

TECH
SPEC

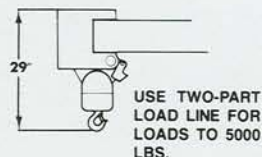
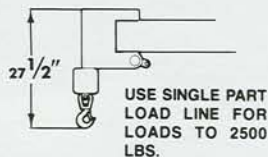
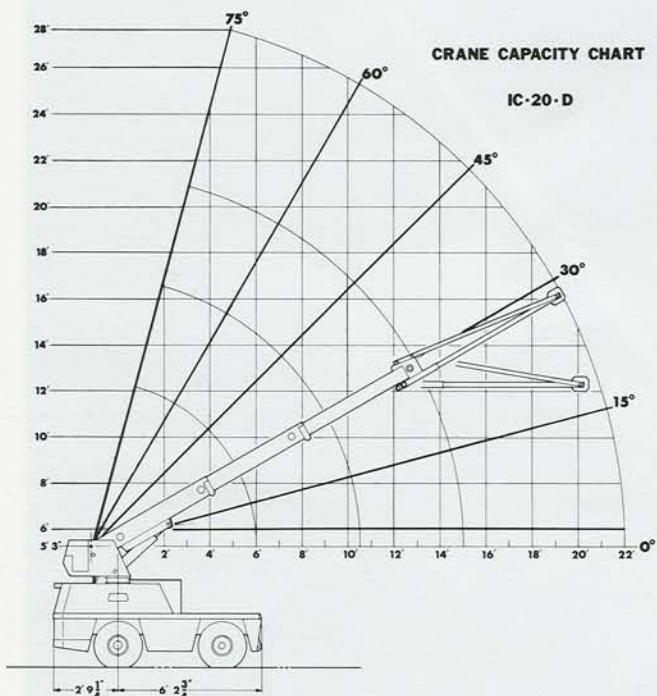
IC-20



BMC BRODERSON
Manufacturing Corp.

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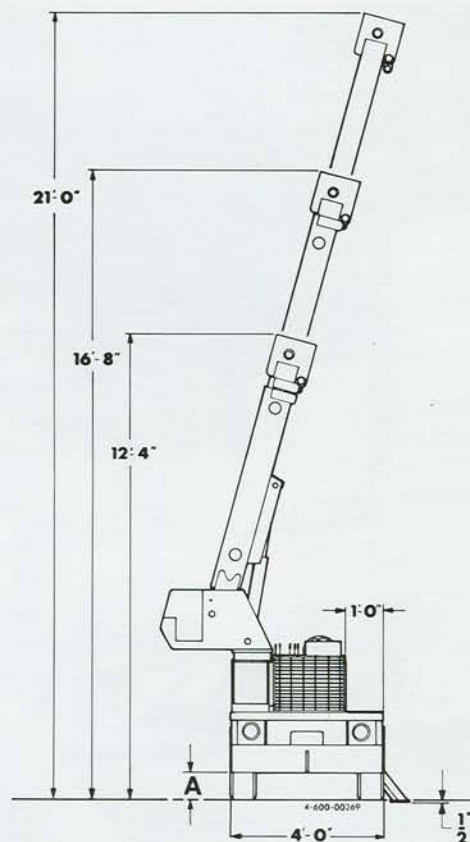
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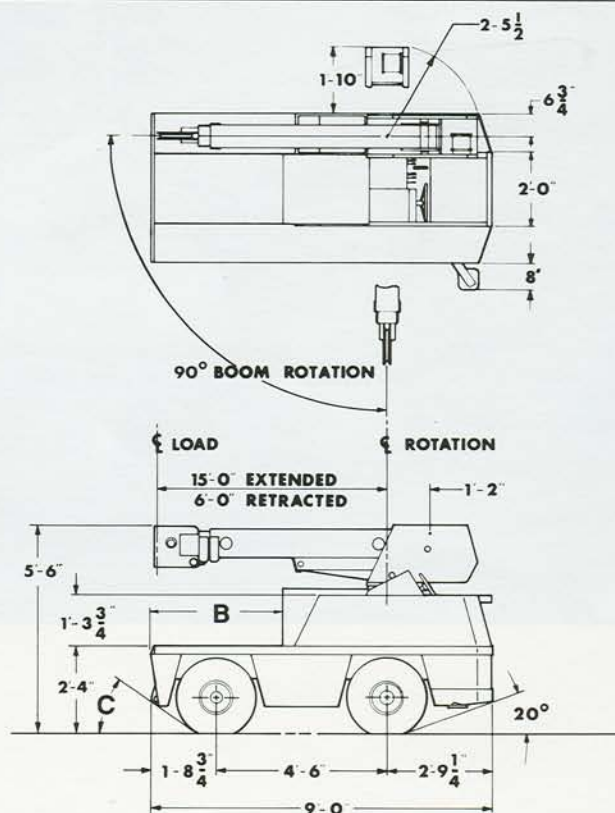
LOAD RADIUS FEET	3-SECTION BOOM			7FT. JIB INSTALLED	
	CENTERED OVER FRONT	FOR 90° SWING		90° SWING (IN LINE OR OFFSET)	
		ON RUBBER	ON OUTRIGGER	ON RUBBER	ON OUTRIGGER
4	5000	5000	5000	1300	1300
5	4000	4000	4000	1100	1100
6	3000	2625	3000	750	750
8	2500	1550	2425	650	650
10	1950	1550	1500	550	550
12	1675	1050	1075	500	500
15	1200	750	750	500	500
17		500		425	500
19				325	500
22				225	350

