



TECH
SPEC

IC-80



AT A GLANCE:

- Rated Capacity — 17,000 pounds
- Vertical Reach — 28'0"
- Horizontal Reach — 20'2"
- Continuous Rotation
- 10'2" Turning Radius with
Optional Four Wheel Steer
- Carry Deck
- Hydraulic Outriggers

bmc BRODERSON
Manufacturing Corp.

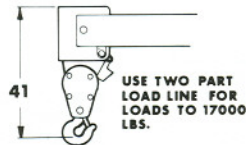
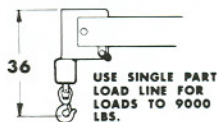
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IC-80

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

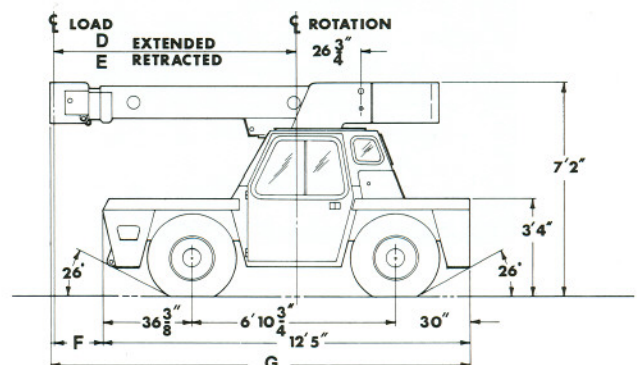
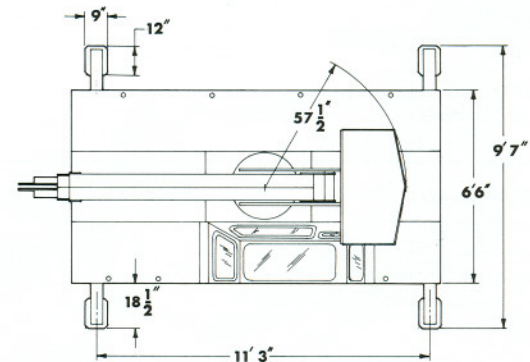
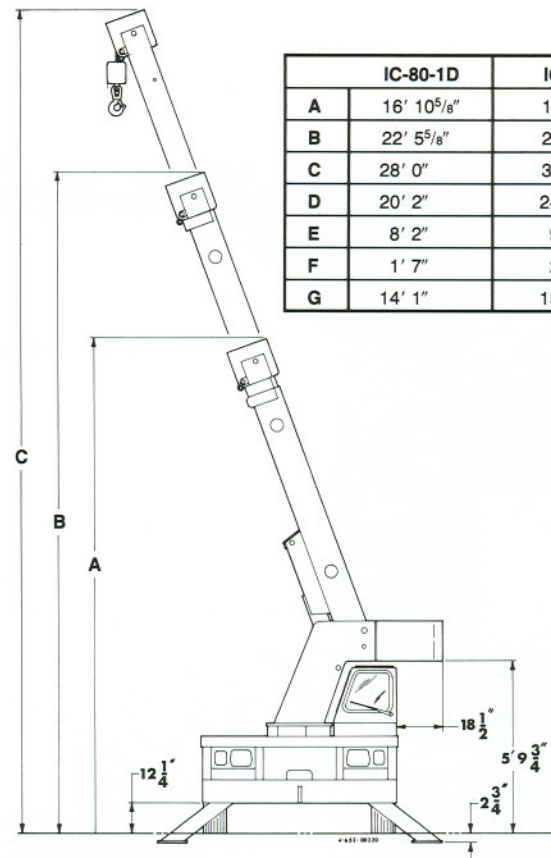
LOAD RADIUS FEET	3-SECTION BOOM		10' BOOM EXTENSION INSTALLED	
	ON O/R*	ON RUBBER	ON O/R*	ON RUBBER
5	17000	9500	7000	7000
6	14500	8500	6000	6000
8	10250	6000	5000	5000
10	7700	4150	4000	4000
12	6550	3100	3450	3275
14	5550	2425	3050	2650
16	4450	1975	2700	2175
18	3950	1625	2250	1850
20	3550	1400	2250	1550
22			2250	1325
24			2250	1200
26			2250	975
28			2150	825
30			1825	675



