

## ***IC-100-B*** ***Industrial Crane***

The IC-100-B is a self-propelled 10 US ton rated Industrial Carry Deck Crane designed for in-plant lifting and material handling applications. It is designed to incorporate the field proven features and demonstrated reliability of the Broderon IC-80 models with 10 US ton lift capacity and a longer boom.

### ***Capacity***

20,000 lbs (13,608 kg)

### ***Sheave Height***

59' 4" (15 m)  
(with boom extension)

### ***Horizontal Reach***

43' (13.1 m)  
(with boom extension)

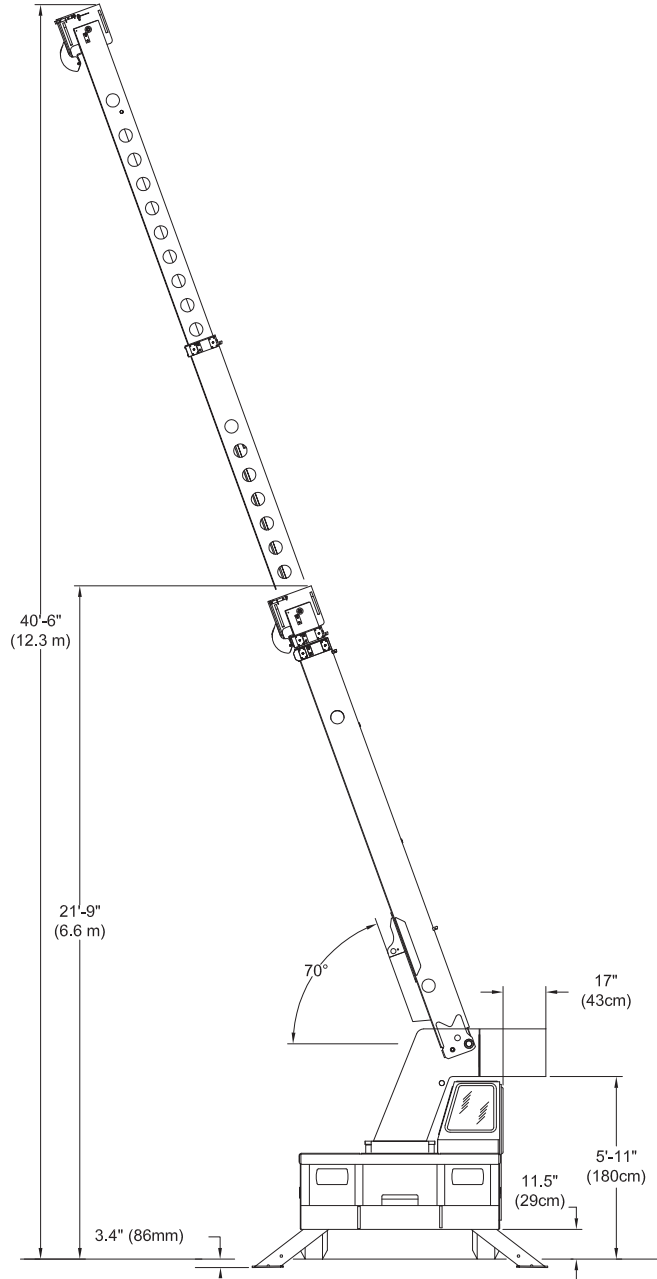
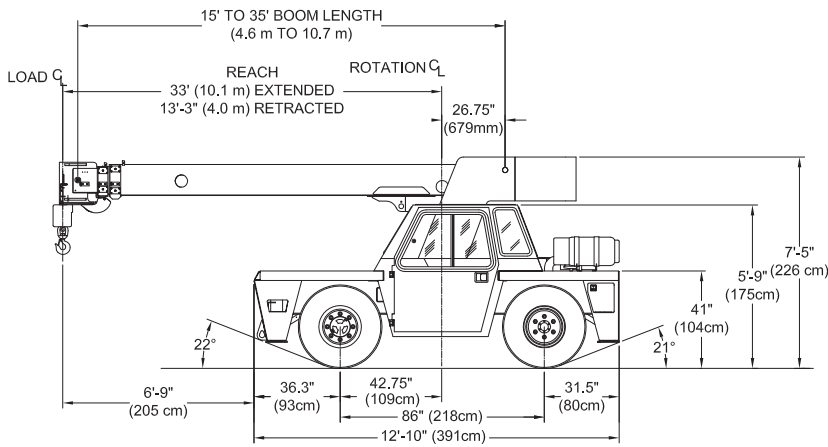
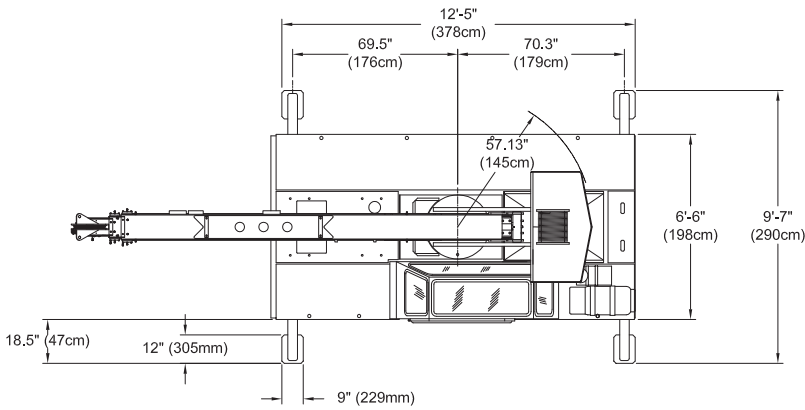
### ***Height***