Capacities on outrigger are 85% of tipping loads. Capacities on rubber are 75% of tipping loads.

Capacities below BOLD line are limited by tipping. Other capacities are limited by structural or hydraulic capability.



	A	B	C
IC-20-D	9"	3'5 1/2"	35°
IC-20-DE	5"	3'10"	27°



GENERAL:

	IC-20-D	IC-20-DE Electric
Weight	5,850 lbs.	6,300 lbs.
Travel Speed	Up to 5 MPH	Up to 3 MPH
Drawbar Pull	2,800 lbs.	3,000 lbs.

POWER:

IC-20-D Engines	Standard	Optional
Make	Ford	Perkins
Model	VSG4131	104.19-IDI
Type	Gas	Diesel
No. Cylinders	4	4
Displacement	79	122
HP @ Governed Speed	34 HP	39 HP

Fuel Tank Capacity—13.5 Gallons

IC-20-DE (Electric):

Motors

Drive powered by 48 VDC electric motor with SCR control. Hydraulic pump powered by 48 VDC electric motor.

ELECTRICAL SYSTEM:

IC-20-D 12 Volt System

Lighting group—1 pair headlights

Instrument Group—Fuel, ammeter, oil pressure, water temperature, hydrostatic loop oil temperature gauges and hourmeter

Back-Up Alarm—Provides pulsating sound when transmission is in reverse

IC-20-DE (Electric):

48 volt—Drives

24 volt—Controls

Batteries—Two 24 volt, 170 amp-hour, accessible under hinged deck covers. On-board 40 volt charger

Instrument Group—Ammeter, voltmeter, battery meter, hourmeter, hydraulic pressure gauge.

Back-Up Alarm—Provides pulsating sound when transmission is in reverse

HYDROSTATIC PUMP - IC-20-D Only:

Piston type, 2.8 CID/Rev direct driveline driven from engine crankshaft.

AXLES:

Front Drive Axle:

IC-20-D

Contains planetary geared torque hubs and high torque hydraulic drive motors. Axle oscillates a total of 1½".

IC-20-DE Electric:

Single staged planetary gear box is direct-mounted on drive motor. Axle oscillates a total of 1½".

Rear Steering Axle:

Non-oscillating

STEERING:

Full hydraulic orbitrol unit with one double-acting 2½" cylinder attached to rear axle.

TIRES:

Front—7.50 x 10 pneumatic, 12-ply rating

Rear—7.50 x 10 pneumatic, 16-ply rating

BRAKES:

Foot actuated disc brake built into each torque hub to hold crane chassis when not being driven.

OUTRIGGER:

One hydraulic outrigger with box beam construction. Hydraulic cylinder is equipped with direct-connected holding valve.

CARGO DECK:

20 sq. ft. deck area, 5,000 pounds capacity.

HYDRAULIC SYSTEM:

IC-20-D

Tandem pump mounted to rear of hydrostatic piston pump. Delivers 5 & 15 GPM at rated engine RPM.

IC-20-DE Electric

Gear pump driven by separate 48 volt motor. Delivers 6 GPM at 500 PSI.

