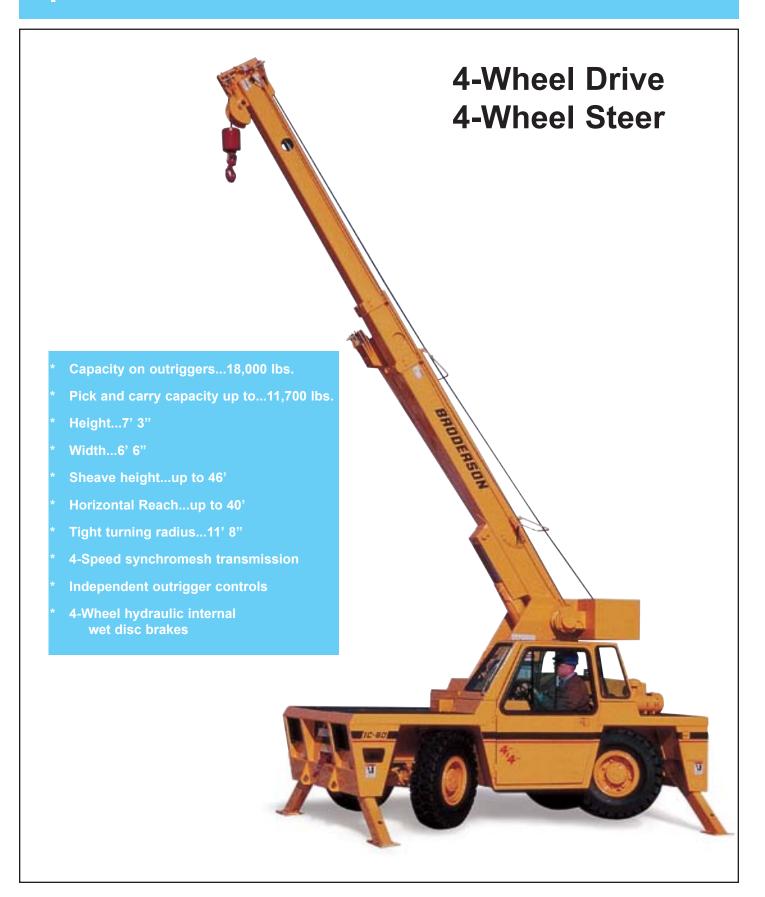
Tech Spec

IC-80-F



Tech Spec

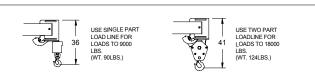


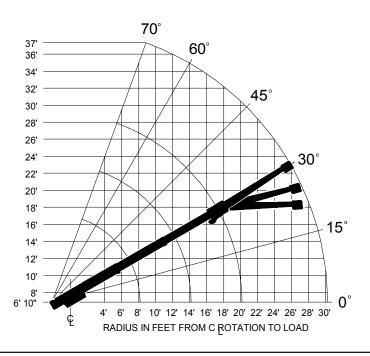
IC-80-1F

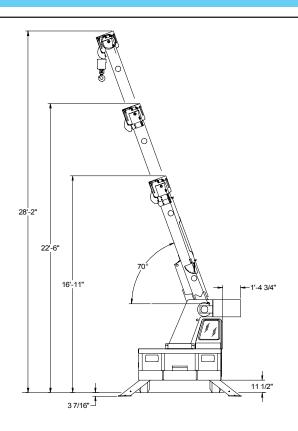
IC-80-1F 8'-2" - 20'-2" BOOM

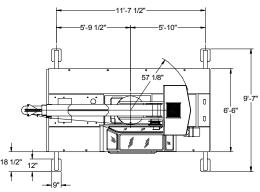
	CAPA	ACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE						
	LOAD	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS						
	RADIUS	360 °ROTATION			OVER FRONT		TNC	
	FEET	ON RUBBER	ON OUTRIG	GERS	ONI	RUBBER	ON	OUTRIGGERS
	5	9600	1700	0	1	1700		18000
	6	7900	1450	0	1	0400		14500
Σ 0	8	5750	1025	0	8	3400		10250
0	10	4150	7700)	6	300		7700
<u>m</u>	12	3100	6550)	4	650		6550
	14	2425	5550)	3	8650		5550
×	16	1975	4650)	3	8000		4650
-	18	1625	3950)	2	2500		4150
	20	1400	3550)	2	2150		3800
	22	1275	3000)	1	900		3000
	24	1075	2750)	1	650		2800
ا نا	26	925	2450)	1	425		2600
\times	28	775	2150)	1	250		2400
Ш ∑	30	675	1950)	1	100		2250
0	BOOM	10-FOOT I	-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET					FFSET
0	EXTENSION		MAIN BOOM ANGLE					
0, B	ANGLE	0°	30°	45	5°	60°		70°
~	* † 0°	2250	2600	32	00	5000		7000
	†15°		2400	27	00	3500		4200
	†30°		2250	25	00	3000		3300

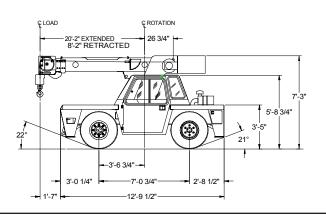
- * USE 0° FOR STRAIGHT BOOM EXTENSION.
- [†] USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION. BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.











