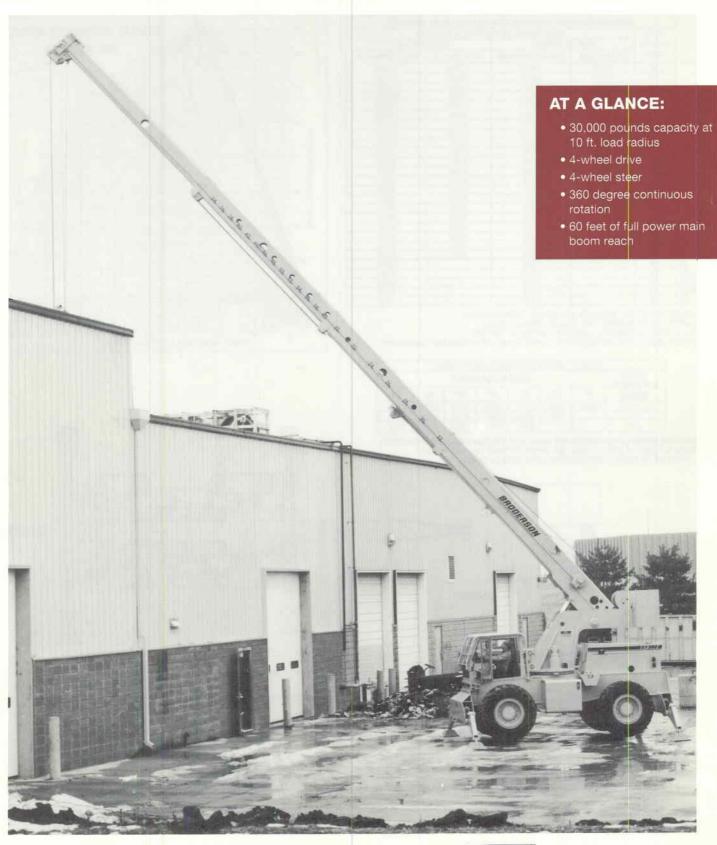
TECH SPEC

RT-300



DTG BRODERSON Manufacturing Corp.

P.O. Box 14770, Lenexa, Kansas 66215 (913) 888-0606 • FAX (913) 541-0690

RT-300

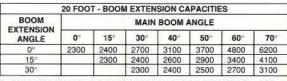
	LOAD	CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE MAIN BOOM CAPACITIES IN POUNDS					
	RADIUS	360° ROTATION		OVER FRONT			
		ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS		
	10	19150	30000	26300	30000		
	12	14050	28500	22500	28500		
	14	11800	25950	17950	25950		
	16	9000	22500	14500	22550		
	18	7500	19500	11850	19500		
	20	6150	17050	9900	17050		
	22	5050	14550	8100	15000		
	24	4050	12350	6750	13300		
Σ	26	3300	10550	5650	11900		
8	28	2800	9100	4750	10650		
MAIN BOOM	30	2250	8000	4150	9600		
Z	32	1800	7150	3550	8600		
¥.	34	1500	6400	3150	8050		
-	36	1200	5800	2850	7500		
	38	1050	5350	2650	6950		
	40	900	4950	2400	6500		
	44	700	4250	1900	5600		
	48		3600	1600	4850		
	52		3150	1300	4150		
	56		2750	1050	3650		
	60		2300	850	3200		
BOOM	64		1950		2300		
	68		1750		2300		
	72		1500		2250		
	76		1300		1950		
	80		1100		1700		

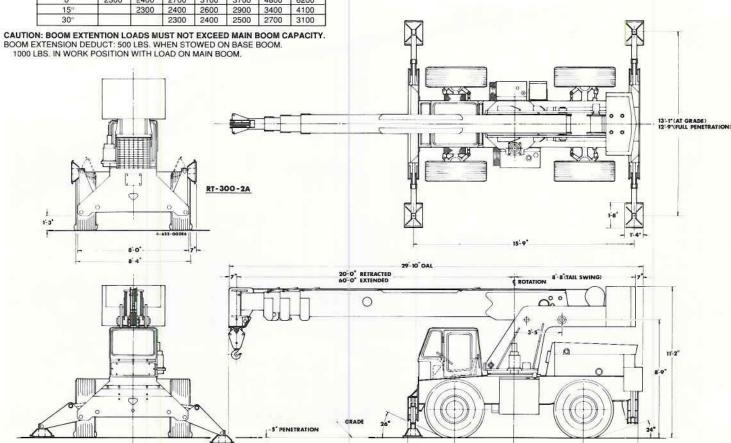
CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS. CAPACITIES ON RUBBER ARE 75% OF TIPPING LOADS. CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING.

OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITY.

	7	77	
		1 1	44+
20'			
30			
			20
40'			25
50'			730.
		35	
60'		10.	
70'		2 ⁴⁵ .	
	555.		
80'		-300-2	A

16-7"





12-11

General:

Weight:

 Total
 44,000 Pounds

 Front Axie
 21,500 Pounds

 Rear Axie
 22,500 Pounds

 Road Speed
 19 Mile Per Hour (Max.)

Gradeability 70 Percent on Concrete

14 Feet 11 Inches

Angle of Approach
Angle of Departure
Turning Radius:

26 Degrees
24 Degrees

Outside Tire C/L Radius Vehicle Clearance

Circle (Dia.) 34 Feet 0 Inches
Drawbar Pull 24,700 Pounds

Engine:

Standard Optional Optional Make John Deere Cummins John Deere 6BT5.9 Model 6059D 6059T Diesel Turbo Diesel Turbo Diesel Type C.I.D. 359 359 359

Max. Torque 287@1400 RPM 400@1600 RPM 397@1600 RPM 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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