

RT-400-A **Rough Terrain Crane**

The RT-400 provides the low-height “stair step” entry and exit of a cab down rough terrain crane. Its 20 US ton lifting capacity can accommodate lifts historically made by older 15 US ton capacity units while not exceeding 75% of the RT-400-A’s rated capacity. The RT-400-A’s pilot-controlled hydraulic design provides the “feel” and precision of direct mechanical to hydraulic level controls while moving the noise and heat of control valves outside the cab operator environment.

- Tier 4 final compliant
- Comfortable arm rest mounted control levers
- Spacious, comfortable cab

Capacity

40,000 lbs. (18,143 kg)

Sheave Height

98' (30 m)
(with boom extension)

Horizontal Reach

85' (26 m)
(with boom extension)

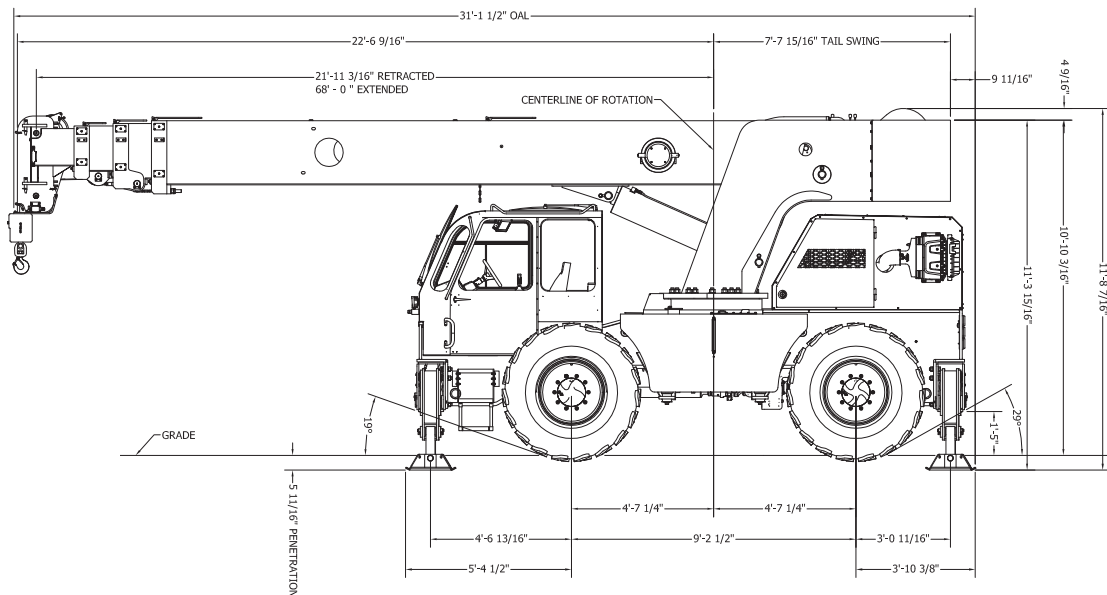
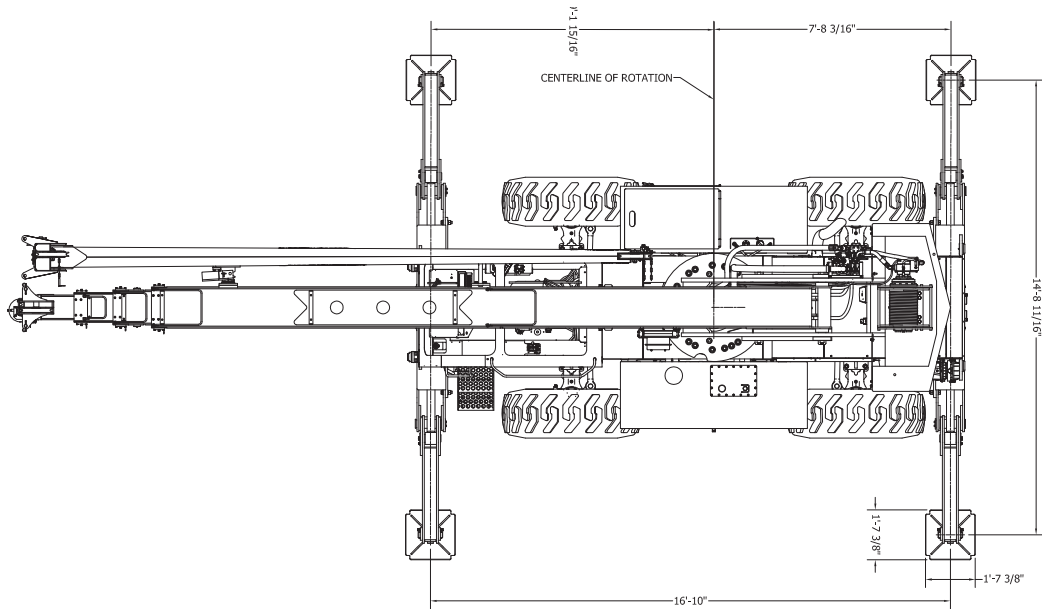
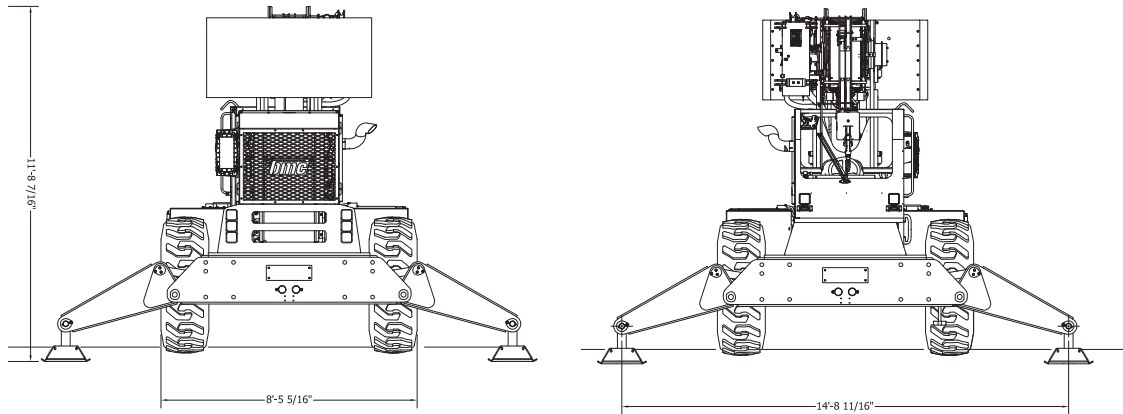
Height

