



Tech Spec

IC-80-F

2-WHEEL DRIVE

- * Capacity on outriggers...18,000 lbs.
- * Pick and carry capacity up to...11,700 lbs.
- * Height...7' 3"
- * Width...6' 6"
- * Sheave height...up to 46'
- * Horizontal Reach...up to 40'
- * Tight turning radius
- * 2-Wheel drive standard
- * 4-Wheel steer standard
- * 4-Wheel drive optional
- * Powershift transmission
- * Fully hydraulic controls for smooth precise operations
- * Independent outrigger controls



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Tech Spec

4-Wheel Drive 4-Wheel Steer

- * Capacity on outriggers...18,000 lbs.
- * Pick and carry capacity up to...11,700 lbs.
- * Height...7' 3"
- * Width...6' 6"
- * Sheave height...up to 46'
- * Horizontal Reach...up to 40'
- * Tight turning radius...11' 8"
- * 4-Speed synchromesh transmission
- * Independent outrigger controls
- * 4-Wheel hydraulic internal wet disc brakes





IC-80-1F

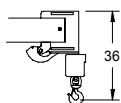
IC-80-1F 8'-2" - 20'-2" BOOM

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	
MAIN BOOM	5	9600	17000	11700	18000	
	6	7900	14500	10400	14500	
	8	5750	10250	8400	10250	
	10	4150	7700	6300	7700	
	12	3100	6550	4650	6550	
	14	2425	5550	3650	5550	
	16	1975	4650	3000	4650	
	18	1625	3950	2500	4150	
10' BOOM EXT.	20	1400	3550	2150	3800	
	22	1275	3000	1900	3000	
	24	1075	2750	1650	2800	
	26	925	2450	1425	2600	
	28	775	2150	1250	2400	
	30	675	1950	1100	2250	
	BOOM EXTENSION	10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET				
		MAIN BOOM ANGLE				
	ANGLE	0°	30°	45°	60°	70°
	* † 0°	2250	2600	3200	5000	7000
	† 115°	—	2400	2700	3500	4200
	† 130°	—	2250	2500	3000	3300

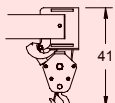
* USE 0° FOR STRAIGHT BOOM EXTENSION.

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

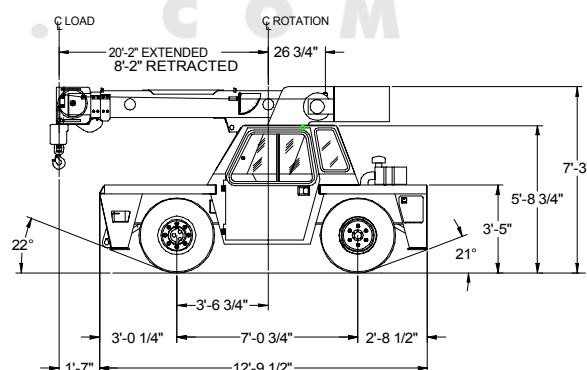
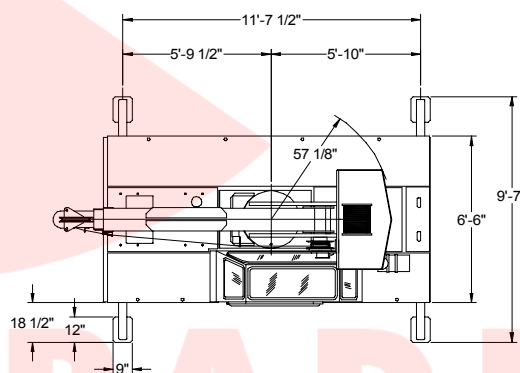
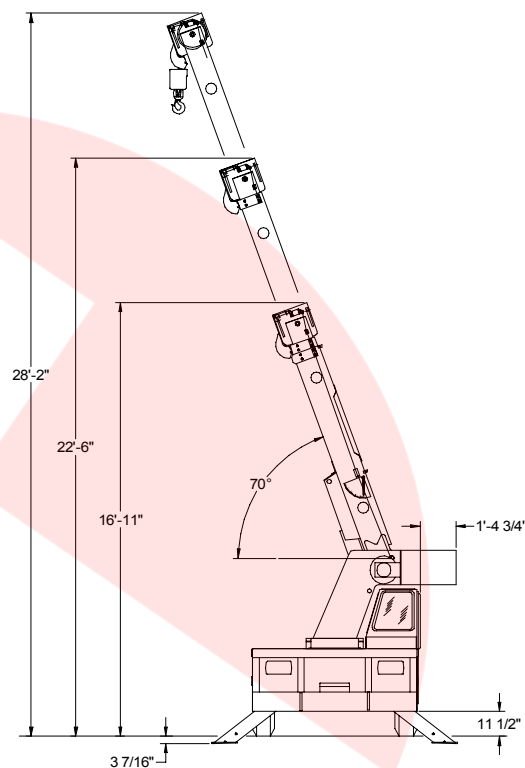
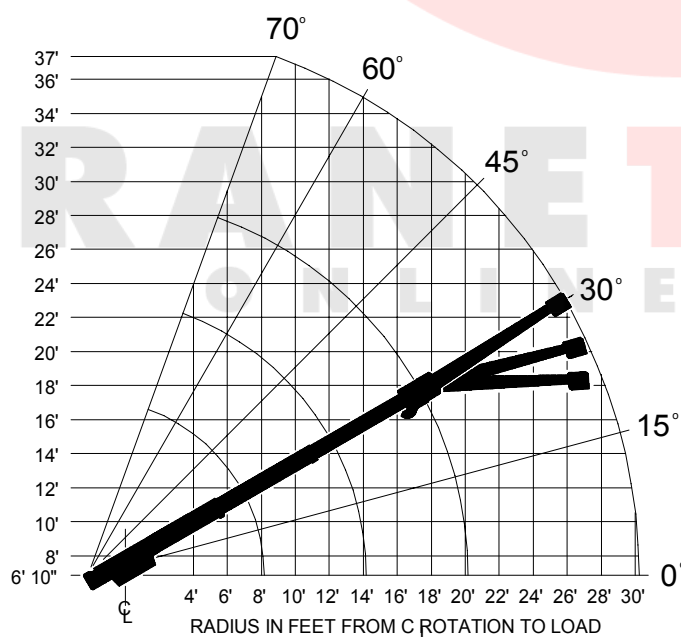
BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.



