

# STERLING CRANE



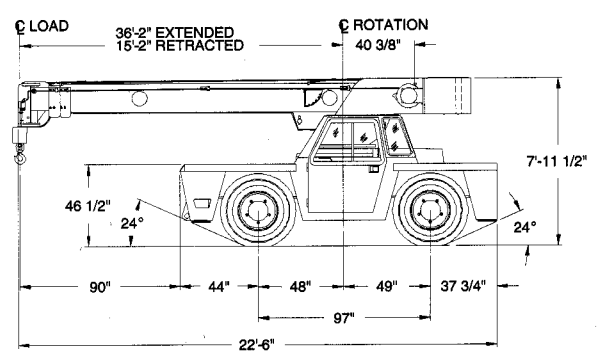
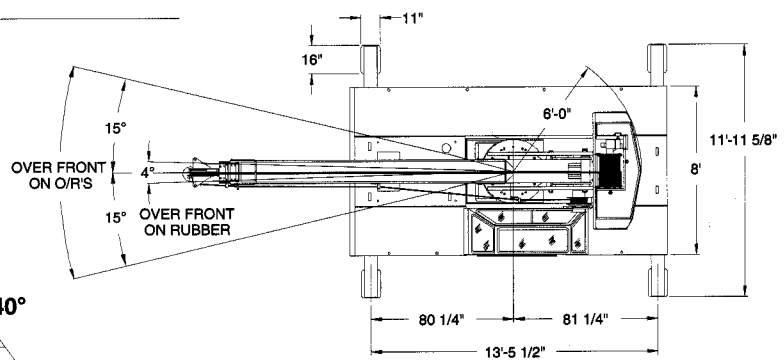
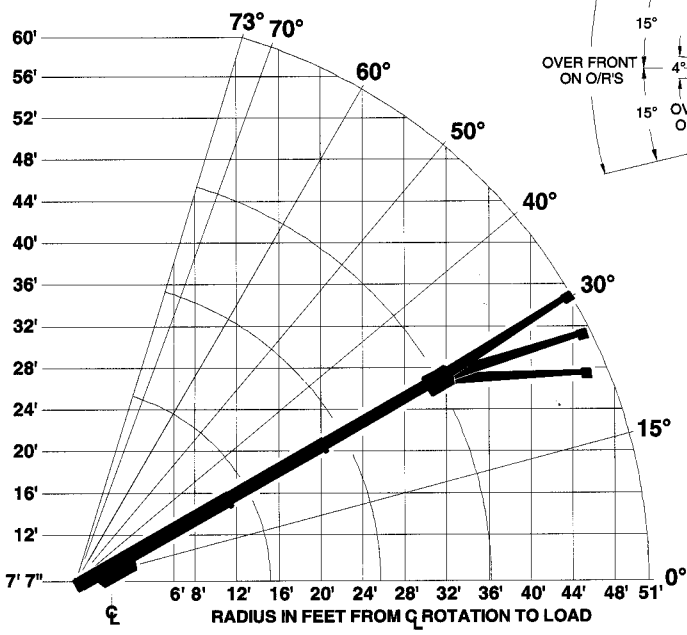
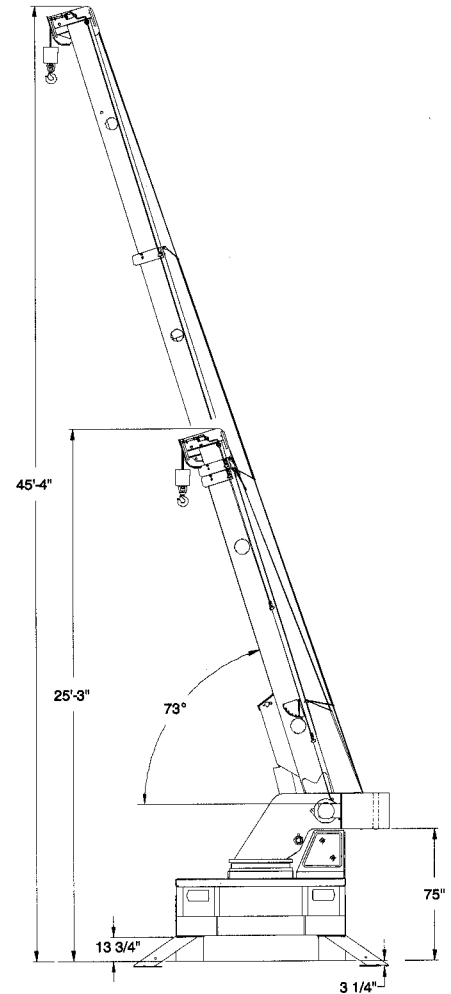
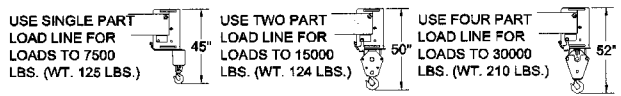
## LIFTING CHARTS - Carry Decks

