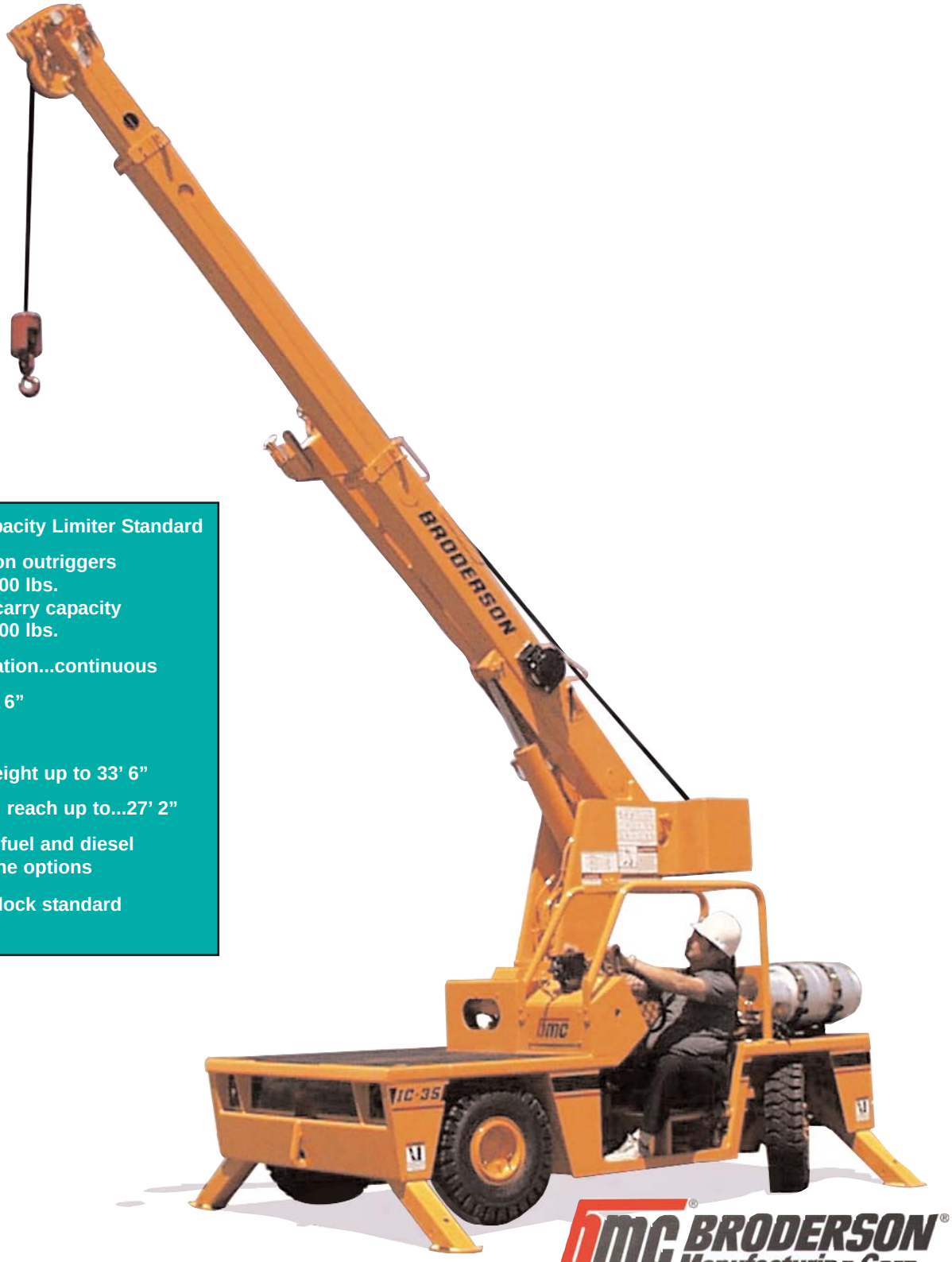
Tech Spec

IC-35-D



* Rated Capacity Limiter Standard
* Capacity on outriggers ...8,000 lbs.
* Pick and carry capacity ...6,700 lbs.
* Boom rotation...continuous
* Height...6' 6"
* Width...5'
* Sheave height up to 33' 6"
* Horizontal reach up to...27' 2"
* Gas, dual fuel and diesel engine options
* Anti-Two Block standard

