

470TM

TELESCOPING
BOOM EXCAVATOR



SPECIFICATION GUIDE

GET MORE DONE IN LESS TIME.

- Highway-speed capability saves time
- Low profile enables operation where space is limited
- Telescoping boom reaches farther and higher
- Programmable joysticks offer precise control
- SAE, ISO, or Badger control patterns for ease of operation

SPECIFICATIONS: Standard Equipment

Engine

Manufacturer	Cummins®
Type	QSB 6.7 Tier 3
Net Power Rating	215hp @ 2500 rpm
Torque	655 ft-lb @ 1500 rpm
Electrical System	24 volt, 70 amp alternator
Fuel System	Diesel 100 gallon capacity

Transmission

Automatic	Allison® 6-speed forward, 1-speed reverse
Transfer Case	Fabco® hi-low range with front axle disconnect

Axle

4x2 Front	Dana® Tubular - 22,000 lb. (9979kg) rated capacity
Rear	Dana® - 23,000 lb. (9525kg) rated capacity

Carrier Cab

The carrier cab includes:

- All-weather, acoustically-lined, isolation mounted steel cab
- Cloth covered, 8-way adjustable seat with mechanical suspension and seat belt
- Tilt and telescoping steering column
- Full automotive gauge display
- Fresh air heater and defroster
- 2-speed electric windshield wiper and washer
- Fire extinguisher
- Sun visor and dome light

Upper Cab

The upper cab includes:

- All-weather isolation mounted steel cab
- Cloth covered, 12-way adjustable seat with mechanical suspension and seat belt
- Two electronic, programmable joysticks mounted in armrests allow for the use of SAE, ISO or Badger control patterns
- Foot pedal for remote travel, joystick hat for remote steering
- Air conditioning, heater and defroster
- Safety glass sliding side window
- Safety glass slide-up front window
- 2-speed electric windshield wiper and washer
- Dome light

Suspension

Front	Leaf spring with auto-lockout cylinders
Rear	Rigid mounted

Boom

- Fixed, two-section telescoping boom with adjustable boom support rollers
- Internal, 180-degree rotating boom tip
- Badger tool-less bucket adaptor

Hydraulic System

Pumps:

- Main pump: Variable displacement piston pump
 - Flow and pressure compensating
 - 0-66 GPM @ 2500 rpm engine speed

Travel: Hydrostatic Remote Propel

- Variable displacement closed-loop, piston pump
- 0-30 GPM @ 2500 rpm engine speed
- 89 hp hydraulic motor

Steering pump; Gear pump

- 12 GPM @ 2500 rpm engine speed

Oil Cooler:

- Heavy duty fin/tube type

Filtration System

- 10 micron absolute, in-tank element
- Relief valves, visual and electronic filter indicators
- 100 mesh with 5 psi bypass suction strainer for each pump

Oil Capacity:

- 42 gal. sealed and pressurized, visual oil level indicator

Swing

- Planetary transmission with automatic internal swing brake
- Spring set/hydraulic release swing brake
- Priority circuit axial piston motor
- Dynamic braking provided by the hydraulic system
- Swing speed 0-9 rpm

Brakes

Front	16.5 x 7 Drum Bendix® S CAM
Rear	16.5 x 7 Drum Bendix® S CAM

Tires

Front Single	385/65R22.5
Rear Dual	11R22.5H

Steering

- TRW® integral hydraulic power steering gear

Other Standard Equipment

- Sealed halogen high/low beam headlights with high-beam indicator
- Turn, tail, backup, stop, and 4-way hazard lights
- West-coast style and convex mirrors
- Electric travel alarm
- Dual rear mounting steps
- Polished aluminum wheels