### BRODERSON MODEL IC-200-2E - 15 TON CAPACITY

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE							
LOAD RADIUS FEET	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS						
	360° ROTATION		OVER FRONT				
	ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS			
6	16200	30000	17000	30000			
8	13200	24000	13800	24000			
10	11000	19800	11500	19800			
12	8100	16100	9600	16100			
14	6250	13500	7900	13500			
16	5000	11200	6300	11200			
18	4100	10000	5100	10000			
20	3400	8800	4300	8800			
22	2850	7700	3600	7800			
24	2400	6600	3000	6900			
26	2100	5750	2600	6200			
28	1850	5150	2300	5700			
30	1650	4650	2100	5300			
32	1450	4200	1850	4900			
36	1150	3400	1500	4200			
40	900	3050	1200	3600			
44	650	2600	950	3100			
48	450	2200	750	2700			
51	250	1900	600	2400			
<b>15' BOOM EXT.</b>							
BOOM EXTENSION DEDUCT: 400 POUNDS WHEN STOWED ON BASE BOOM. 800 POUNDS IN WORK POSITION WITH LOAD ON MAIN BOOM.							
15-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET							
MAIN BOOM ANGLE							
ANGLE	0°	15°	30°	40°	50°	60°	70°
0°	---	3100	3450	3900	4650	6000	7500
15°	---	3000	3100	3300	3650	4250	5200
30°	---	3000	3050	3200	3450	3450	3900

CAUTION BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY. BOOM EXTENSION MAY ONLY CARRY LOADS WITH OUTRIGGERS DOWN.

BOOM EXTENSION DEDUCT: 400 POUNDS WHEN STOWED ON BASE BOOM. 800 POUNDS IN WORK POSITION WITH LOAD ON MAIN BOOM.



# STERLING CRANE

## GENERAL:

### Weight:

IC-200-1E	27,310 lbs.
IC-200-2E	27,760 lbs.

Gradeability: 75%

Turning Radius: 13' 9"

### Boom Movement:

	IC-200-1E	IC-200-2E
Rotation	Continuous	Continuous
Elevation	0° to 73°	0° to 73°
Extension	15' 4"	21' 0"

### Boom Speeds:

Rotation	1.8 RPM	1.8 RPM
Elevation	21 sec.	21 sec.
Extension	26 sec.	35 sec.

## ENGINE:

	Standard	Optional
Make	GM	Cummins
Model	4.3L V-6	4BT3.9
Type	Gasoline	Turbo-Diesel
No. Cyl.	6	4
Displacement	262 CID	239 CID
HP @ Gov. Speed	110 H.P.	110 H.P.
Fuel Tank Capacity	30 Gallons	

## TRANSMISSION:

Powershift transmission with 4-speeds forward and 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. Equipped with torque converter and transmission oil cooler. Torque converter has stall ratio of 2.2:1.

### Gear Ratio:

First	5.72:1	Second	3.23:1
Third	1.77:1	Fourth	1.00:1

## AXLES:

### Front Axle:

Planetary drive/steer front axle with 15.78 to 1.0 ratio. Differential equipped with "limited slip" feature. Front axle mounted rigidly to frame.

Gear	Travel Speed	Drawbar Pull*
First	3 MPH	19,000*
Second	6 MPH	10,000*
Third	11 MPH	5,700*
Fourth	20 MPH	3,000*

\*Drawbar pull is calculated for GM 4.3L engine.

### Rear Axle:

#### Standard (2-Wheel Drive):

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

#### Optional (4-Wheel Drive):

Planetary drive/steer axle with 24.98 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 output for front axle match. Transmission equipped with electrohydraulic control for shifting between 2-wheel drive and 4-wheel drive.

## STEERING:

Full hydraulic steering unit with two 3-inch 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 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:

385/65D22.5, 16-ply rating, high-traction on/off road tread.

## OPERATOR COMPARTMENT:

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

## CHASSIS:

### CARGO DECK:

78 square feet of deck area. 17,000 lbs. capacity on deck when load is centered over or between axles. Steps located on front corners.

### OUTRIGGERS:

Four hydraulic outriggers of box beam construction with direct-connected holding valves. Independent controls for each outrigger. Outrigger pad dimension: 11" x 16".