USE SINGLE PART
LOAD LINE FOR
LOADS TO 9000
LBS.
(WT. 90LBS.)



USE TWO PART
LOADLINE FOR
LOADS TO 18000
LBS.
(WT. 124LBS.)



IC-80-2F

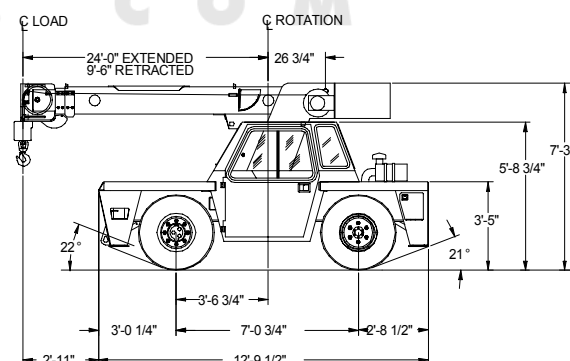
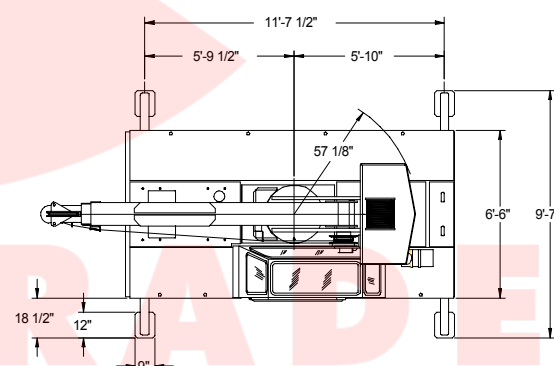
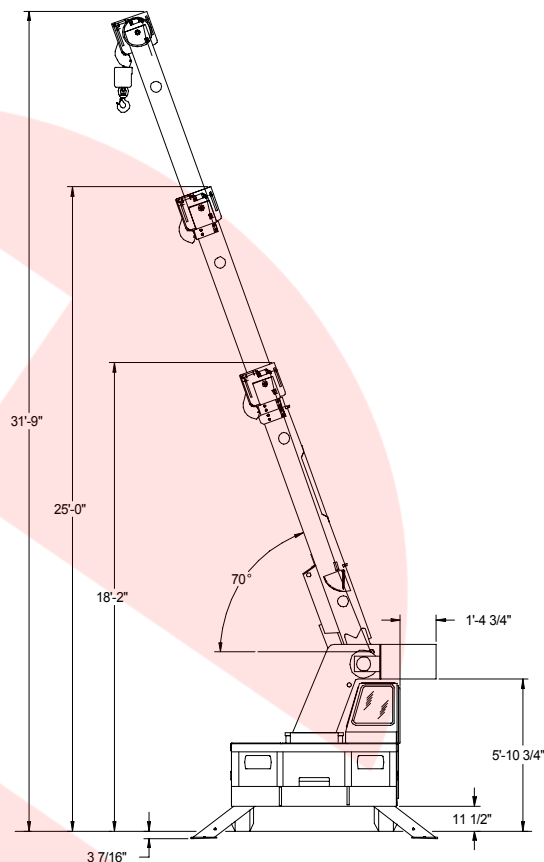
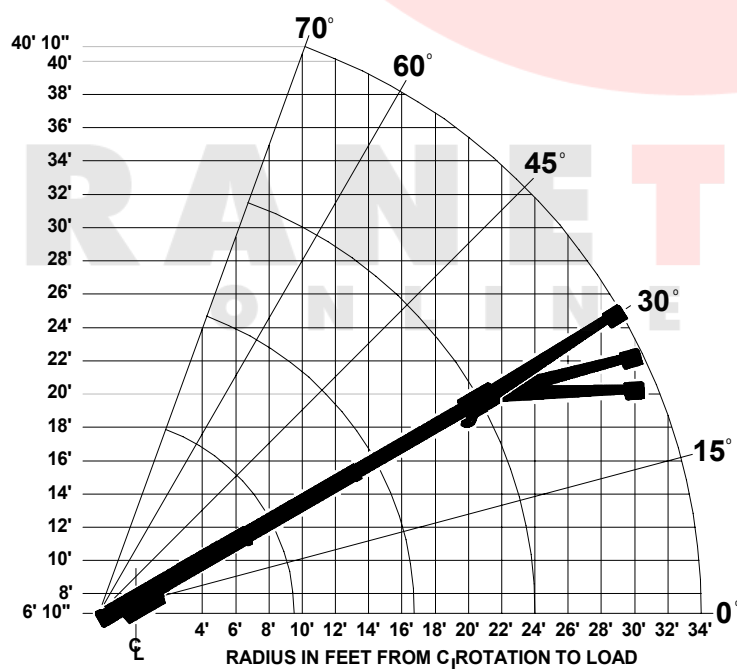
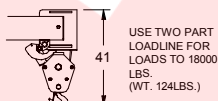
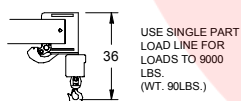
IC-80-2F 9'-6" - 24'-0" BOOM

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	
MAIN BOOM	5	9500	17000	11600	18000	
	6	7800	14500	10200	14500	
	8	5500	10250	8250	10250	
	10	3900	7700	6200	7700	
	12	2900	6550	4550	6550	
	14	2300	5550	3550	5550	
	16	1850	4550	2850	4550	
	18	1550	3950	2400	4050	
	20	1300	3250	2050	3650	
	22	1100	2875	1750	3300	
10' BOOM EXT.	24	925	2475	1550	3100	
	26	850	2250	1350	2750	
	28	700	2000	1175	2500	
	30	600	1775	1025	2300	
	32	500	1625	900	2100	
	34	425	1400	800	1950	
	BOOM EXTENSION	10-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET				
		MAIN BOOM ANGLE				
	ANGLE	0°	30°	45°	60°	70°
	* 0 °	2250	2600	3200	5000	7000
115°	—	2400	2700	3500	4200	
130°	—	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-80-3F