11' 2" (3.4 m)

Width

8' 5" (2.6 m)





RT-400-A

GENERAL SPECIFICATIONS



GENERAL

	ROTATION	ELEVATION	EXTENSION
Boom Movement	Continuous	0° to 75°	47' (14.3m)
Boom Speeds	2.23 RPM	28 sec	57 sec

Weight Total	51,900 lbs. (23,500 kg.)		
Front Axle	30,000 lbs. (13,600 kg.)		
Rear Axle	21,900 lbs. (9,900 kg.)		
Drawbar Pull	33,500 lbs. (15,100 kg.)		
Gradeability	70% (34°)		
Turning Radius	4-Wheel Steer: (Min.) Outside Tire C/L Radius: 14' 5" (4.4 m) Vehicle Clearance Circle (Radius): 17' 2" (5.23 m)		

EXPORT ONLY

Make	Cummins	Cummins
Model	QSB4.5L (Tier 4 Final)	QSB4.5L Tier 3
Type	Turbo Diesel, Charge Air Cooled	Diesel, Turbo charged, Air Cooled
C.I.D.	4.5L	4.5L
Max Torque	460 ft. lbs. (624Nm) @1500 RPM	459 ft. lbs. (622 Nm) @ 1500 RPM
HP @ Gov. Speed	163 HP (122 kW) @ 2600 RPM	160 HP (119 kW) @ 2500 RPM

ENGINE

TRANSMISSION

6-SPEED POWERSHIFT (2 RANGE, 3 SPEEDS/RANGE) FORWARD AND REVERSE, Oil Cooler and Oil Filter. Operator interface to shift and and disconnect front axle for 2-wheel drive operation.

AXLES

DANA FRONT & REAR AXLES
Gear Ratio: 19.333 : 1

BRAKES

Service: 4-wheel hydraulic internal wet disc brakes

Parking: Internal wet disc, spring-applied/hydraulically released integral to rear axle.

STEERING

Hydraulic steering unit with one cylinder attached to each axle. Allows limited steering when engine is not running. Push-button control is used to select front-wheel steering, 4-wheel steering or crab steering. Electronic sensors and control module sense wheels are centered after a new mode is selected.

TIRES

Standard:
17.5 x 25, 20-ply rating, mud lug.

CHASSIS

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

OPERATOR COMPARTMENT

Spacious, comfortable operator's cab with arm rest mounted pilot control levers. Equipped with driver's side sliding door. Heater, defroster, front and top windshield wiper and sliding sun shade. Integrally designed air conditioning is standard.

ELECTRICAL (12-VOLT SYSTEM)

DASH DISPLAY

In-dash LCD screen shows engine RPM, coolant temperature, voltage, fuel level, oil pressure, DEF level and engine hours. Display also shows engine fault codes, control system faults, engine warnings, engine shutdown indication and diagnostic information.