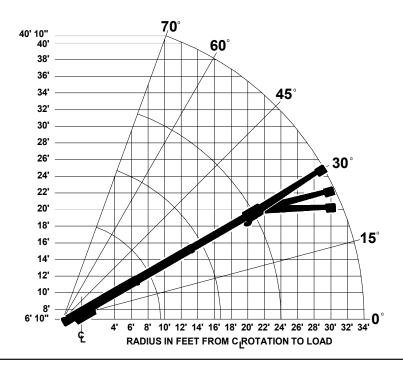
IC-80-2F

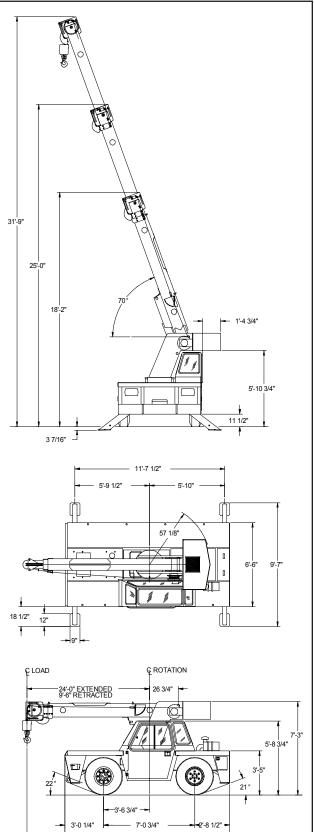
IC-80-2F 9'-6" - 24'-0" BOOM

	CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE							
	LOAD	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS						
	RADIUS	360 ROTATION		OVER FRONT		NT		
	FEET	ON RUBBER	ON OUTRIGO	SERS	ON F	UBBER	ON	OUTRIGGERS
	5	9500	1700	0	1	1600		18000
	6	7800	1450	0	10)200		14500
_	8	5500	1025	0	8	250		10250
0	10	3900	7700) [6	200		7700
ВО	12	2900	6550)	4	550		6550
	14	2300	5550)	3	550		5550
AIN	16	1850	4550)	2	850		4550
Σ	18	1550	3950)	2	400		4050
	20	1300	3250)	2	050		3650
	22	1100	2875	5	1	750		3300
	24	925	2475	5	1	550		3100
	26	850	2250)	1	350		2750
	28	700	2000)	1	175		2500
	30	600	1775	5	1	025		2300
l ×	32	500	1625	5		900		2100
Ш	34	425	1400)		300		1950
Σ	воом	10-FOOT BOOM EXTENSION - STRAIGHT OR OF				FFSET		
Ō	EXTENSION		MAIN	BOOM	/I ANG	LE		
- B	ANGLE	0°	30°	45	5°	60°		70°
1 0'	* † 0°	2250	2600	320	00	5000		7000
	†15°	-	2400	270	00	3500		4200
	†30°		2250	250	00	3000		3300

- * USE 0° FOR STRAIGHT BOOM EXTENSION.
 † USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.
- † USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION. BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.







— 12'-9 1/2"

IC-80-3F

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

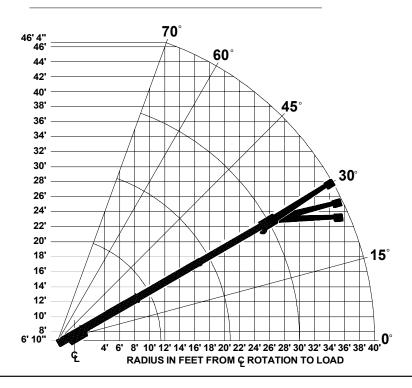
- 1	CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE								
	LOAD	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS							
	RADIUS	360 °R	360 °ROTATION		OVER FR		RC	DNT	
	FEET	ON RUBBER	ON OUTRIGO	GERS	ONF	RUBBER	ON	OUTRIGGERS	
	5	9400	1700	0	1	1400		18000	
	6	7550	1400	0	1	0000		14000	
	8	5250	1000	0	8	3100		10000	
	10	3600	7700)	6	3100		7700	
Σ	12	2650	6100)	4	1450		6100	
0	14	2050	5200)	3	3400		5200	
ВО	16	1600	4400)	2	2700		4400	
	18	1250	3650	3650		2200		3900	
A N	20	1050	3050	3050		1800		3400	
Σ	22	850	2650	2650		1550		3050	
	24	750	2300	2300		1350		2800	
	26	650	2050	2050		1150		2550	
	28	550	1850	1850		1000		2350	
	30	450	1650	1650		900		2150	
	32	350	1550)		750		1950	
	34	250	1400)		650		1800	
	36	200	1250)		550		1650	
×	38	150	1100)		450		1500	
В	40	100	1000)		400		1400	
ΜO	воом	10-FOOT B	OOM EXTE	NSION	N - STF	RAIGHT C	OR (OFFSET	
0	EXTENSION		MAIN	BOO	M ANG	ELE			
0, B	ANGLE	0°	30°	45	5°	60°		70°	
10	* † 0°	2250	2600	32	00	5000		7000	
	†15°		2400	27	00	3500		4200	
	†30°		2250	25	00	3000		3300	