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

CAPACITIES APPLY TO OPERATION ON FIRM LEVEL SURFACE

MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS

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

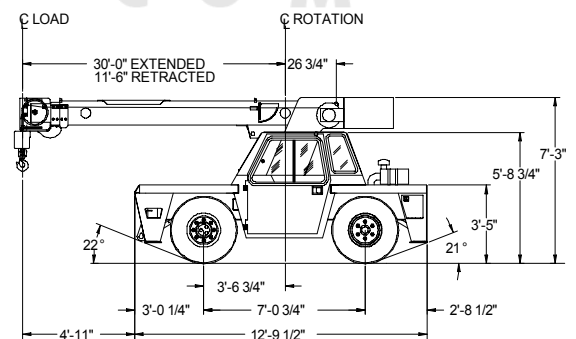
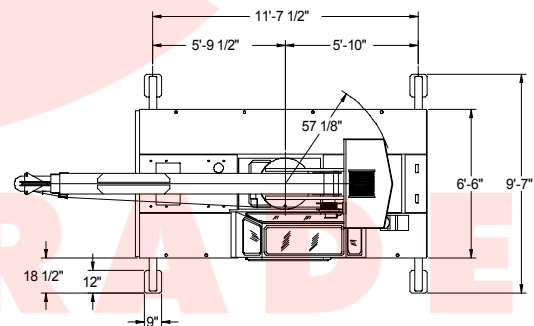
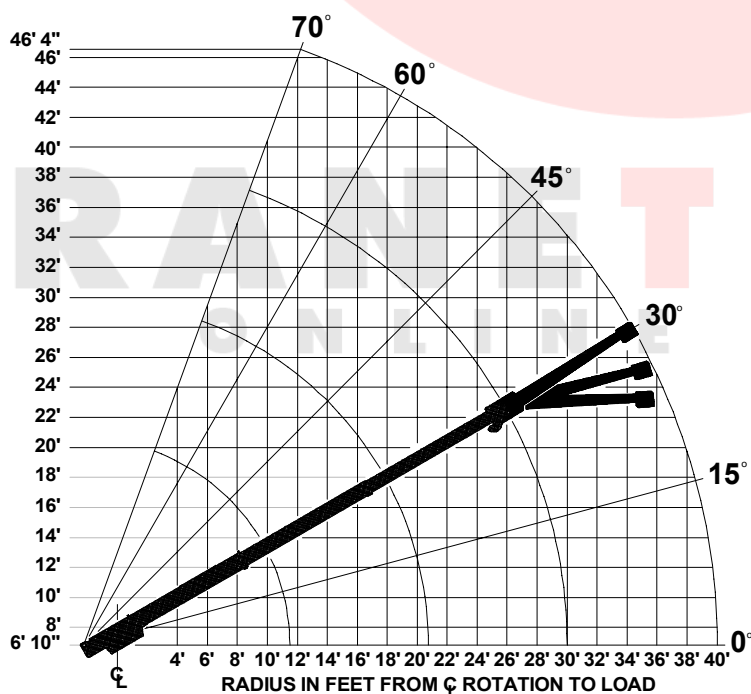
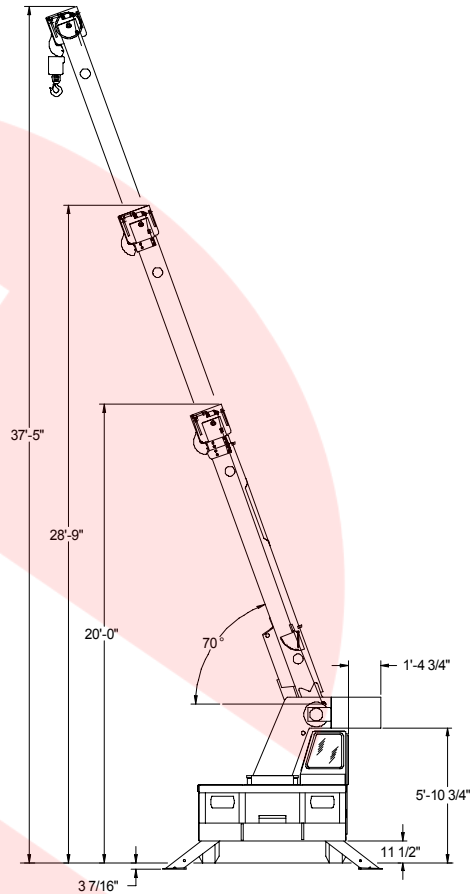
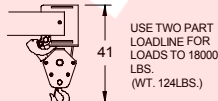
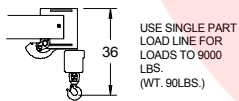
MAIN BOOM ANGLE

ANGLE	0°	30°	45°	60°	70°
* ↑ 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.



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 pres-
sure 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 com-
partment side opening.
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 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 com-
fort.
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,
require an option or special
equipment on your IC-80-F that is
not listed on our sales literature,
please contact your dealer sales-
person or the factory to receive a
special quoted price.**