IC-80-2D Industrial Crane with 9'6"-24'0" Boom

LOAD RADIUS FEET	3-SECTION BOOM		10' BOOM EXTENSION INSTALLED	
	ON O/R*	ON RUBBER	ON O/R*	ON RUBBER
5	17000	9500	7000	7000
6	14500	8500	6000	6000
8	10250	6000	5000	5000
10	7700	4150	4000	4000
12	6550	3025	3450	3275
14	5550	2350	3050	2600
16	4450	1850	2700	2125
18	3950	1550	2250	1800
20	3250	1300	2250	1525
22	2875	1100	2250	1275
24	2475	925	2250	1050
26			2250	850
28			2000	700
30			1775	600
32			1625	525
34			1400	450

	IC-80-1D	IC-80-2D
A	16' 10 ⁵ / ₈ "	18' 1 ⁵ / ₈ "
B	22' 5 ⁵ / ₈ "	24' 11 ³ / ₈ "
C	28' 0"	31' 7 ¹ / ₄ "
D	20' 2"	24' 0"
E	8' 2"	9' 6"
F	1' 7"	2' 11"
G	14' 1"	15' 5"



**General:**

	Standard Drive Axle	Optional Drive Steer Axle
Weight: IC-80-1D	14,230 lbs.	14,530 lbs.
IC-80-2D	14,530 lbs.	14,830 lbs.
Travel Speeds (Calculated):		
Gear: First	5.4	3.0
Second	11.0	6.5
Third	20.0	12.0
Fourth	N/A	20.0
Gradeability:	43%	71%
Drawbar Pull:		
Gear	Pounds	Pounds
First	7,050*	11,900*
Second	3,450	5,820*
Third	1,880	3,170
Fourth	N/A	1,880
Turning Radius:		
(C/L of Outside Steering Wheel):	14'8"	10'2"
Aisle Width for 90° Turn:	11'9"	9'9"

* Wheels will spin before these values are reached.

Engine:

	Standard	Optional	Optional
Make	Continental	Perkins	Cummins
Model	TM27	D4.203	4B3.9
No. of Cyl.	4	4	4
Displacement	165 C.I.D.	203 C.I.D.	239 C.I.D.
HP at Governed Speed	64	63	76

Electrical:**12 Volt System****Lighting Package:**

One Pair Headlights with Hi and Low Beams, Back-up Lights, Integral Tail, Brake and Turn Signals and Front turn Signals

Instrument Package:

Fuel, Ammeter, Oil Pressure, Water Temperature, Converter Oil Temperature Gauges and Hourmeter

Transmission:**Make:** Borg Warner**Model:** 72T/T18

Type: Reversing Gearbox and Manual Shift Three Speed Gearbox.*
Equipped with Torque Converter and Transmission Oil Cooler.

Gear Ratio:	Forward	Reverse
First	6.324:1	6.956:1
Second	3.092:1	3.401:1
Third	1.686:1	1.855:1
Fourth*	1:1	1:1

Torque Converter Has Stall Ratio of 2.15:1

* 4-speed gearbox only available with 4-wheel steer option.

Axes:

	Standard	Optional
Drive Axle:		
Make	Rockwell	Hurth
Model	F-146	272A
Gear Ratio	7.2:1	11.98:1
Location	Front	Front
Steering Axle (Non-Driving):		
Make	Rockwell	
Model	FF-931	
Location	Rear	

Brakes:

Service - 4-Wheel Drum Type Brakes

Parking - Band Type Mounted on Transmission

Tires:

Standard - 9:00x15, 12-Ply Rating, Highway Tread

Optional - 10:00x15, 12-Ply Rating, Highway Tread

Optional - 10:00x15, 14-Ply Rating, Mining & Industrial Tread

Optional - Grizzly Supersoft XS250x15 Solid Rubber

Optional - Foam Filling for the Above Pneumatic Tires

Fuel Tank:

20 Gallon Capacity

Outriggers:

Four Hydraulic Outriggers of Box Beam Construction with Direct-Connected Holding Valves. Independent Controls for Left and Right-Hand Outriggers. Outrigger Pad Dimension 9"x12".