### ACCESSORY STORAGE BOX:

Storage box is 14" deep x 10-1/2" long x 36-1/2" wide, located in front carry deck.

### Lifting Rings

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

## ELECTRICAL:

### 12 Volt System

### Lighting Package:

One pair headlights with high and low beams, tail, brake and turn signal lights and back-up lights in rear, front turn signals and emergency flasher switch at operator's station.

### Instrument Package:

Fuel, ammeter, oil pressure, water temperature, transmission oil temperature gauges. All gauges are lighted. Hourmeter records hours only during actual engine operation. Also included are warning lights for low transmission pressure, turn signals, high beams, hazard lights, park brake and four-wheel drive.

### Back-Up Alarm:

Provides pulsating sound when transmission is in reverse.

## HYDRAULIC SYSTEM:

Tandem pump, direct-driven by engine crankshaft, rated at 29 and 34 GPM at rated RPM. Hydraulic oil tank capacity of 54 gallons.

## BOOM ASSEMBLY:

Three-section boom assembly equipped with bearing pads, double-acting hydraulic cylinders with direct-connected holding valves and 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 10,000 lbs. at a line speed of 100 FPM. Includes downhaul weight, swivel hook and sheave block for 4-part line and 240 ft. of 1/2" hoist rope.

### Anti-Two-Block Device:

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

### Sheave Block, Four Part Line

Double sheave block for 4-part line requirements.

# STERLING CRANE

Listed below are brief descriptions of each option available for the IC-200-E Industrial Crane. Consult the IC-200-E Engineering Spec for additional information on each option.

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**MODEL:**

**IC-200-1E** Industrial Crane with  
12' 8"-28' 0" Boom  
**IC-200-2E** Industrial Crane with  
15' 2"-36' 2" Boom

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**ENGINE OPTIONS:****Diesel Engine**

Cummins Turbo-4BT3.9

**Spark Arrester Muffler**

Installed in addition to std. muffler.

**Catalytic Converter**

Reduces engine emissions.

**Engine Heater**

Engine coolant heater installed to circulate warm water through engine, plugs into 120 volt AC.

**Ether Injection System**

Ether starting aid controlled by switch in operator compartment and injects ether directly into intake manifold.

**Engine Shut Down Gauges**

Shuts engine off when high water temperature or low engine oil pressure occurs. (Diesel Only)

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**Axle & Steering Options:****4-Wheel Steer & 2-Wheel Drive****4-Wheel Steer & 4-Wheel Drive****Electronic Directional Steering**

Three steering modes instead of the standard two with the added feature of electronic realignment of the front and rear wheels when changing from one mode to another. The steering modes are round, crab and 2-wheel rear steering.

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**TIRE OPTIONS:****Non-Marking Tires****Foam Filling of Tires****Spare Tire & Wheel**

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**CHASSIS OPTIONS:****Auxiliary Winch**

Mounted behind front bumper, hydraulically driven with control in operator's console.

**Pintle Hook:****Pintle Hook, Rear****Pintle Hook, Front****Headlight and Taillight Grilles**

Welded steel protective grilles for headlights and taillights.

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**CHASSIS OPTIONS: (Cont'd)****Rearview Mirrors**

One mounted on right-hand deck stake and one mounted on left-hand deck stake.

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**OPERATOR COMPARTMENT OPTIONS:****Operator Guard**

Tubular steel weldment with heavy expanded steel mesh top section.

**Operator Guard Cover**

Clear vinyl cover over Operator Guard, for inclement weather operations.

**Operator Guard Door**

Hinged door covers operator compartment side opening.

**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**

Provides 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 with R 134 coolant.

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**ELECTRICAL OPTIONS:****Outrigger Alarm System**

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

**Strobe Lights**

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

**Amber Rotating Beacons**

Amber rotating beacon mounted on each side of turret weight box.

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**ELECTRICAL OPTIONS: (Cont'd)****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.

**Boom Work Lights and Beacons**

Boom work lights and amber rotating beacons installed.

**Boom Work Lights and Strobes**

Boom work lights and strobe lights installed.

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**BOOM ATTACHMENTS:****Boom Extension, 15 Ft.**

Boom stowable.

**Boom Extension, 15 Ft., Offsettable (2E Only)**

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

**Sheave Block - Two-Part Line****Searcher Hook:****Nose Mount****Link Under Boom****Load Moment Indicator**

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.

**Load Indicator**

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

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**Should you, as an end user, require an option or special equipment on your IC-200-E that is not listed on our sales literature, please contact your dealer salesperson or the factory to receive a special quoted price.**

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