

3,000 – 4,000 lbs • Mast Specifications

8BNCU15 - 16.5" BC

Mast Type	Maximum Fork Height (top of forks)	Overall Height				Free Lift		Tilt Range		Fixed Carriage
		Lowered	Extended		Without Load Backrest ⁽¹⁾	With Standard Load Backrest	FWD deg	BWD deg	Load Capacity @ 24-in. Load Center lb	
			Without Load Backrest ⁽¹⁾	With Standard Load Backrest						
2-Stage ⁽²⁾ (FV)	128	83	152	176	59	35	3	5	3000	
	140	89	164	188	64	40	3	5	3000	
	152	95	176	200	71	47	3	5	3000	
3-Stage ⁽²⁾ (FSV)	188	83	212	236	59	35	3	5	2900	
	203	88	227	251	64	40	3	5	2800	
	224 ⁽³⁾	95	248	272	71	47	3	5	2600	
	227	99	251	275	75	51	3	5	2600	

Note: Height of standard load backrest is 48 in.
 (1) This dimension is approximate. Dimension will need to be adjusted if any hoses or quick disconnects extend above the carriage.
 (2) Tread OAW is 41
 (3) Must be ordered as a TSDR.

8BNCU15 - 18.5" BC

Mast Type	Maximum Fork Height (top of forks)	Overall Height				Free Lift		Tilt Range		Fixed Carriage
		Lowered	Extended		Without Load Backrest ⁽¹⁾	With Standard Load Backrest	FWD deg	BWD deg	Load Capacity @ 24-in. Load Center lb	
			Without Load Backrest ⁽¹⁾	With Standard Load Backrest						
2-Stage ⁽²⁾ (FV)	128	83	152	176	59	35	3	5	3000	
	140	89	164	188	64	40	3	5	3000	
	152	95	176	200	71	47	3	5	3000	
3-Stage ⁽²⁾ (FSV)	188	83	212	236	59	35	3	5	3000	
	203	88	227	251	64	40	3	5	3000	
	224 ⁽⁴⁾	95	248	272	71	47	3	5	3000	
	227	99	251	275	75	51	3	5	3000	
	251	107	275	299	83	59	3	5	2950	
4-Stage ⁽³⁾ (QFV)	222.5	78.5	246.5	270.5	54.5	30.5	3	5	3000	
	240.5	83	265	289	59	35	3	5	3000	
	258.5	89	283	307	65	41	3	5	2500	
	270.5 ⁽⁴⁾	93.5	295	319	69	45	3	5	1950	

Note: Height of standard load backrest is 48 in.
 (1) This dimension is approximate. Dimension will need to be adjusted if any hoses or quick disconnects extend above the carriage.
 (2) Tread OAW is 41 in.
 (3) Tread OAW 46 in.
 (4) Must be ordered as a TSDR.

8BNCU18 - 16.5" BC

Mast Type	Maximum Fork Height (top of forks)	Overall Height				Free Lift		Tilt Range		Fixed Carriage
		Lowered	Extended		Without Load Backrest ⁽¹⁾	With Standard Load Backrest	FWD deg	BWD deg	Load Capacity @ 24-in. Load Center lb	
			Without Load Backrest ⁽¹⁾	With Standard Load Backrest						
2-Stage ⁽²⁾ (FV)	128	83	152	176	59	35	3	5	3500	
	140	89	164	188	64	40	3	5	3500	
	152	95	176	200	71	47	3	5	3500	
3-Stage ⁽²⁾ (FSV)	188	83	212	236	59	35	3	5	3300	
	203	88	227	251	64	40	3	5	3200	
	224 ⁽³⁾	95	248	272	71	47	3	5	2700	
	227	99	251	275	75	51	3	5	2700	

Note: Height of standard load backrest is 48 in.
 (1) This dimension is approximate. Dimension will need to be adjusted if any hoses or quick disconnects extend above the carriage.
 (2) Tread OAW is 41 in
 (3) Must be ordered as a TSDR

3,000 – 4,000 lbs • Mast Specifications

8BNCU18 - 18.5" BC

Mast Type	Maximum Fork Height (top of forks)	Overall Height				Free Lift		Tilt Range		Fixed Carriage
		Lowered	Extended		Without Load Backrest ⁽¹⁾	With Standard Load Backrest	FWD deg	BWD deg	Load Capacity @ 24-in. Load Center lb	
			Without Load Backrest ⁽¹⁾	With Standard Load Backrest						
2-Stage ⁽²⁾ (FV)	128	83	152	176	59	35	3	5	3500	
	140	89	164	188	64	40	3	5	3500	
	152	95	176	200	71	47	3	5	3500	
3-Stage ⁽²⁾ (FSV)	188	83	212	236	59	35	3	5	3500	
	203	88	227	251	64	40	3	5	3500	
	224 ⁽⁴⁾	95	248	272	71	47	3	5	3400	
	227	99	251	275	75	51	3	5	3400	
	251	107	275	299	83	59	3	5	2950	
4-Stage ⁽³⁾ (QFV)	222.5	78.5	246.5	270.5	54.5	30.5	3	5	3500	
	240.5	83	265	289	59	35	3	5	3300	
	258.5	89	283	307	65	41	3	5	2500	
	270.5 ⁽⁴⁾	93.5	295	319	69	45	3	5	2350	
	277 ⁽⁴⁾	95	300	324	70	46	3	5	2300	