Cargo Deck:

62 Square Feet

12,000 pounds Capacity

Steps Located on Front Corners

Hydraulic System:

Tandem Pump, Direct-Driven by Engine Crankshaft, Rated at 16 and 32.5 GPM at Rated RPM. Hydraulic Oil Tank Capacity of 16 Gallons.

Steering:**Standard:**

Full Hydraulic Orbitrol Unit with Two Double-Acting Hydraulic Cylinders Attached to Rear Axle.

Optional:

Full Hydraulic Orbitrol Unit with Two Double-Acting Hydraulic Cylinders Attached to Both Front and Rear Axles.

Steering Modes Include: Round Steer

Crane:

Boom Movement:	IC-80-1D	IC-80-2D
Rotation	Continuous	Continuous
Elevation	0° to 70°	0° to 70°
Extension	8'2" to 20'2" (12')	9'6" to 24'
Boom Speeds:		
Rotation	1.7 RPM	1.7 RPM
Elevation	10.0 Seconds	10.0 Seconds
Extension	28.0 Seconds	34.0 Seconds

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 Winch:

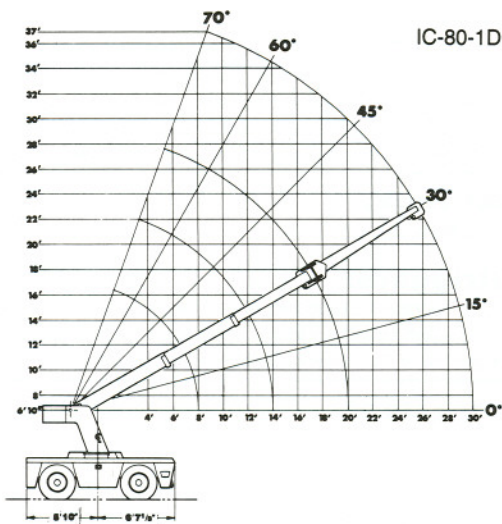
Turret-Mounted
Hydraulic Powered
Bare Drum Line Pull of 10,000 Pounds
Winch Line Speed of 110 FPM
IC-80-1D—90 feet of 9/16" Wire Rope
IC-80-2D—105 feet of 9/16" Wire Rope
Downhaul Weight and Swivel Hook

Anti-Two-Block Device:

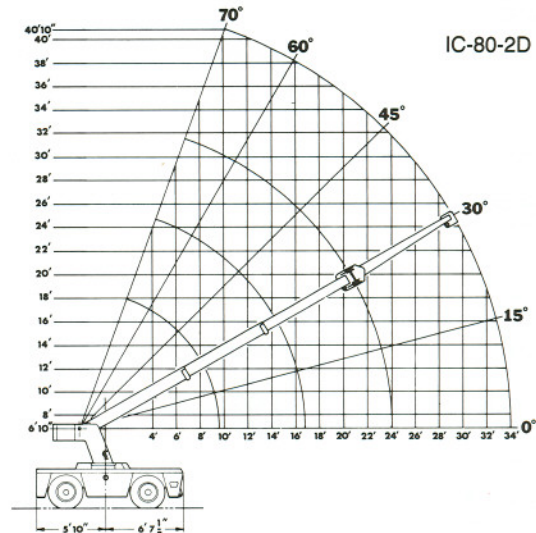
An Audible and Visual Warning System to Alert the Operator if the Load Hook or Hook Block Pulls Too Close to Boom Tip.



IC-80



IC-80-1D



IC-80-2D

IC-80-1D Industrial Crane with
8'2" - 20'2" Boom (1)

IC-80-2D Industrial Crane with
9'6" - 24'0" Boom (2)

Options:

Engine:

LP Gas Fuel System Kit (3).

Contains All Necessary Components for LP Gas Operation.