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IC-35-D

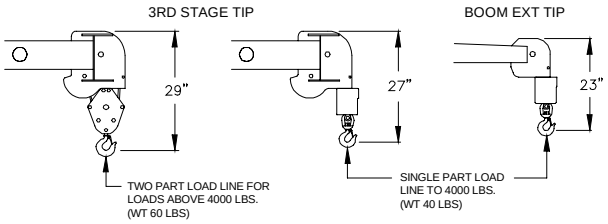
	LOAD RADIUS FEET	MAIN BOOM OR EXTENSION CAPACITIES IN POUNDS			
		360° ROTATION		OVER FRONT	
		ON RUBBER	ON OUTRIGGERS	ON RUBBER	ON OUTRIGGERS
MAIN BOOM	4	5000	8000	6700	8000
	5	4000	6800	5800	6800
	6	2850	5850	5100	5850
	8	1800	4150	3500	4150
	10	1250	3200	2350	3400
	12	900	2350	1750	2850
	14	700	1850	1350	2450
	16	600	1500	1100	2150
	18	500	1250	950	1950
	19	450	1150	900	1850
8' BOOM EXTENSION	20	400	1100	850	1600
	22	300	900	700	1450
	24	250	800	600	1300
	26	200	700	500	1150
	27	150	650	450	1100

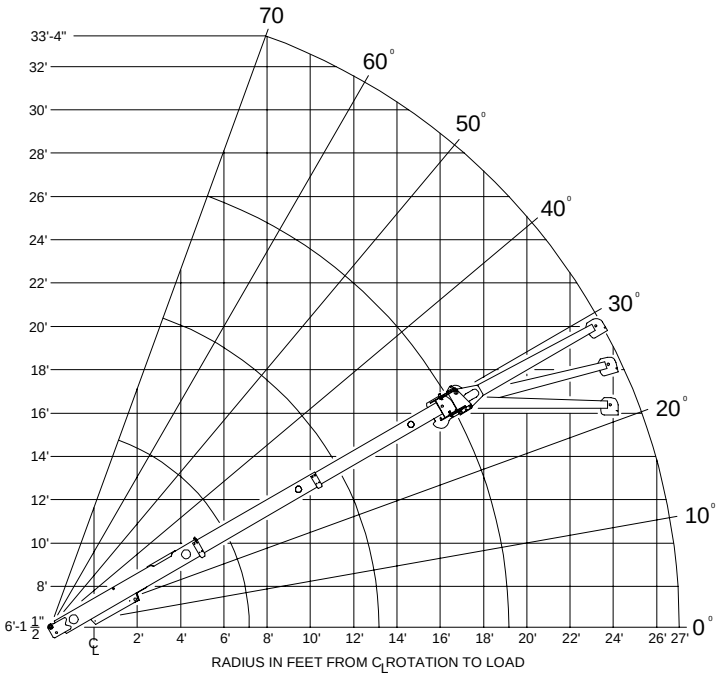
BOOM EXTENSION ANGLE	8-FOOT BOOM EXTENSION - STRAIGHT OR OFFSET							
	MAIN BOOM ANGLE							
	0°	10°	20°	30°	40°	50°	60°	70°
+* 0°	1100	1200	1300	1450	1600	1850	2300	3500
* 15°	—	—	1100	1250	1350	1500	1700	2050
* 30°	—	—	—	1100	1200	1300	1450	1600

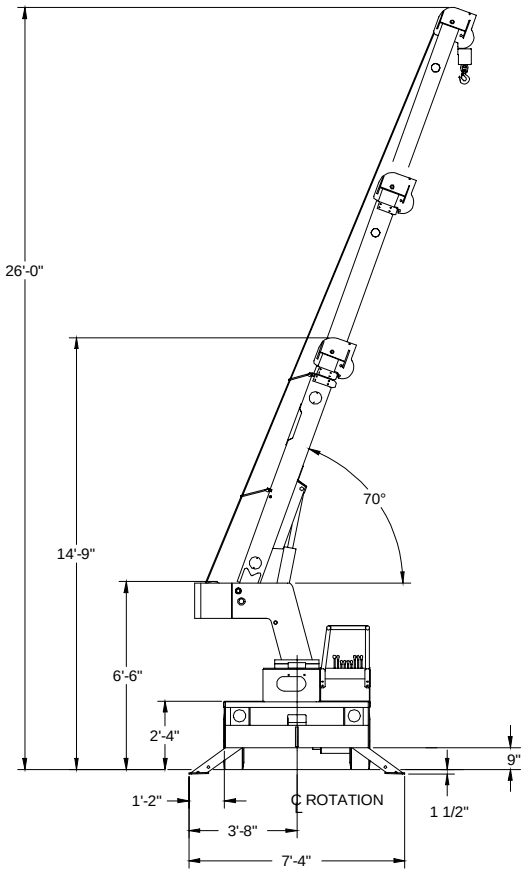
+ USE 0° FOR STRAIGHT BOOM EXTENSION.
* USE 0°, 15° OR 30° FOR OFFSET BOOM EXTENSION.
BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY.