SPECIFICATIONS: Optional Equipment

Engine

Manufacturer	Cat®
Type	C6.6 Tier 3
Net Power Rating	225HP@2200 RPM

Other Optional Equipment

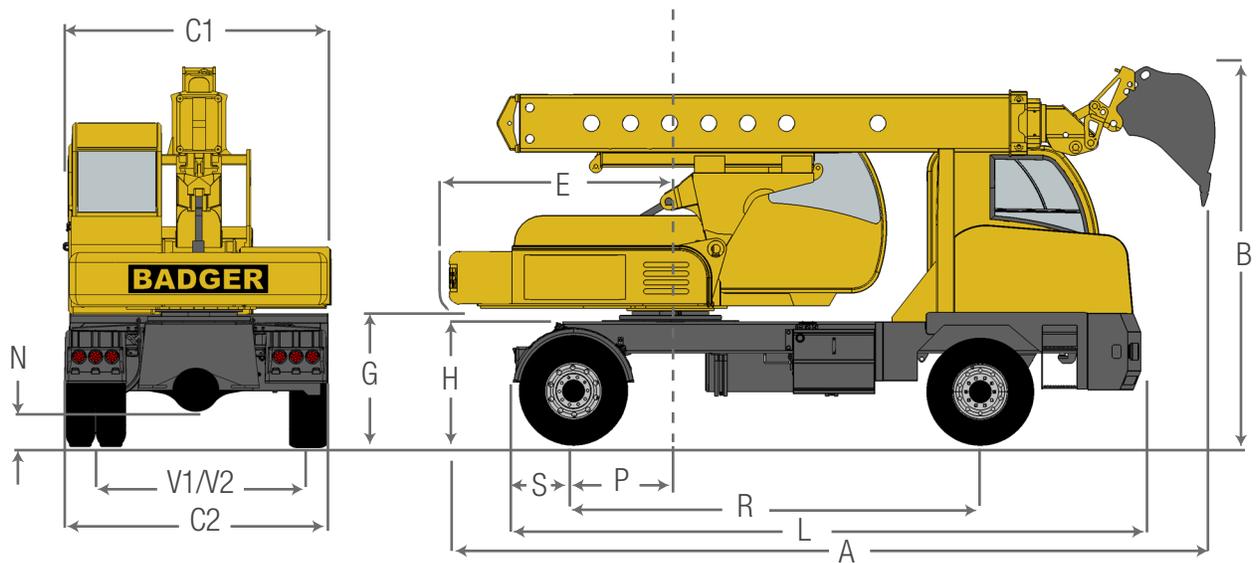
- 4x4 Fabco® front axle
- Manual transmission
- Tier 4i or On Highway Cummins® engine

- Boom tip auxiliary hydraulics
 - Bidirectional
 - High & low flow
- Work light options
 - 2 LED boom, 2 LED cab-mounted lights
 - 6 LED perimeter lights
- ABS anti-lock braking system
- Engine exhaust brake
- Carrier air conditioning
- AM/FM stereo radio

Buckets & Attachments

- Excavating Buckets
 - 24"
 - 30"
 - 36"
 - 42"
- Ditching Buckets
 - 36"
 - 48"
 - 60"

TRANSPORT



Dimensions

A	Overall length, transport position	24'8"	(7.52 m)
B	Overall height	12'10"	(3.91 m)
C1	Width of Upperstructure	8' 6"	(2.59 m)
C2	Width of Carrier	8' 6"	(2.59 m)
E	Swing clearance	7'4"	(2.24 m)
G	Clearance, upper to groundline	4' 8"	(1.42 m)
H	Top of fender to groundline	4'2"	(1.27 m)
L	Length of Undercarriage	19'4"	(5.89 m)
N	Ground Clearance (SAE J1234)	9"	(22.86 cm)
P	Rear axle to axis of rotation	3' 4"	(1.02 m)
R	Wheelbase	160"	(4.06 m)
S	Rear axle to rear of fender	2'7"	(0.79 m)
V1	Tread, rear axle	6'7"	(2.01 m)
V2	Tread, front axle	7'2"	(2.18 m)

