

7-SERIES ELECTRIC



**S I N G L E R E A C H,
D O U B L E R E A C H A N D
S T R A D D L E T R U C K S
3 , 0 0 0 - 5 , 0 0 0 L B S
S P E C I F I C A T I O N S**



3,000 – 5,000 lbs • Standard

PERFORMANCE

- 36V (available on ALL models)
- 24V (available on 7BRU18 and 7BSU20 models)
- Toyota Advanced Control System (TACS) with metal oxide semiconductor field effect transistors (MOSFET)
- Multifunction digital display panel
 - Multifunctional hour meter
 - Time/date display
 - Programmable travel, acceleration, lift speeds and reach/retract; as well as coast control
 - Fault code memory
- Programmable performance parameter
- Multifunction control handle
- Separately Excited (SepEx™) drive motor
- Series wound lift motor with pulse width modulation (PWM) and variable speed lifting
- Electronic power steering motor
- Proportional valve controlled variable speed lowering
- Two speed reach/retract
- UL-approved model type E (except with FSV 270" mast on 24V 7BRU18, 7BSU20, and 7BSU25 models)

OPERABILITY

- 180-degree electronic power steering
- Flexible side stance operator compartment
- Wide-view 3-stage mast (FSV)
- Electronically cushioned mast
- Hydraulic deceleration at floor level
- 32 to 50 inch baseleg openings (inside dimensions) in one inch increments
- Polyurethane drive wheel
- Dual articulating polyurethane load wheels (bolt-on)
- Polyurethane caster wheel (dual)
- 48 inch tilting load backrest extension (3 degrees forward/4 degrees backward)
- 31 inch wide fork carriage
- 42 inch forks
- Electric disc brake

ERGONOMICS

- ERGOMAT® cushioned floor and brake pedal
- Integrated clipboard
- Amenity trays
- Cup holder
- Safety glass mast guard
- Comfort-padded lean points

SERVICEABILITY

- One-piece top cover with interlocking door
- Battery compartment rollers
- Battery retaining gates
- SB350 battery connector
- Battery discharge indicator with lift interrupt
- Brush wear indicator with protection (on drive and lift motors)
- Self-diagnostics
- Built-in analyzer
- Over temperature indicator with protection (on drive and lift motors)
- Regenerative braking

OPTIONAL EQUIPMENT

- Light and fan package with independent controls
 - Power hook-up for onboard terminal
 - Corrosion conditioning model
 - Cold storage conditioning model
 - Freezer conditioning model
 - Load weight display
 - Sideshifter
 - Forward and reverse travel alarm
 - Strobe light
 - Flashing beacon
 - Overhead guard mounted work area lights
 - Custom mast heights
 - Mast lift limit switch with bypass
 - Wire mesh mast guard
 - 36 or 44 inch tilting load backrest
 - Low or narrow profile baselegs
 - Heavy-duty vulkollan drive wheel
 - Various fork lengths
 - Polished and tapered forks (42 inch only)
 - Various battery compartment sizes
 - Anti-static ground strap
 - Fire extinguisher
 - Tapered toe box (4"x3" and 5"x4")
 - 360-degree infinite electronic power steering with drive wheel direction indicator
- Note:** Please check with your local Toyota sales professional for additional options.

3,000 – 5,000 lbs • Specifications

Model		7BRU18	7BRU23	7BDRU15	7BSU20	7BSU25	
A	Maximum Fork Height	in.	See Mast Specification Table				
B	Mast Lowered Height	in.					
C	Mast Extended Height	in.					
D	Free Lift	in.					
E	Wheelbase *	in.	57.5	60	60	57.5	60
F	Length to Fork Face (Head Length) *	in.	51.2	53.6	59.3	48.75	52
G	Truck Length*	in.	72.2	74.6	74.6	72.2	74.6
H	Powerunit Length*	in.	34.8	34.8	34.8	34.8	34.8
I	Powerunit Width	in.	40.5	40.5	40.5	40.5	40.5
J	Powerunit Height	in.	53.5	53.5	53.5	53.5	53.5
K	Carriage Width	in.	31	31	31	31	31
L	Carriage Height	in.	36.1	39	36	30	25
M	Load Backrest Tilt Range	forward/backward	deg.	3/4	3/4	3/4	3/4
N	Overhead Guard Height	in.	95 †	95	95	95 †	95
O	Baselegs Opening (inside dimensions)	in.	32-50	32-50	32-50	32-50	32-50
P	Baselegs Overall Width (outside dimensions)	in.	41-61	41-61	41-61	41-61	41-61
	Baseleg Width	in.	5.5	5.5	5.5	5.5	5.5
	Fork Size (TxWxL)	in.	1.75 x 4 x 42	1.75 x 4 x 42	1.75 x 4 x 42	1.75 x 4 x 42	1.75 x 4 x 42
Q	Fork Adjustment	in.	16-29.5	16-29.5	16-29.5	16-29.5	16-29.5
R	Step Height	in.	11.5	11.5	11.5	11.5	11.5
S	Battery Roller Height	in.	7	7	7	7	7
T	Bumper to centerline of drive wheel	in.	9.1	9.1	9.1	9.1	9.1
U	Underclearance (centerline of wheelbase)	in.	2	2	2	2	2
V	Reach Stroke	in.	23	22	38.7	–	–
W	Maximum Reach	in.	28.7	29.6	53.0	–	–
X	Outside Turning Radius*	in.	69	69.5	69.5	69	69.5

* Based on trucks equipped with 16.4 inch battery compartment. Subtract 2 inches for 14.4 inch compartment. Add 4.5 inches for 20.9 inch compartment.