Hydraulic oil tank capacity - 9.5 gallons

CRANE:

Boom Movement:

Rotation	90°
Elevation	0° to 75°
Extension	6' to 15' (9 ft.)

Boom Speed:

Rotation	90° in 13 seconds	IC-20-DE (Electric)
Elevation	11 seconds	90° in 11 seconds
Extension	28 seconds	9 seconds
		22 seconds

Boom Assembly:

Three section boom assembly equipped with bearing pads, double-acting hydraulic cylinders equipped with direct-connected holding valves and boom angle indicator on left side of boom.

Boom Swing:

Two double acting hydraulic cylinders connected to turntable torque tube provides 90° rotation. Heavy-duty ball bearing rotation bearing.

Boom Winch:

Turret-mounted
Hydraulic powered
80 ft. of 5/16" wire rope
Downhaul weight and swivel hook provided for single-part line loads to 4,000 lbs.

IC-20-D

Bare drum line pull of 3,100 lbs.

Winch line speed of 46 ft. per minute

IC-20-DE Electric

Bare drum line pull of 3,500 lbs.

Winch line speed of 26 ft. per minute

Anti-Two Block Device:

Prevents damage to hoist rope and/or machine components.

Dumps hydraulics for Telescope Out, Boom Down and Hoist Up.

IC-20

Listed below are brief descriptions of each option available for the IC-20-D and IC-20-DE Industrial Cranes. Consult the IC-20-D Engineering Spec for additional information on each option.

OPTIONS:

MODELS:

1. IC-20-1D Industrial Crane with Gas Engine
2. IC-20-1DE Industrial Crane with "Electric Motors"

ENGINE:

3. LP Gas System (IC-20-D Only)
Contains all necessary components for LP Gas
4. Dual Fuel System (IC-20-D Only)
Contains all necessary components to burn LPG or gasoline
5. Perkins Diesel Engine (IC-20-D Only)
Perkins Model 104.19-IDI
6. Spark Arrester Muffler (IC-20-D Only)
Installed in addition to standard muffler
7. Engine Shutdown Gauges (IC-20-D Only)
Shuts engine off when high water temperature or low engine oil pressure occurs

TIRES:

8. Solid Rubber Tires
For applications where hazardous ground conditions exist.

CHASSIS:

9. Deck Mats
Protects delicate loads from scratching and reduces sliding of heavy loads during travel.
10. Auxiliary Winch (IC-20-D Only)
Mounted behind front bumper, hydraulically driven with control in operators console (3,000 lbs. @ 20 FPM)
11. Pintle Hook
Holland "T-60-A" pintle hook mounted on rear of frame. 5-ton capacity
12. Lifting Sling & Bracket Installation
Three-leg hitch consisting of heavy-duty pear link & three wire ropes with swaged-on clevis ends for attaching to lift points on crane chassis and turntable. Lift points included.
13. Lifting Sling Brackets
Includes two lift rings in front deck & lug on turntable for attaching lifting sling cables. Cables not included.
14. Lifting Sling
Three leg lift sling only.

OPERATOR COMPARTMENT:

15. Operator Guard
Tubular steel weldment with heavy expanded steel mesh top section. Overhead height with guard installed 90".
16. Floor Mat
Vinyl mat with foam backing

ELECTRICAL:

17. Tail Light (IC-20-D Only)
Tail light mounted in protective bracket welded to left rear panel on chassis
18. Lighted Instrument Gauges (IC-20-D Only)
Instrument gauges equipped with lights for night operations.
19. Strobe Light (IC-20-D Only)
One yellow strobe light mounted on top of operators guard for high visibility.
20. Boom Work Lights (IC-20-D Only)
One work light mounted to boom to light boom tip and one work light mounted to turret

SWING OPTION:

21. Boom Swing Lock
Prevents boom from being swung in normal 90° arc.

BOOM ATTACHMENTS:

22. 7 Foot Pin-On Jib
Consists of jib with pair of tension bars, tip sheave, cable keeper, pins, jib attaching pins. Tension bars provide two positions; In-line & 30° offset.
23. 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.
24. Load Indicator
Three sheave load sensor on top of boom. Readout on top of instrument panel.

Should you, as an end user, require an option or special equipment on your IC-20-D or IC-20-DE 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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