7' 5" (2.26 m)

### ***Width***

6' 6" (2 m)





# IC-100-B

## GENERAL SPECIFICATIONS



### GENERAL

	ROTATION	ELEVATION	EXTENSION
Boom Movement	Continuous	0° to 70°	20' (6.1 m)
Boom Speeds	2 RPM.	12 sec.	30 sec.
Weight Total	17,520 lbs. (7,950 kg.)		
Turning Radius	C/L of outside steering wheel: 11' 2" (3.4m) Aisle Width for 90° Turn: 9'7" (2.92m)		
Gradeability	57% (30°)		

### ENGINE

Make	GM	Kubota
Model	3.0 EFI*	V3307 (Tier 4F)
Type	Gas, Fuel Dual	Diesel
Cylinder	4	4
Displacement	181 CID (3L)	199 CID (3.33L)
HP @ Gov. Speed	59HP (44 kW)	74HP (55.4 kW)
Fuel Tank Capacity	17.6 gal. (66.6L)	17.6 gal. (66.6L)

### TRANSMISSION

**POWERSHIFT TRANSMISSION** with 4-speeds in forward & reverse. Provides powershifts at any engine speed in any gear. All shifting is done with a single lever electrical control mounted on the steering column. Multiple-disc clutch packs operated by solenoid valve provide forward, neutral, reverse and speed selection. Equipped with oil cooler and filter. Torque converter has stall ratio of 2.2 : 1.

Transmission Gear	Forward/Reverse	Speed	Drawbar Pull
First	5.72 : 1	4 MPH (6 km/h)	9,500 lbs. (4,300 kg.)
Second	3.23 : 1	7 MPH (11 km/h)	5,500 lbs. (2,500 kg.)
Third	1.77 : 1	13 MPH (21 km/h)	3,000 lbs. (1,300 kg.)
Fourth	1.00 : 1	22 MPH (31 km/h)	1,800 lbs. (800 kg.)

*Drawbar pull is calculated based on GM 3.0L gasoline engine.*

### AXLES

**FRONT**  
Planetary drive/steer axle with 11.625 : 1 axle ratio. Differential is "No-Spin." Axle mounted rigidly to frame.

**REAR**  
2-Wheel Drive:  
Axle with 1-1/2° oscillation in either direction.

### STEERING

Hydraulic steering unit with cylinders attached to each axle. Rear axle is the primary steer. An electric switch in the operator's compartment is used to select rear-wheel steering, four-wheel round steering or crab steering. Electronic sensors and control box automatically align the steering when a new mode is selected.

### BRAKES

Four-wheel hydraulic.  
Wet disc brakes are on the front and rear axles.  
Parking brake is disc type.

### TIRES

**2-WHEEL DRIVE**  
10.00 x 15, 16-ply rating, Highway Type Tread.

### CHASSIS

**CARGO DECK**  
53 square feet (5 m<sup>2</sup>) of deck area. A maximum of 14,000 lb. (6,350 kg) capacity on deck when load is centered over or between axles. A storage box is located in front cargo deck. Steps located on front corners. Heavy deck loads allowed at creep speed below 2 MPH (3.2 km/h) and less than 200 feet (61 m) in 30 minutes.

**OUTRIGGERS**  
Four hydraulic outriggers of box beam construction. Independent controls for each outrigger. Each cylinder equipped with direct-connected holding valves.  
Outrigger pad dimension: 9 inches (23 cm.) x 12 inches (30 cm.)

**LIFTING RINGS**  
Lifting rings at each corner of cargo deck so sling can be attached for lifting crane.

### OPERATOR COMPARTMENT

**OPERATOR'S CONTROL STATION** provides one-position access to all operating functions. Includes adjustable operator's seat, retracting seat belt, fire extinguisher and bubble level.

### ELECTRICAL (12-VOLT SYSTEM)

#### INSTRUMENT PACKAGE

Includes fuel gauge and hourmeter. Also included are warning lights for low oil and transmission pressure, turn signal, high beams, hazard lights, parking brake, hydraulic oil temperature, battery, check engine, stop engine, coolant temperature, outriggers.

#### LIGHTING PACKAGE

Headlights with Hi and Low beams, back-up lights, integral tail, brake, front and rear turn signals and emergency flasher switch at operator's station. 12V horn actuated by button on shifting control.

#### BACK-UP ALARM

Provides pulsating sound from 102 dB alarm when transmission is in reverse. Conforms to SAE J994b.