Note: Refer to notes under 8BNCU.20-21.25

8BNCU20 - 18.5" BC

Mast Type	Maximum Fork Height (top of forks)	Overall Height				Free Lift		Tilt Range		Fixed Carriage
		Lowered	Extended		Without Load Backrest ⁽¹⁾	With Standard Load Backrest	FWD deg	BWD deg	Load Capacity @ 24-in. Load Center lb	
			Without Load Backrest ⁽¹⁾	With Standard Load Backrest						
2-Stage ⁽²⁾ (FV)	128	83	152	176	59	35	3	5	4000	
	140	89	164	188	64	40	3	5	4000	
	152	95	176	200	71	47	3	5	4000	
3-Stage ⁽²⁾ (FSV)	188	83	212	236	59	35	3	5	3500	
	203	88	227	251	64	40	3	5	3500	
	224 ⁽⁴⁾	95	248	272	71	47	3	5	3400	
	227	99	251	275	75	51	3	5	3400	
	251	107	275	299	83	59	3	5	2950	
4-Stage ⁽³⁾ (QFV)	222.5	78.5	246.5	270.5	54.5	30.5	3	5	3500	
	240.5	83	265	289	59	35	3	5	3300	
	258.5	89	283	307	65	41	3	5	2500	
	270.5 ⁽⁴⁾	93.5	295	319	69	45	3	5	2350	
	277 ⁽⁴⁾	95	300	324	70	46	3	5	2300	

Note: Refer to notes under 8BNCU.20-21.25

8BNCU20 - 21.25" BC

Mast Type	Maximum Fork Height (top of forks)	Overall Height				Free Lift		Tilt Range		Fixed Carriage
		Lowered	Extended		Without Load Backrest ⁽¹⁾	With Standard Load Backrest	FWD deg	BWD deg	Load Capacity @ 24-in. Load Center lb	
			Without Load Backrest ⁽¹⁾	With Standard Load Backrest						
2-Stage ⁽²⁾ (FV)	128	83	152	176	59	35	3	5	4000	
	140	89	164	188	64	40	3	5	4000	
	152	95	176	200	71	47	3	5	4000	
3-Stage ⁽²⁾ (FSV)	188	83	212	236	59	35	3	5	4000	
	203	88	227	251	64	40	3	5	4000	
	224 ⁽⁴⁾	95	248	272	71	47	3	5	3800	
	227	99	251	275	75	51	3	5	3000	
4-Stage ⁽³⁾ (QFV)	222.5	78.5	246.5	270.5	54.5	30.5	3	5	3500	
	240.5	83	265	289	59	35	3	5	3300	
	258.5	89	283	307	65	41	3	5	3110	
	270.5 ⁽⁴⁾	93.5	295	319	69	45	3	5	2500	
	277 ⁽⁴⁾	95	300	324	70	46	3	5	2450	

Note: Height of standard load backrest is 48 in.
 (1) This dimension is approximate. Dimension will need to be adjusted if any hoses or quick disconnects extend above the carriage.
 (2) Tread OAW is 41 in.

(3) Tread OAW is 46 in.
 (4) Must be ordered as a TSDR.

SPECIFICATIONS



3,000 - 4,000

STAND-UP RIDER
AC POWER



3,000 – 4,000 lbs • Standard Features

PERFORMANCE

- 36 Volt electrical system
- AC drive system
- AC hydraulic lift system
- UL-approved model type E
- Independent lift, steer & auxiliary motors
- Programmable performance parameters
- Multifunction digital display
 - Time & Date
 - Multifunction hour meters
 - Battery discharge indicator (with lift interrupt)
 - Maintenance indicator
 - Temperature indicator
- Power hook-up for onboard terminal, 10 Amp
- Dual rubber steer tires (3K)
- Dual polyurethane steer tires (3.5-4K)
- Low durometer smooth rubber drive tires
- Mast tilt (3° fwd/5° bwd)

OPERABILITY

- Multifunction control handle (single-axis, simultaneous function)
- Hydrostatic power steering
- Auto-off system
- Cornering speed control
- Auto-position hold (drive motor/brake hold)
- Anti-stall protection
- 2-post overhead guard
- High visibility mast & overhead guard
- Dual electric disc brake (self-adjusting)
- Regenerative braking
- Proportional plugging
- 48" load backrest extension

ERGONOMICS

- Isolated, shock-dampened operator compartment floor
- Spacious operator compartment
- Flexible side stance operator compartment
- 7/8" thick bubble cushioned floor mat
- Ergonomically sloped floorboard
- Cushioned padded backrest & armrest
- Low-effort brake pedal
- Low step height
- Integrated clipboard
- Amenity tray
- Cup holder