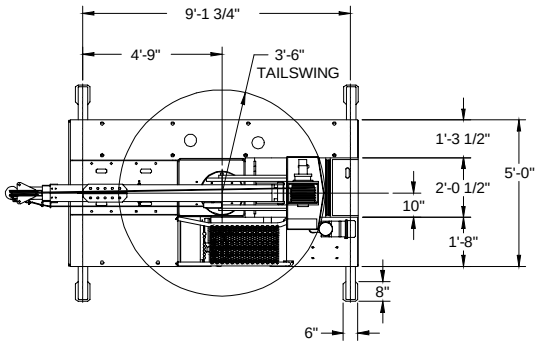
CAPACITIES ON OUTRIGGERS ARE 85% OF TIPPING LOADS. CAPACITIES ON RUBBER ARE 75% OF TIPPING LOADS. CAPACITIES BELOW BOLD LINE ARE LIMITED BY TIPPING. OTHER CAPACITIES ARE LIMITED BY STRUCTURAL OR HYDRAULIC CAPABILITIES.

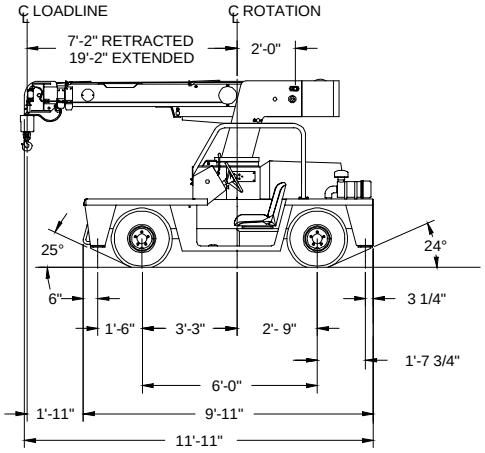
CAUTION: BOOM EXTENSION LOADS MUST NOT EXCEED MAIN BOOM CAPACITY. BOOM EXTENSION DEDUCT: 100 LBS. WHEN STOWED ON BASE BOOM, 300 LBS. IN WORK POSITION WITH LOAD ON MAIN BOOM.











Tech Spec

General:

Weight	7,660 lbs.
Travel Speed	0 to 10 mph
Drawbar Pull	2,400 lbs.
Gradeability	30% (16 degrees)
Boom Movements:	
Rotation	Continuous Rotation
Elevation	0 to 70 degress
Extension	7 ft. 2 in. to 19 ft. 2 in.
Boom Speeds:	
Rotation	1.4 RPM
Elevation	20 seconds
Extension	38 seconds

Engine:	**Standard**	**Optional**
Make	Nissan	Cummins
Model	H20	A2300
Type	Gas	Diesel
Cylinders	4	4
Displacement	121 CID	140 CID
HP @ Governed speed	51 HP	47 HP
Fuel Tank Capacity	13.5 Gallons	

Hydrostatic Pump:
Piston type, direct driven from engine crankshaft. Maximum flow 34 GPM, maximum pressure 4,000 PSI.

Axles:

Front Drive Axle:
Channel shaped structure houses torque hubs, brakes & hydraulic drive motors. Axle oscillates a total of 1-1/2".

Rear Steering Axle:
Fixed rigid to frame.

Steering:
Full hydraulic steering unit controls 2-1/2" steering cylinder attached to rear axle.

Brakes:
Primary braking from hydrostatic transmission. Foot-actuated disc brake attached into each torque hub for additional braking in some conditions. Parking brake switch locks brakes to hold crane when not being driven.

Tires:
Front - 7.5 x 10 pneumatic, 16-ply rating.
Rear - 7.5 x 10 pneumatic, 16-ply rating.

Chassis:

Cargo Deck:
29 square feet deck area, 6,000 pounds capacity when centered over front axle or to the rear of front axle.

