

IC-280-A

Carry-Deck Industrial Crane

The IC-280 has the versatility to perform facility maintenance, re-fits, upgrades and expansion projects.

This quality crane will keep you productive every step of the way.

Capacity

40,000 lbs. (18,100 kg)

Sheave Height

88' 9" (27.1 m)
(with boom extension)

Horizontal Reach

80' 6" (24.5 m)
(with boom extension)

Height

8' (2.4 m)

Width

8' 1" (2.46 m)

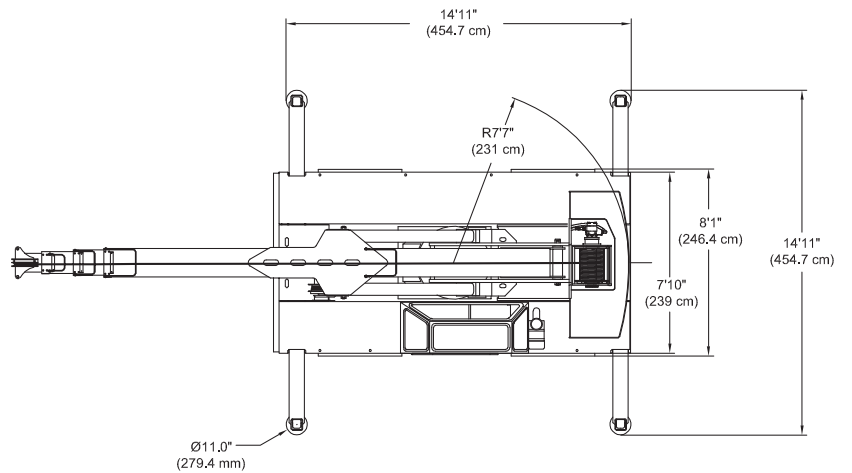
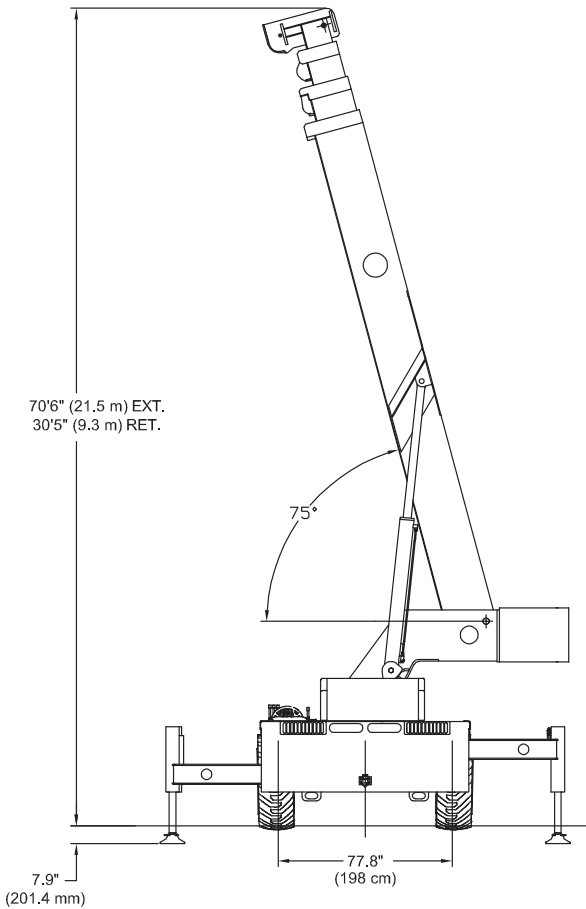
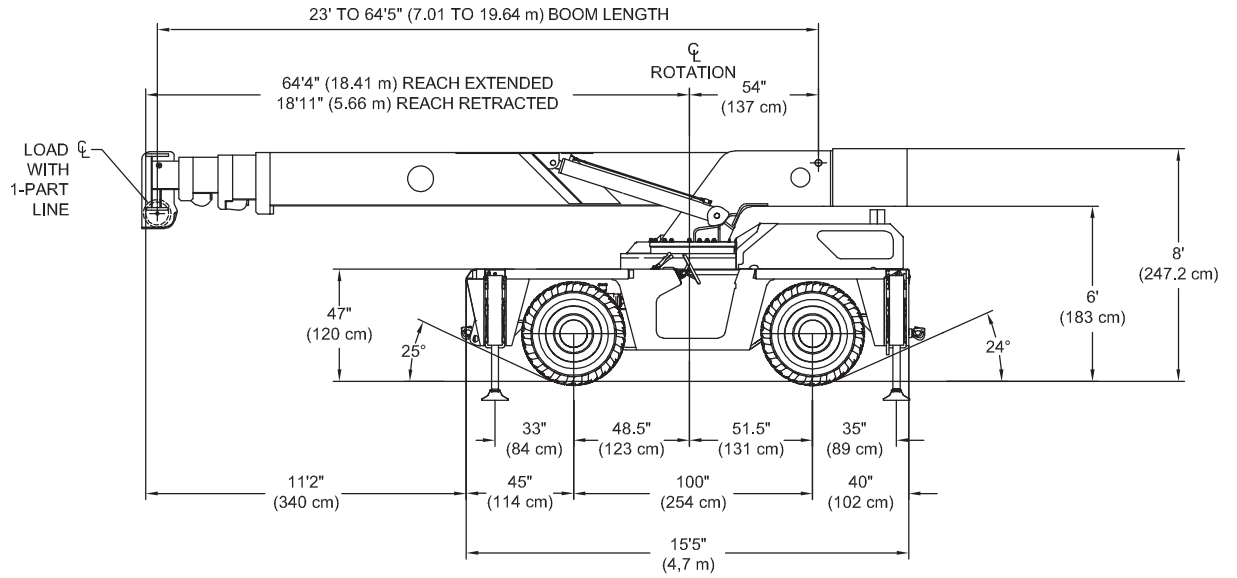


