at 3,000 PSI at 2,500 RPM engine speed. Hydraulic oil tank capacity of 70 gallons.

Boom Assembly:**Boom Movement:**

Rotation	Continuous
Elevation	0 – 70 Degrees
Extension	40 Feet

Boom Speeds:

Rotation	4 RPM
Elevation	17 Seconds
Extension	24 Seconds

Boom Assembly:

Boom assembly equipped with bearing pads. Double acting hydraulic cylinders, equipped with a holding valve, extend and retract the second and third boom sections. Double runs of high strength leaf chain extend and retract the fourth section. Boom length markings and boom angle indicator included on each side of boom. Twin, double-acting hydraulic cylinders control the boom elevation and are equipped with directly-connected holding valves.

Boom Rotation:

Heavy-duty ball bearing rotation gear with external teeth. Rotation is powered by hydraulic motor and compound planetary gear drive. A spring-applied hydraulically released brake and an overrunning load valve are provided. Hydraulic centerpost and electric slip rings allow continuous rotation.

Boom Winch:

Turret Mounted	
Hydraulic Powered	
Bare Drum Line Pull	8,500 Pounds
Wire Rope – 375 Feet of 1/2 inch	
Line Speed:	
Bare Drum	320 FPM
Full Drum	412 FPM

4-Part-Line Sheave Block:

Double sheave block for four-part-line requirements.

Anti-Two-Block Device:

Prevents damage to hoist rope and/or machine components from accidentally pulling load hook against boom tip.



RT-300

OPTIONS

Engine:

- Cummins Diesel Engine (2)**
Model 6BT5.9, turbocharged diesel engine.
- John Deere Diesel Engine (3)**
Model 6359T, turbocharged diesel engine.
- Engine Shutdown Gauges (4)**
Shuts engine off when high water temperature or low engine oil pressure occurs
- Engine Side Covers (5)**
Quick detach, to fit fixed hood and grill

Tire Options:

- 14 x 24, 20-ply Rock Lug Tire (6)**
- Spare Wheel & Tire:**
14 x 24, 20 Ply Rock Lug Tire (7)
17.5 x 25, 20 Ply Tire (8)

Chassis Options:

- Sheave Block Storage Tray (9)**
Tray on left hand side behind hydraulic tank for storing load block
- Auxiliary Front Winch (10)**
Mounted on front outrigger housing, hydraulically driven with control in operator's console
- Lifting Eyes (11)**
Lifting eyes at each corner of chassis so slings can be attached for lifting crane.
- Pintle Hook, Front (12)**
Pintle hook mounted on front outrigger housing, 24 ton capacity.
- Pintle Hook, Rear (13)**
Pintle hook mounted on rear outrigger housing, 24 ton capacity.

Operator's Compartment Options:

- All Weather Cab (14)**
Consists of rigid-mounted canopy section and two removable hinged doors. Includes heater with two-speed fan, 12-volt electrical windshield wiper. Defroster fan included.
- Window Wiper - Top Window (15)**
12-volt electrical wiper on top window operated with its own switch.
- Operator Guard (16)**
Tubular steel weldment with heavy expanded steel mesh top and grille front section.
- Operator's Suspension Seat:**
 - Seats Inc. (17)**
Full-suspension, with adjustments for height, tilt, fore/aft, operator weight. Arm rest included.
 - Grammer. (18)**
Full-suspension, with adjustments for height, tilt, fore/aft, operator weight, and lumbar support. Arm rest included.

Electrical Options:

- Back-Up Alarm (19)**
Provides pulsating sound when transmission is in reverse.
- Strobe Lights (20)**
Yellow strobe light mounted on top of engine hood for high visibility.
- Amber Rotating Beacons (21)**
Amber rotating beacon mounted on top of engine hood for high visibility.

Lighting Kit (22)

Includes two modular, dual-beam headlights with turn signal lights. Taillights with brake and turn signal lights. Back-up lights and lights installed in back of instrument gauges.

Work Lights (23)

One halogen work light mounted to boom to light boom tip and one work light mounted to turret to light ground under boom tip.

Boom Attachments Options:

Angle Indicator (24)

Large pointer and quadrant located under boom, in addition to standard indicators.

20 Ft. Offsettable Boom Extension (25)

Boom stowable. Offsets include 0 (in-line), 15 or 30 degree. *Downhaul Weight & Hook Option required.*

Downhaul Weight & Hook (26)

Downhaul weight and 5-ton swivel hook to use with existing wedge socket on 1/2 inch or 9/16 inch load line.

Load Indicator (27)

Includes 3-sheave load sensor on top of boom and readout box on top of instrument panel.

Load Moment Indicator (28)

Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads. Readouts for load, boom angle, boom length, and load radius.

Wire Rope - Spin Resistant (29)

9/16 inch dia., rotation-resistant loadline, 450 feet long. Includes 5-part adapter for existing 4-part sheave block.

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