



## 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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## General:

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

\* Wheels will spin before these values are reached.

## Engine:

|                                 | Standard    | Optional   | Optional   |
|---------------------------------|-------------|------------|------------|
| <b>Make</b>                     | Continental | Perkins    | Cummins    |
| <b>Model</b>                    | TM27        | D4.203     | 4B3.9      |
| <b>No. of Cyl.</b>              | 4           | 4          | 4          |
| <b>Displacement</b>             | 165 C.I.D.  | 203 C.I.D. | 239 C.I.D. |
| <b>HP at Governed<br/>Speed</b> | 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.

| <b>Gear Ratio:</b> | <b>Forward</b> | <b>Reverse</b> |
|--------------------|----------------|----------------|
| 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.

## Axles:

|                                     | Standard | Optional |
|-------------------------------------|----------|----------|
| <b>Drive Axle:</b>                  |          |          |
| <b>Make</b>                         | Rockwell | Hurth    |
| <b>Model</b>                        | F-146    | 272A     |
| <b>Gear Ratio</b>                   | 7.2:1    | 11.98:1  |
| <b>Location</b>                     | Front    | Front    |
| <b>Steering Axle (Non-Driving):</b> |          |          |
| <b>Make</b>                         | Rockwell |          |
| <b>Model</b>                        | FF-931   |          |
| <b>Location</b>                     | 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. Outtrigger 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:

| <b>Boom Movement:</b> | 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'  |
| <b>Boom Speeds:</b>   |                     |              |
| 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:

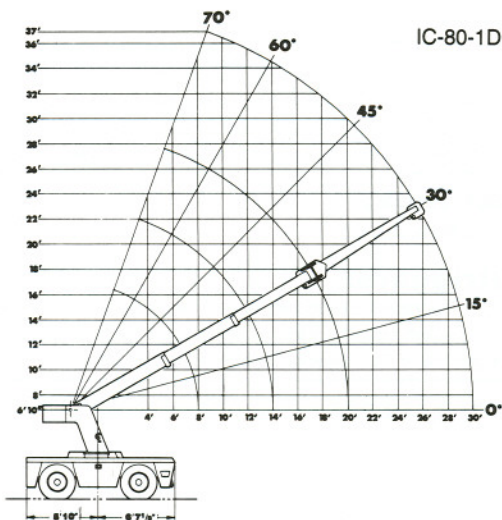
Turret-Mounted  
Hydraulic Powered  
Bare Drum Line Pull of 10,000 Pounds  
Winch Line Speed of 110 FPM  
IC-80-1D—90 feet of 9/16" Wire Rope  
IC-80-2D—105 feet of 9/16" Wire Rope  
Downhaul Weight and Swivel Hook

### Anti-Two-Block Device:

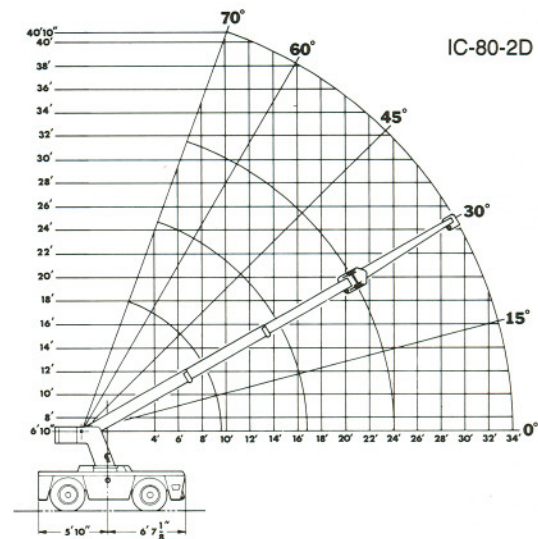
An Audible and Visual Warning System to Alert the Operator if the Load Hook or Hook Block Pulls Too Close to Boom Tip.



# 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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