Outriggers:
Four hydraulic outriggers of box-beam construction. Independent controls for each. Hydraulic cylinders are equipped with direct-connected holding valves.

Chassis: (Cont'd)

Lifting Rings:
Consists of four rings, one at each corner of the load deck.

Pulling Eye:
Mounted on front bumper.

Operator's Compartment
Provides one-position access to all chassis and crane functions. Includes adjustable operator's seat, retracting seat belt, fire extinguisher and bubble level.

Electrical System:

12 Volt System

Lighting Group: One pair headlights and taillights.

Instrument Group:
Fuel, ammeter, oil pressure, water temperature, hydrostatic oil temperature gauges & hourmeter. Gauges are lighted.

Outrigger Alarm System
Two-tone alarm is activated when "Outrigger Down" controls are operated.

Back-Up Alarm:
Provides pulsating 97 decible sound when transmission is in reverse.

Hydraulic System:
Tandem pump mounted to rear of hydrostatic piston pump. Delivers 6 GPM at 2,600 PSI for boom circuits & 18 GPM at 2,250 PSI for hoist circuit. System protected by relief valves. Hydraulic oil tank has 14 gallons capacity. Hydraulic oil cooler provided.

Boom:

Boom Assembly:
Three-section boom assembly equipped with bearing pads, double-acting hydraulic cylinders equipped with direct-connected holding valve and boom angle indicators on each side of boom.

Boom Rotation:
Heavy-duty ball bearing rotation gear with external teeth. Rotation is powered by hydraulic motor & worm gear drive.

Boom Hoist:
Turret-mounted, planetary gear hoist, hydraulically powered with bare drum line pull of 4,600 lbs. and a line speed of 86 FPM. Hoist includes 85 ft. of 3/8 in. wire rope, down-haul weight, swivel hook and sheave block for 2-part line.

Anti Two-Block Device:
Prevents damage to hoist rope and/or crane components. Dumps hydraulic flow for Hoist Raise, Telescope Extend and Boom Lower.

Sheave Block
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-35-D

Listed below are brief descriptions of each option available for the IC-35-2D Industrial Crane. Consult the IC-35-2D Engineering Spec for additional information on each option.

IC-35-2D, 4-Ton Industrial Crane with Gas Engine.

Engine Options:

Cummins 2.3L Diesel Engine
Cummins Model A2300, CARB Tier II and EPA Tier II Certified.

Spark Arrester Muffler
Installed in addition to standard muffler.

Engine Shut Down Gauges
Shuts engine off when high water temperature or low engine oil pressure occurs for diesel only.

Tire Option:

Solid Rubber Tires
For applications where hazardous ground conditions exist.

Non-Marking Solid Rubber Tires

Foam Filling of Tires

Spare Tire & Wheel
7.50 x 10, 16-ply (front & rear wheels are different).

Chassis Options:

Auxiliary Winch
Mounted behind front bumper, hydraulically driven with control in operator's console (3,000 lbs. @ 20 FPM).

Pintle Hook - Rear
Holland “T-60-A” pintle hook mounted on rear of frame. 5-ton capacity.

Lifting Sling
Sling to attach to Lifting Rings.

Headlight & Taillight Grilles
Welded steel protective grilles for headlights and taillights.

Operator Compartment Options:

All Weather Cab
Rigid-mounted canopy section and removable hinged door. Cab door adds 4 inches to crane width. Includes heater, windshield wiper, defroster fan, dome light & sliding window in door. Cannot be used with Operator Guard.

Cab Heater
Heater with two-speed fan, for units without All Weather Cab.

Operator Guard
Tubular steel weldment with heavy expanded steel mesh top section.

Operator Guard Cover
Clear vinyl cover to go over Operator Guard, for inclement weather operations.

Floor Mat:
Vinyl mat with foam backing.

Electrical Options:

Strobe Lights
Two yellow strobe lights mounted to turntable.

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.

Wire Rope:
140 ft. of 3/8 in. dia. wire rope.

Boom Attachment Options:

Boom Extension
8 foot, boom stowable.

Boom Extension, Offset
8 foot, boom stowable, the boom extension is offsettable to 3 different positions. 0 degree (inline), 15 degree and 30 degree offset.

Searcher Hook
2,000 pound capacity. Swivel hook with spring latch hangs from support structure projecting outward from boom tip.

Should you, as the end user, require an option or special equipment on your IC-35-2D that is not listed on our sales literature, please contact your dealer sales-person or the factory to receive a special quoted price.

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