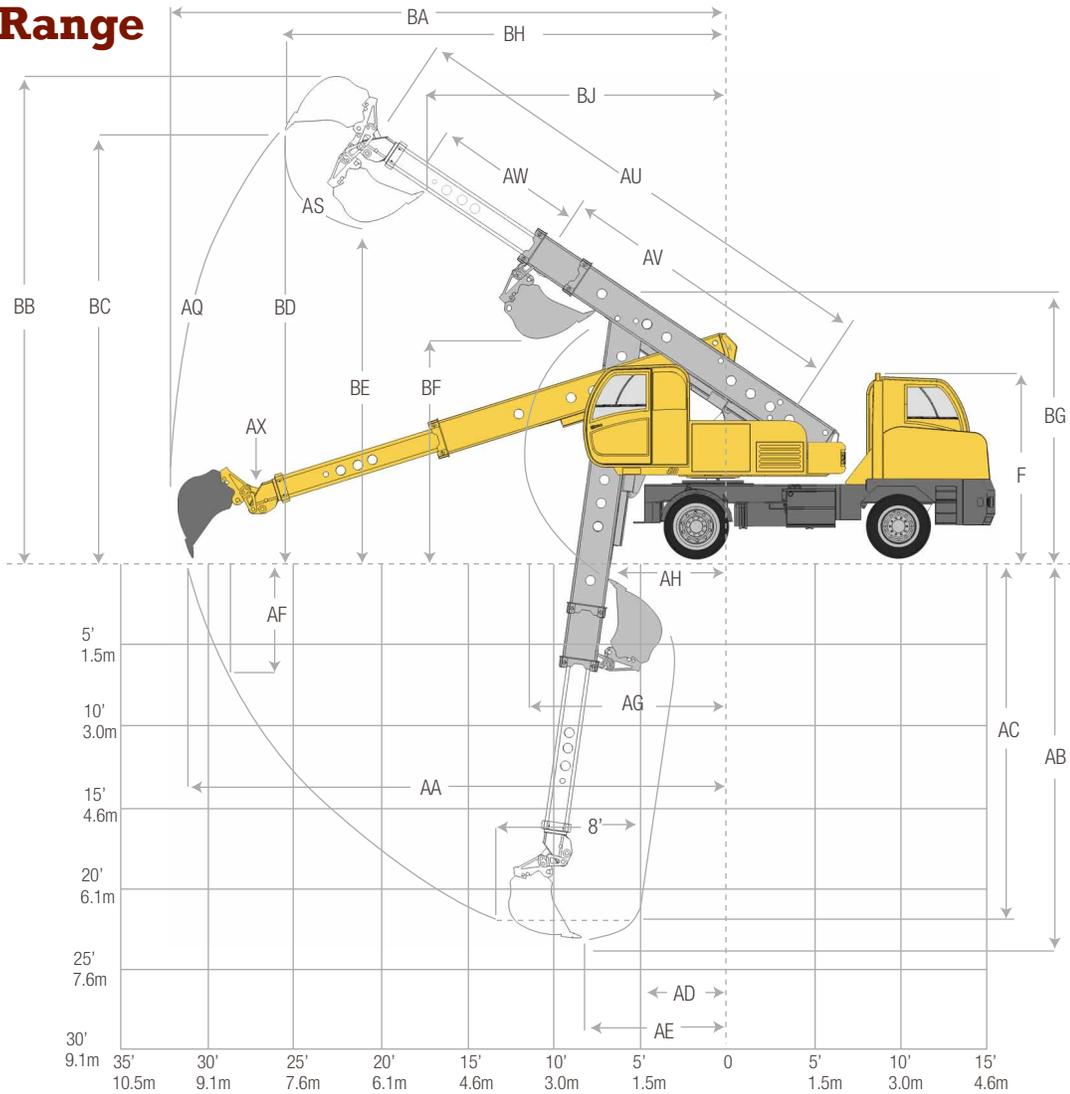
Weights

4x4 Weight	41,500 lbs.	(18,824 kg)
4x4 Front axle weight:	17,308 lbs.	(7,850 kg)
4x2 Weight:	41,000 lbs.	(18,598 kg)
4x2 Front axle weight:	16,808 lbs.	(7,624 kg)



470™ TELESCOPING BOOM EXCAVATOR

Working Range



AA Maximum radius at groundline	(165° pivot) 28' 5" (8.67m)
AB Maximum digging depth	(165° pivot) 20' 6" (6.25m)
AC Maximum depth for 8' (2.50m) level cut	18' 11" (5.77m)
AD Minimum radius of 8' (2.50m) level cut at depth "AC"	4' 7" (1.39m)
AE Radius of maximum digging depth	7' 11" (2.42m)
AF Maximum depth of vert. wall - excavated (165° pivot)	4' 6" (1.36m)
AG Minimum level cut radius with bucket on groundline	11' 1" (3.38m)
AH Minimum radius at groundline	6' 4" (1.94m)
AQ Boom pivot angle (32.50° above) (82° below)	114.50°
AS Bucket pivot angle	165°, 148°
F Top of exhaust to groundline	10' 4" (3.15m)

AU Maximum telescoping boom length (boom pivot to bucket pivot)	22' 10" (6.97m)
AV Minimum telescoping boom length (boom pivot to bucket pivot)	12' 4" (3.77m)
AW Telescoping travel	10' 6" (3.20m)
AX Bucket tilt angle (both sides of equipment)	90°
BA Maximum radius of working equipment (165° pivot)	29' 2" (8.90m)
BB Maximum height of working equipment (165° pivot)	25' 2" (7.68m)
BC Maximum bucket tooth height	23' 6" (7.15m)
BD Minimum clearance of bucket teeth, with bucket pivot at max height	16' 10" (5.14m)
BE Minimum clearance of fully curled bucket at max boom height	12' 5" (3.78m)
BF Minimum clearance of bucket teeth, at min boom height	11' 3" (3.42m)
BG Maximum height of working equipment with bucket below groundline	14' 2" (4.33m)
BH Radius of bucket teeth at maximum height	23' 4" (7.11m)
BJ Minimum radius of bucket teeth at maximum bucket pivot height	15' 5" (4.69m)

Due to continued improvements, all specifications are subject to change without notice.



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