#### OUTRIGGER ALARM SYSTEM

Two-tone alarm is activated when "outrigger down" controls are operated.

### HYDRAULIC

**TANDEM PUMP**, direct-driven by engine crankshaft, rated at 16 & 32 GPM at rated RPM (61 L/min & 121 L/min). Hydraulic oil tank capacity of 25 gallons (95 L).

### BOOM ASSEMBLY

**THREE-SECTION BOOM ASSEMBLY** equipped with bearing pads, double-acting hydraulic cylinders with direct-connected holding valves & boom angle indicator on each side of boom.

#### BOOM ROTATION

Heavy-duty ball bearing rotation gear with external teeth. Rotation is powered by hydraulic motor and worm gear drive.

#### BOOM HOIST:

Turret mounted planetary gear hoist hydraulically powered with a bare-drum line pull of 11,500 lbs (5,200 kg) at a speed of 100 FPM (30.5 m/min). Includes down-haul weight, swivel hook & sheave block for 2-part line and 140 ft (43 m) of 9/16" (14 mm) hoist rope.

#### ANTI-TWO-BLOCK DEVICE

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

#### SHEAVE BLOCK, TWO-PART

Single sheave block for 2-part line requirements.

#### RATED CAPACITY LIMITER

Warns operator of impending overload with audible and visual signals. Prevents overload by stopping boom functions that cause overloads.

#### DRUM ROTATION INDICATOR

Provides visible feedback to operator when hoist drum is rotating.

CONSULT THE IC-100-B ENGINEERING SPEC FOR ADDITIONAL INFORMATION.

## **Main Features**

**RATED CAPACITY LIMITER**  
Standard

**CAPACITY ON OUTRIGGERS**  
20,000 lbs. (9,000 kg)

**PICK AND CARRY CAPACITY**  
up to 11,200 lbs. (5,091 kg)

**HEIGHT**  
7' 5" (2.26 m)

**WIDTH**  
6' 6" (2.0 m)

**BOOM ROTATION**  
360° Continuous

**SHEAVE HEIGHT**  
up to 49' 4" (15 m)

**HORIZONTAL REACH**  
up to 33' 0" (10 m)

**4-WHEEL STEER**  
Standard

**4-WHEEL DRIVE**  
Optional

**POWERSHIFT TRANSMISSION**  
Standard

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

**INDEPENDENT OUTRIGGER  
CONTROLS**

## **ENGINE OPTIONS**

### **Spark Arrester Muffler**

Installed in addition to standard muffler

### **Catalytic Converter**

Reduces engine emissions

### **Engine Heater**

Coolant heater installed to circulate warm water through engine. Plugs into 120 volt AC, 1,500 watts

## **TIRE OPTIONS**

### **Mining & Industrial**

11 x 15 , 120 lbs. (57 kg.)

### **Mining & Industrial Non-Marking**

10 x 15 , 120 lbs. (57 kg.)

### **Solid Rubber Tires**

8.25 x 15

### **Foam Filled Tires**

All four 400 lbs. (181 kg.)

### **Spare Tire & Wheel**

Mounted

## **CHASSIS**

### **Auxiliary Winch**

Mounted behind front bumper, hydraulically driven with controls.

### **Pintle Hook:**

Pintle Hook, Rear

Pintle Hook, Front

### **Rearview Mirrors**

One mounted on right & left-hand deck stake

## **OPERATOR COMPARTMENT**

### **Operator Guard**

Tubular steel weldment with heavy expanded steel mesh top section.

### **All-Weather Cab**

Rigid-mounted canopy section & removable hinged door. Includes heater, electric windshield wiper, one sliding glass window in the door & one in the right

## **Options**

side of canopy. Defroster fan & dome light included.

### **Cab Heater**

Heater with two-speed fan for units without All Weather Cab.

### **Windshield Washer**

Includes reservoir pump and nozzle.

### **Floor Mat**

Vinyl mat with foam backing.

### **Deluxe Seat**

Provides additional operator comfort.

### **Noise Reduction Kit**

Includes floor mat, control valve and side panels of foam backed vinyl for noise reduction.

### **Air Conditioning**

Air Conditioner with R134 coolant.

## **ELECTRICAL**

### **Strobe Lights**

Yellow strobe light mounted on each side of turret weight box.

### **Boom Work Lights**

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

### **Work Lights-Rear**

Two work lights recessed in rear bumper.

### **RCL Light Bar**

3 color light bar for external indication of load status

## **BOOM ATTACHMENTS**

### **Boom Extension**

10ft. (3m), Boom stowable.

### **Boom Extension**

10ft. (3m), Offsettable.

Same as above item, except boom extension is offsettable to 3 different positions; 0° (inline), 15° and 30° offset.

### **Searcher Hook**

Nose Mount

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.

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**BRODERSON<sup>®</sup>**  
**Manufacturing Corp.**  
14741 West 106th Street  
Lenexa, KS 66215 USA

(913) 888-0606  
[www.BMCCranes.com](http://www.BMCCranes.com)

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