Dual Fuel System Kit (4).

Contains All Necessary Components to Burn LPG or Gasoline.

Diesel Engine.

Perkins Model D4.203 Diesel Engine (5).
Cummins Model 4B3.9 (6).

Spark-Arrester Muffler (7).

Installed in Addition to Standard Muffler.

Engine Shutdown Gauges (8).

Shuts Engine Off When High Water Temperature or Low Engine Oil Pressure Occurs.

Front Axle:

No-Spin Differential

(Standard Axle) (9).

Differential Equipped with "No-Spin" Feature.

Four-Wheel Steering (10).

Hurth Drive/Steer Axle for Four-Wheel Steering.
Differential Equipped with "No-Spin" Feature.

Tires:

10:00x15, 12-Ply Rating (11).

Solid Rubber Tires (12).

10:00x15, 14-Ply Rating, Mining and Industrial Tires (13).

Foam Filled Tires (14,15).

Foam Filling of Either 9:00 or 10:00x15 Tires.

Spare Tires and Wheels (16,17,18).

Spare Tires and Wheels are Available for All Pneumatic Tires on the IC-80.

Chassis Options:

Accessory Storage Box (19).

Storage Box is 14" Deep x 10 1/2" Long x 27" Wide.

Located in Front Carry Deck.

Auxiliary Winch (20).

Mounted Behind Front Bumper, Hydraulically Driven with Control in Operators Console.

Pintle Hook (21).

Pintle Hook Mounted on Rear Frame. 5 Ton Capacity.

Headlight and Taillight Grilles (22).

Welded Steel Protective Grilles for Headlights and Taillights.

Lifting Rings (23).

Lifting Ring at Each Corner of Carry Deck So Sling Can Be Attached for Lifting Crane.

Operators

Compartment:

Operator Guard (24).

Tubular Steel Weldment with Heavy Expanded Steel Mesh Top Section.

All-Weather Cab (25).

Rigid-Mounted Canopy Section and Removable Hinged Door. Includes Heater, Electric Windshield Wiper, One Sliding Glass Window in the Door and One Fold-Out Window in Rear to Provide Flow-Through Ventilation. Defroster Fan Included.

Windshield Washer (26).

Includes Reservoir Pump and Nozzle.

Floormat (27).

Vinyl Mat with Foam Backing.

Operator Suspension Seat (28).

Provides Additional Operator Comfort.

Electrical:

Back-Up Alarm (29).

Provides Pulsating Sound when Transmission is in Reverse.

Strobe Lights (30).

Yellow Strobe Light Mounted on Each Side of Turret Weight Box.

Lighted Instrument Gauges (31).

Instrument Gauges Equipped with Lights for Night Operations.

Amber Rotating Beacons (32).

Amber Rotating Beacon Mounted on Each Side of Turret Weight Box.

Boom Work Lights (33).

One Work Light Mounted to Boom to Light Boom Tip and One Work Light Mounted to Turret to Light Ground Under Boom Tip.

Boom Attachments:

Anti-Two-Blocking Device (34).

Prevents Damage to Hoist Rope and/or Crane Components from Pulling Load Hook Against Boom Tip. This System uses a Weight Suspended from a Switch.

Anti-Two-Blocking Device (35).

Same as Above Except a Trip Arm is used Instead of a Weight.

10 Foot Boom Extension (36).

Boom Stowable. Fiberglass Bucket(s) or Work Platform can be Attached to Boom Extension Tip.

Fiberglass Bucket(s) (37,38).

24" x 24" x 42" Deep Personnel Bucket with Maximum Capacity of 300 Pounds.

Work Platform (39).

69" x 32 7/8" x 42" Deep. Constructed of Steel Tubing with Expanded-Metal Floor. Maximum Capacity of 600 Pounds.

Bucket/Platform Brake (40).

Friction Brake for Holding Bucket(s) or Work Platform in a Fixed Position.

Sheave Block (41).

Required for Maximum-Capacity Lifts.

Searcher Hook (42).

3,000 Pound Capacity, Mounts to Boom Tip.

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