LIGHTING KIT

Includes LED headlights with LED turn signal lights. Taillights with LED brake & turn signal lights. LED Back-up lights, and emergency flashers.

OUTRIGGER ALARM SYSTEM

102 dB alarm with alternating two-tone sound is activated when "outrigger down" controls are activated.

HYDRAULIC

Precise, easy to maintain pilot hydraulic control system with dual redundant piston pumps delivering 103 GPM (390L/min) combined flow to support full multi-function demand. Large 160-gallon (605L) provides passive hydraulic oil cooling without additional oil cooler.

BOOM ASSEMBLY

Four-section high strength steel construction with lubricant-filled bearing pads. Double-acting hydraulic cylinders, equipped with a holding valve, extend & retract the second and third boom sections. Double runs of high strength leaf chain extend & retract the fourth section. Boom angle indicator included on left side of boom. Single hydraulic cylinder controls boom elevation. Lift cylinder equipped with mounted holding valves.

BOOM ROTATION

Heavy-duty ball bearing with external teeth rotation gear. Rotation is by hydraulic motor and worm gear drive. Hydraulic centerpost and electric slip rings allow continuous rotation.

BOOM HOIST

Turret Mounted / Hydraulic Powered
Bare Drum Line Pull: 13,800 lbs (6520 kg)
Wire Rope: 425 ft (130 m) of 5/8 in (16 mm) dia
Line Speed: 144 FPM (43.9 m/min)

4-PART-LINE SHEAVE BLOCK:

Double sheave block for four-part-line requirement. Downhaul weight and hook included - Standard.

ANTI-TWO-BLOCK DEVICE:

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

BRODERSON® RATED CAPACITY LIMITER:

Warns operator of impending overload with audible & visual signals. In the event of overload, stops boom functions that increase overloads. Displays boom length, angle, load radius, load & capacity.

CONSULT THE RT-400-A ENGINEERING SPEC FOR ADDITIONAL INFORMATION.

Main Features

RATED CAPACITY LIMITER
Standard

CAPACITY ON OUTRIGGERS
40,000 lbs. (18,143 kg)

PICK AND CARRY CAPACITY
up to 26,300 lbs. (11,955 kg)

HEIGHT
11' 2" (3.4 m)

WIDTH
8' 5" (2.6 m)

BOOM ROTATION
360° Continuous

SHEAVE HEIGHT
up to 98' (30 m)

HORIZONTAL REACH
up to 85' (26 m)

FOUR-WHEEL STEER
Standard

FOUR-WHEEL DRIVE
Standard

POWERSHIFT TRANSMISSION
Standard

**FULLY HYDRAULIC CONTROLS FOR
SMOOTH, PRECISE OPERATIONS**

**INDEPENDENT OUTRIGGER
CONTROLS**

TIER 4 FINAL DIESEL ENGINE
Standard

Options

TIRE OPTIONS

Spare Tire & Wheel
17.5 x 25, 20-Ply Tire

CHASSIS OPTIONS

Auxiliary Front Winch
Planetary gear winch mounted beneath chassis frame, with push-button control on the operator console.

Pintle Hook, Front
Pintle hook mounted on the front outrigger housing, 24-ton capacity.

Pintle Hook, Rear
Pintle hook mounted on the rear outrigger housing, 24-ton capacity.

ELECTRICAL OPTIONS

Strobe Lights
Yellow LED strobe light mounted on each side of counterweight for high visibility.

Boom Work Lights
One LED work light mounted to boom to light boom tip and one work light mounted to turret to light ground under boom tip.

RCL Light Bar
3 color light bar for external indication of load status

**OPERATOR COMPARTMENT -
STANDARD**

Window Wiper - Top Window
12-volt electric wiper on front and top window.

Air Conditioning
Integrally designed air conditioning system.

Spacious Operator's Cab

Arm rest mounted crane function levers, sliding driver's side door, retractable sunshade

BOOM ATTACHMENTS:

20-Ft Offsettable Boom Extension
Boom stowable. Offsets include 0 degree (in line), 15 degree or 30 degree.

Broderson Cranes are manufactured to ISO 9001:2015 certified standards and have a market leading reputation for quality and reliability. Broderson Cranes are engineered for operating efficiency and are easy to operate and maintain.

An extensive network of full-service dealers offer parts and service support by factory-trained technicians.

For additional options or special equipment not listed, please consult your dealer salesperson or contact Broderson Manufacturing Corp.

BRODERSON[®]
Manufacturing Corp.
14741 West 106th Street
Lenexa, KS 66215 USA

(913) 888-0606
www.BMCcranes.com

Dimensions and values shown
are for reference purposes
only. Specifications subject
to change.