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IC-280-A

DIMENSIONS



SPECIFICATIONS

GENERAL

	ROTATION	ELEVATION	EXTENSION
Boom Movement	Continuous	0° to 75°	34'6" (10.52m)
Boom Speeds	1.4 RPM	60 sec.	17.9 sec.

Weight Total	41,340 lbs. (18,751 kg)		
Front Axle	19,870 lbs. (9,010 kg)		
Rear Axle	21,470 lbs. (9,740 kg)		
Gradeability	64% (33°)		
Turning Radius	14' 4" (4.37m)		

ENGINE

Make	Cummins	GM
Model	QSF3.8 T4F / QSB3.3 T4i	5.7L V8 (T2)
Type	Turbo-Diesel	LPG
Cylinder	4 / 4	8
Displacement	3.8L / 3.3L	5.7L
HP @ Gov. Speed	120HP (89kW) / 99HP (75kW)	135HP (101kW)
Fuel Tank Capacity	30 gal. (113L)	Dual 43lb. (19.5 kW)

TRANSMISSION

POWERSHIFT TRANSMISSION with with 4-speeds forward & reverse. Provides power shifts 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 valves provide reverse, neutral, forward and speed selection. Equipped with torque converter and transmission oil cooler.

GEAR RATIOS:

1st	5.72:1
2nd	3.23:1
3rd	1.77:1
4th	1.00:1

AXLES

FRONT

Planetary drive/steer front axle with 16:42 to 1.0 ratio. Differential equipped with "limited slip" feature. Front axle mounted rigidly to frame.

TRANS. GEAR	SPEED	DRAWBAR PULL*
1st	3 MPH	18,100 lbs. (8,200 kg)
2nd	5 MPH	10,600 lbs. (4,800 kg)
3rd	10 MPH	6,000 lbs. (2,700 kg)
4th	18 MPH	3,200 lbs. (1,450 kg)

*Drawbar pull is calculated for QSF 3.8 L Tier 4F Diesel engine.

REAR

Standard (2-Wheel Drive):

Steering axle with 1-1/2 degree oscillation in either direction.

Optional (4-Wheel Drive):

Planetary drive/steer axle with 15.78 to 1.0 ratio. Differential is not "limited slip" in rear axle. 1-1/2 degree oscillation in either direction. Axle ratio compatible with 4-wheel drive transmission rear output ratio to match front axle speed.

STEERING

Hydraulic steering unit with two cylinders attached to each axle. Allows limited steering when engine is not running. A switch on the control panel is used to select rear-wheel steering or four-wheel (round) steering or crab steering.

BRAKES

Service: Split-system, 4-wheel hydraulic-boosted multiple plate wet disc brakes.

Parking: Hand lever actuated disc-type parking brake on transmission.

TIRES

Standard:

445/65 D22.5, 18-ply high traction on/off road tread.

CHASSIS

CARGO DECK

80 Square feet (7.4 m) of deck area. 14,200 lbs. (6,441 kg) capacity on deck when load is centered over or between axles.

OUTRIGGERS

Four hydraulic out-and-down outriggers of box construction with hydraulic load holding valves. Independent controls for each outrigger. Outrigger pad dimension: 11" (30 cm) x 11" (30 cm)

ACCESSORY STORAGE BOX

Storage box is 14" (35 cm) deep x 12½" (32 cm) long x 36 ½" (93 cm) wide, located in front cargo deck.