SERVICEABILITY

- One-piece top cover
- Self diagnostics
- Built-in analyzer
- Fault code memory
- Programmable maintenance indicator
- Battery compartment rollers (corrosion resistant)
- Battery retaining gates
- Vertically mounted drive motors
- Anti-static ground strap
- Reverse polarity protection
- Flashware enabled software

OPTIONAL EQUIPMENT

- 16.5" battery compartment (3-3.5K)
- 18.5" battery compartment (3-4K)
- 21.25" battery compartment (4K)
- Integral sideshifter
- Cold storage conditioning
- Digital load weight display
- Fire extinguisher – 2.5 lb. dry chemical
- Extended operator backrest
- Mast tilt centering (2-way)
- 12V Power Supply, 10 Amp
- Battery side gate interlock
- UL-approved model type EE
- 83" overhead guard
- Bottler's mast tilt (10° fwd/3° bwd)
- Strobe light (amber or red)
- Travel alarm (forward, reverse or both)
- LED mast-mounted work lights
- LED rear work light
- LED Operator compartment light
- Operator compartment fan
- Keyless on/off switch
- PIN code entry system
- Compartment Sensor System (CSS)
- Quick disconnects (single & dual)
- Reverse steering
- Tapered forks
- Travel speed reduction above free-lift (FSV & QFV only)
- Various load backrest extension heights
- Various drive & steer tire materials

Note: Please check with your local Toyota sales professional for additional options.

3,000 – 4,000 lbs • Specifications

Models		8BNCU15/16.5	8BNCU15/18.5	8BNCU18/16.5	8BNCU18/18.5	8BNCU20/18.5	8BNCU20/21.25
Load Capacity (with 24-in. load center)	lb	3000		3500		4000	
Brakes		Self-Adjusting Electric Disc Brakes					

EXTERIOR DIMENSIONS

A	Maximum Fork Height (MFH) FSV Mast	in	188		188		188
B	Mast Lowered Height	in	83		83		83
C	Mast Extended Height	in	236		236		236
D	Overhead Guard Height	in	88		88		88
E	Battery Roller Height	in	7.5		7.5		7.5
F	Load Backrest Height	in	48		48		48
G	Carriage Width (Fork Spread)	in	35.5		35.5		35.5
H	Chassis Width	in	41		41		42.5
I	Chassis Height	in	50.2		50.2		50
J	Fork Size (TxWxL)	in	1.5x4x42		1.5x4x42		1.5x4x42
K	Load Distance (1)	in	12.7		12.7		12.7
L	Wheelbase	in	48.4	50.4	48.4	50.4	50.4
M	Length to Fork Face	in	68.5	70.5	68.5	70.5	70.5
N	Tilt Range	degrees	3°/5°		3°/5°		3°/5°
O	Turning Radius	in	56.1	58.1	56.1	58.1	58.1
P	Freelift	in	35		35		35
Q	Step Height	in	8		8		8
R	Underclearance	in	4		4		4
S	Grade Clearance	%	35	33	35	33	30
T	Basic Right Angle Stack (2)	in	68.8	70.8	68.8	70.8	73.5

POWER SYSTEM

Battery Compartment	Width	in	16.5	18.5	16.5	18.5	18.5	21.25	
	Length	in	38.5	38.5	38.5	38.5	38.5	38.5	
Height	in	32.3	32.3	32.3	32.3	32.3	32.3		
Power Type			Battery						
Battery	Voltage/Capacity(6hr. rating)	36V	AH	56.1	58.1	56.1	58.1	58.1	60.8
	Min. weight		lb	1980	2300	1980	2300	2300	2593
Electric Motor	Drive	36V	HP	7.0		7.0		7.0	
	Load Handling (Hyd.)	36V	HP	14.1		14.1		14.1	
Control Type	Drive			Transistor-MOSFET					
	Load Handling (Hyd.)			Transistor-MOSFET					

PERFORMANCE DATA

Maximum Travel Speed	fwd/rvs – full load	mph	7.5	7.5	7.5
	fwd/rvs – no load	mph	7.5	7.5	7.5
Maximum Lift Speed	full load	fpm	70	65	60
	no load	fpm	110	110	110
Maximum Lowering Speed	full load	fpm	100	100	100
	no load	fpm	85	85	85
Maximum Gradeability	full load	%	15	15	15
	no load	%	15	15	15

UNDERCLEARANCE

Center of Wheelbase		4	4	4
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TRUCK WEIGHTS

Gross weight without battery	lb	6625	6865	6625	6865	6865	6965
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ATTACHMENT

Attachment Operating Hydraulic Pressure	psi	2200	2200	2200
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Tires

Type (front/rear)		Solid Rubber/Poly	Solid Rubber/Poly	Solid Rubber/Poly
Size (ODxWxD)	Drive	16.25x6x11.25	16.25x6x11.25	16.25x7x11.25
	Steer	10x5x6.5	10x5x6.5	10x5x6.5

1) Centerline of front axle to front face of forks. 2) Add load length and aisle clearance.

3,000 – 4,000 lbs • Specifications