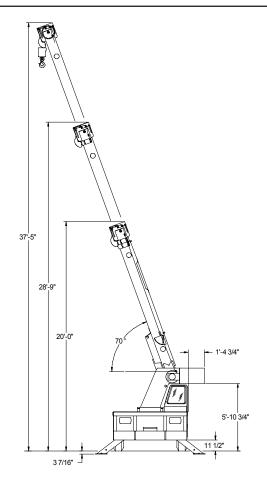
- * USE 0° FOR STRAIGHT BOOM EXTENSION.
 † USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.
- BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.

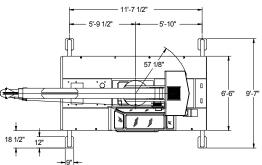
(WT. 90LBS.)

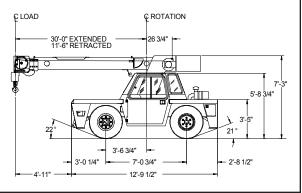


LBS. (WT. 124LBS.)









IC-80-F

GENERAL:

Neight:	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	4-Wheel Steer	4-Wheel Drive
Steering Wheel)	10 ft. 9 in.	11 ft. 8 in.

Aisle Width for

90° Turn: 9 ft. 7 in. 9 ft. 9 in.

ENGINE:	Standard	Optional
Make	GM	Cummins
Model	3.0 EFI*	4B3.9
Туре	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
<u>Gear</u>	Gear Ratios	Speed	<u>Pull</u>
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.

Fo	Forward/Reverse		Drawbar
<u>Gear</u>	Gear Ratios	Speed	<u>Pull</u>
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: Front	2-Wheel Drive Internal wet disc brakes	4-Wheel Drive 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.

Tech Spec

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.

IC-80-F

Listed below are brief descriptions of each option available for the IC-80-F Industrial Cranes. Consult the IC-80-F Engineering Spec for additional information on each option.

MODELS:

IC-80-1F Industrial Crane with 8'2"-20'2" Boom

IC-80-2F Industrial Crane with 9'6"-24' Boom

IC-80-3F Industrial Crane with 11'6"-30' Boom

ENGINE:

Diesel Engine

Cummins - 4B3.9

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)

AXLE & STEERING OPTIONS: 4-Wheel Steer & 4-Wheel Drive

TIRE OPTIONS:

Mining & Industrial Tires 10.00 x 15, 16-Ply Rating 10.00 x 15, Non Marking

Solid Rubber Tires:

8.25 x 15

8.25 x 15 Non-Marking

Foam Filling of Tires

Spare Tire & Wheel

Highway Tread, 10.00 x 15 Mining & Industrial, 10.00 x 15 Mining & Industrial, Non Marking

CHASSIS OPTIONS:

Auxiliary Winch

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

CHASSIS OPTIONS: (Cont'd)

Pintle Hook:

Pintle Hook, Rear Pintle Hook, Front

Headlight and Taillight Grilles

Welded steel protective grilles for headlights and taillights.

Rear Work Light Grilles

Protective grilles for worklights.

Rearview Mirrors

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

OPERATOR COMPARTMENT OPTIONS:

Operator Guard

Tubular steel weldment with heavy expanded steel mesh top section.

Operator Guard Cover

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

Operator Guard Door

Hinged door covers operator compartment side opening.

All-Weather Cab

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

Operator Suspension 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 OPTIONS:

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.

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.

BOOM ATTACHMENTS:

Boom Extension, 10 Foot Boom stowable.

Boom Extension, 10 Foot, Offsettable

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

Searcher Hook:

Nose Mount

Should you, as an end user, equipment on your IC-80-F that is not listed on our sales literature, please contact your dealer salesperson or the factory to receive a special quoted price.