

IC-80-3F

IC-80-3F 11'-6" - 30'-0" BOOM

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE

MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS

360° ROTATION OVER FRONT

ON RUBBER ON OUTRIGGERS ON RUBBER ON OUTRIGGERS

LOAD RADIUS FEET	360° ROTATION		OVER FRONT	
	ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS
5	9400	17000	11400	18000
6	7550	14000	10000	14000
8	5250	10000	8100	10000
10	3600	7700	6100	7700
12	2650	6100	4450	6100
14	2050	5200	3400	5200
16	1600	4400	2700	4400
18	1250	3650	2200	3900
20	1050	3050	1800	3400
22	850	2650	1550	3050
24	750	2300	1350	2800
26	650	2050	1150	2550
28	550	1850	1000	2350
30	450	1650	900	2150
32	350	1550	750	1950
34	250	1400	650	1800
36	200	1250	550	1650
38	150	1100	450	1500
40	100	1000	400	1400

10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET

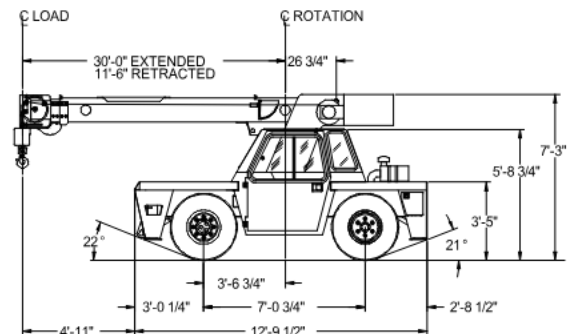
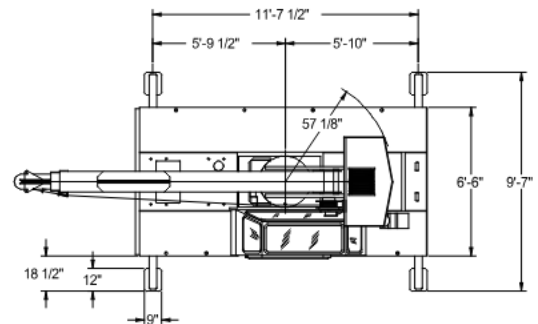
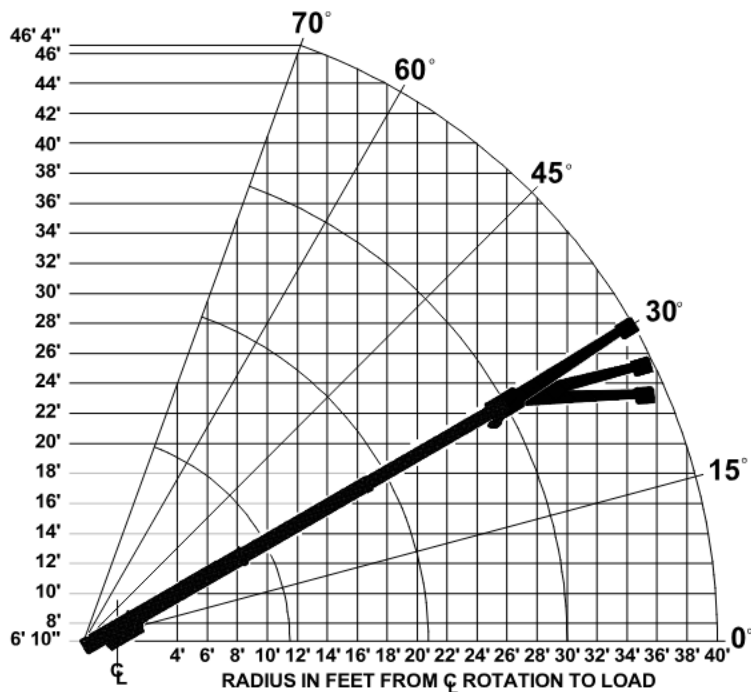
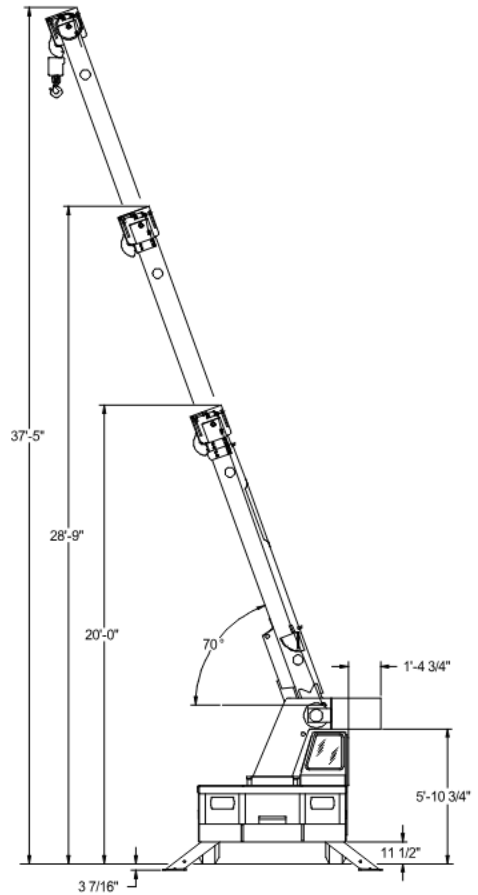
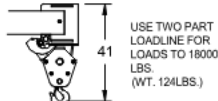
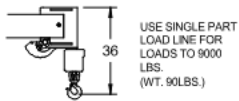
MAIN BOOM ANGLE

ANGLE	0°	30°	45°	60°	70°
* f 0°	2250	2600	3200	5000	7000
† 15°	—	2400	2700	3500	4200
† 30°	—	2250	2500	3000	3300

* USE 0° FOR STRAIGHT BOOM EXTENSION.

† USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.

BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.



IC-80-F

GENERAL:

Weight:	IC-80-1F	IC-80-2F	IC-80-3F
4-Wheel Steer	15,730 lbs.	15,930 lbs.	16,230 lbs.
4-Wheel Drive	16,430 lbs.	16,630 lbs.	16,930 lbs.

Boom Movement:

Rotation	Continuous	Continuous	Continuous
Elevation	0° to 70°	0° to 70°	0° to 70°
Extension	12 ft.	14 ft. 6 in.	18 ft. 6 in.

Boom Speeds:

Rotation	2.0 RPM	2.0 RPM	2.0 RPM
Elevation	10.0 sec.	10.0 sec.	10.0 sec.
Extension	17.0 sec.	21.0 sec.	27.0 sec.

Turning Radius:	Standard	Optional
(C/L of Outside Steering Wheel)	<u>4-Wheel Steer</u> 10 ft. 9 in.	<u>4-Wheel Drive</u> 11 ft. 8 in.

Aisle Width for 90° Turn:	9 ft. 7 in.	9 ft. 9 in.
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ENGINE:	Standard	Optional
Make	GM	Cummins
Model	3.0 EFI*	4B3.9
Type	Gas	Diesel
No. Cyl.	4	4
Displacement	181 CID	239 CID
HP @ Gov. Speed	69	80

Fuel Tank Capacity: 20 Gallons

* Electronic Fuel Injection with Dual Fuel

TRANSMISSION:

2-Wheel Drive:

Powershift transmission with 4-speeds in forward and 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 & speed selection. Equipped with oil cooler and filter. Torque converter has stall ratio of 2.2:1.

Gradeability 70 percent.

	Forward/Reverse	Travel	Drawbar
Gear	Gear Ratios	Speed	Pull
First	5.72:1	4 MPH	10,900 lbs.
Second	3.23:1	7 MPH	6,090 lbs.
Third	1.77:1	12 MPH	3,270 lbs.
Fourth	1.00:1	22 MPH	1,780 lbs.

TRANSMISSION: (Cont'd)

4-Wheel Drive:

Remote mounted synchromesh 4-speed. Forward, neutral and reverse control mounted on steering column. 4-speed control has side lever & push button knob for electric declutching. Can be shifted while in motion. Equipped with oil cooler and filter. Torque converter has stall ratio of 2.2:1.

Gradeability 72 percent.

	Forward/Reverse	Travel	Drawbar
Gear	Gear Ratios	Speed	Pull
First	4.29:1	5 MPH	11,500 lbs.
Second	2.66:1	8 MPH	7,070 lbs.
Third	1.41:1	15 MPH	3,670 lbs.
Fourth	0.77:1	27 MPH	1,930 lbs.

AXLES:

Front:

Planetary drive/steer axle with 11.98:1 ratio. Differential is "Limited Slip." Axle mounted rigidly to frame.

Rear:

2-Wheel Drive:

Axle with 1-1/2 degree oscillation in either direction.

4-Wheel Drive:

Planetary drive/steer axle with 11.98:1 ratio. Differential is "Limited Slip." 1-1/2 degree oscillation in either direction.

STEERING:

Hydraulic steering unit with two 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 or four-wheel round steering.

BRAKES:	2-Wheel Drive	4-Wheel Drive
Front	Internal wet disc brakes	Internal wet disc brakes
Rear	Drum type	Internal wet disc brakes
Parking	Disc type	Disc type

TIRES:

2-Wheel Drive 10.00 x 15, load range J radial, highway type tread.

4-Wheel Drive 10.00 X 15, mining & industrial, 16 ply rating.

CHASSIS:

Cargo Deck:

64 square feet of deck area.* 14,000 lbs. 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.

* 54 Square feet with Cummins engine.

**14,000 pounds allowed at creep speed of 200 feet in 30 minutes.

Outriggers:

Four hydraulic outriggers of box beam construction with direct-connected holding valves. Independent controls for each outrigger. Each cylinder equipped with direct-connected holding valves. Outrigger pad dimension 9" x 12".

Accessory Storage Box:

Storage box 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:

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:

Fuel, ammeter, oil pressure, water temperature, transmission oil temperature gauges & hourmeter. Also included are warning lights for low transmission pressure, turn signal, high beams, hazard lights, parking brake & 4-wheel drive.

Lighting Package:

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

ELECTRICAL: (Cont'd)

Back-Up Alarm:

Provides pulsating sound from 97 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 SYSTEM:

Tandem pump, direct-driven by engine crankshaft, rated at 17 & 32 GPM at rated RPM. Hydraulic oil tank capacity of 22 gallons.

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 10,000 lbs. at a line speed of 110 FPM. Includes downhaul weight, swivel hook & sheave block for 2-part line and 125 ft. of 9/16" 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.