LIFTING RINGS

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

OPERATOR COMPARTMENT

Provides one-position access to all chassis & crane functions. Includes adjustable operator's seat, retracting seat belts, fire extinguisher & bubble level.

LIGHTING PACKAGE

Consists of two 12V-lamps, with high and low beams for driving; tail, brake and turn signal lights and backup lights in rear; front turn signals and emergency flasher switch at operator's station.

INSTRUMENT PACKAGE

Fuel gauge and hourmeter which records hours only during actual engine operation. Also included are warning lights for low oil and transmission pressure, check engine, high coolant and transmission temperature, turn signals, high beams, hazard lights, parking brake and four-wheel drive.

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" or "outrigger out" controls are operated.

ELECTRICAL (12-VOLT SYSTEM)

HYDRAULIC

TANDEM PUMP direct-driven by engine, delivers 30 GPM (113L/min) at rated RPM. 54-gallon capacity.

FOUR-SECTION BOOM ASSEMBLY

Full power, proportional extension telescoping boom. System consists of telescopic double acting hydraulic cylinder with load holding valves and extension and retraction chains. Retracted boom length 23' 0" (7.0m), Extended boom length 64' 5" (19.7m). Boom angle indicator on side of boom.

BOOM ROTATION

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

BOOM HOIST

Turret-mounted planetary gear hoist, is hydraulically powered to provide a bare-drum line pull of 12,500 lbs (5,670 kg) and a speed of 186 fpm (57 m/min), includes 320 feet (97 m) of 9/16 inch (14 mm) wire rope, 170 pound (77 kg) downhaul weight, swivel hook, sheave block for 4-part line.

ANTI-TWO-BLOCK DEVICE

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

RATED CAPACITY LIMITER

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



Main Features

- RATED CAPACITY LIMITER**
Standard
- CAPACITY ON OUTRIGGERS**
40,000 lbs. (18,100 kg)
- PICK AND CARRY CAPACITY**
14,800 lbs. (6,713.17 kg)
- HEIGHT**
8' (2.4 m)
- WIDTH**
8' 1" (2.46 m)
- BOOM ROTATION**
360°
- SHEAVE HEIGHT**
up to 88' 9" (27.1 m)
- HORIZONTAL REACH**
up to 80' 6" (24.5 m)
- FOUR-WHEEL STEER**
Standard
- FOUR-WHEEL DRIVE**
Optional
- POWERSHIFT TRANSMISSION**
Standard
- FULLY HYDRAULIC CONTROLS
FOR SMOOTH, PRECISE
OPERATIONS**
- INDEPENDENT OUTRIGGER
CONTROLS**

Additional Features

ENGINE

- Spark Arrester Muffler**
Installed in addition to standard muffler. (LPG only.)
- Engine Heater**
Engine coolant heater installed to circulate warm water through engine, plugs into 120 volt AC.

AXLE & STEERING

- 4-Wheel Steer & 2-Wheel Drive
- 4-Wheel Steer & 4-Wheel Drive

TIRE

- Non Marking Pneumatic Tires
- Foam Filling of Tires
- Spare Tire & Wheel

CHASSIS

- Auxiliary Winch**
Mounted on front outrigger bumper, hydraulically driven with control in operator's console.
- Pintle Hook**
Rear and Front
- Rearview Mirrors**
One mounted on right-hand deck stake and one mounted on left-hand deck stake.
- Outrigger Shoes**
Nylon outrigger shoes, 20" (510 mm) diameter round shoes with storage on rear bumper.

OPERATOR COMPARTMENT

- Operator Guard**
Tubular steel weldment with heavy expanded steel mesh top section.
- All Weather Cab**
Rigid-mounted canopy section and removable hinged door. Includes heater, electric windshield wiper, one sliding glass window in the door & one in the right side of canopy. Defroster fan & dome light included.

Cab Heater Only

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.

Operator Suspension Seat

Small suspension built in to provide additional operator comfort. Deluxe seat upholstery springs provide additional operator comfort.

Noise Reduction Kit

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

Air Conditioning

Air Conditioner w/ 134 coolant.

ELECTRICAL

Strobe Lights

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

Boom Work Lights

One worklight 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

20 ft. (6.1 m) Offset. Boom stowable. Boom extension is offsettable to 3 different positions; 0 degree (in line), 15 degree and 30 degree offset.

Sheave Block

2 part and 4 part available

Searcher Hook

Nose mount 5,000 lb. (2,270 kg) capacity.

CONSULT THE IC-280-A ENGINEERING SPEC FOR ADDITIONAL INFORMATION.

Broderson Cranes are manufactured to ISO 9001 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

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

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