† Overhead guard height for 7BRU18 and 7BSU20 with FSV 897/192* mast is 89 inches.

3,000 – 5,000 lbs • Mast Specifications

7BRU18

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ⁽¹⁾	
		Lowered	Extended	With Standard Load Backrest	FWD	BWD
			With Standard Load Backrest			
	in.	in.	in.	in.	deg.	deg.
FSV	192	89	240	41	3	4
	210	95	258	47	3	4
	240	107	288	59	3	4
	270 * †	119	318	71	3	4

7BRU23

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ⁽¹⁾	
		Lowered	Extended	With Standard Load Backrest	FWD	BWD
			With Standard Load Backrest			
	in.	in.	in.	in.	deg.	deg.
FSV	210	95	258	47	3	4
	240	107	288	59	3	4
	258	115	306	67	3	4
	270	119	318	71	3	4
	300	131	348	83	3	4
	330	143	378	95	3	4
	360	155	408	107	3	4

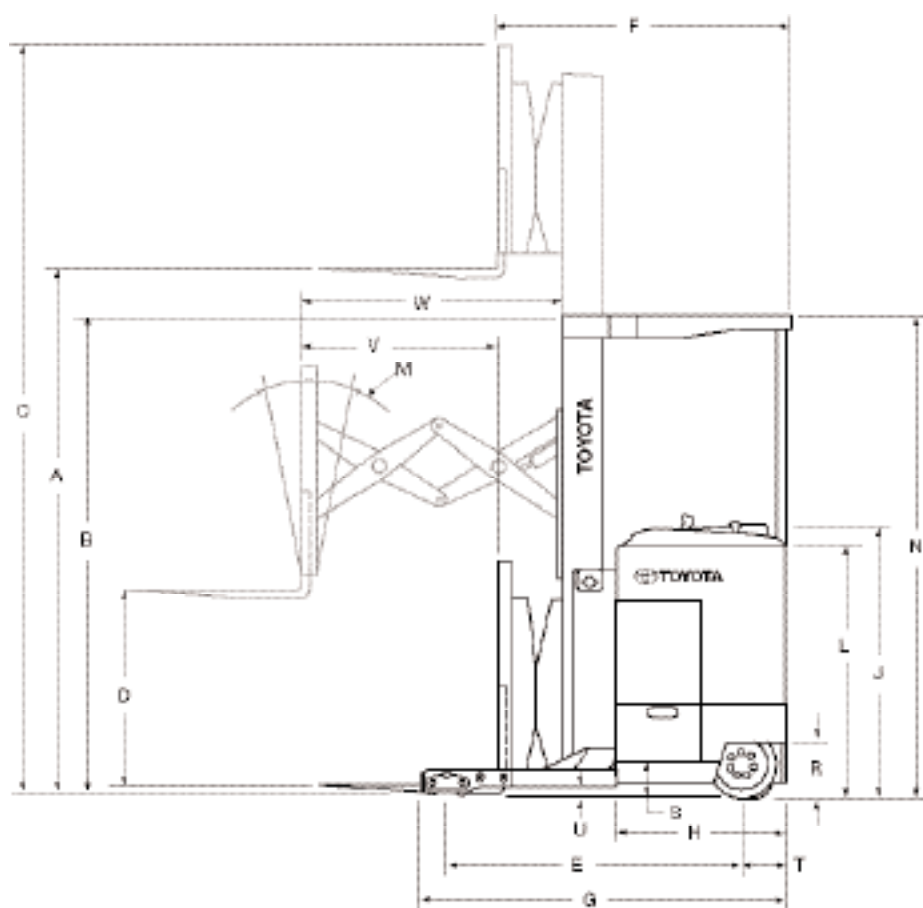
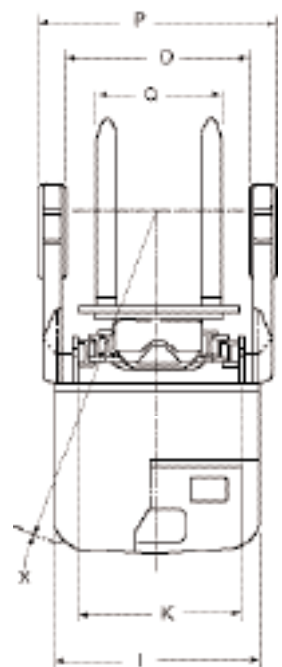
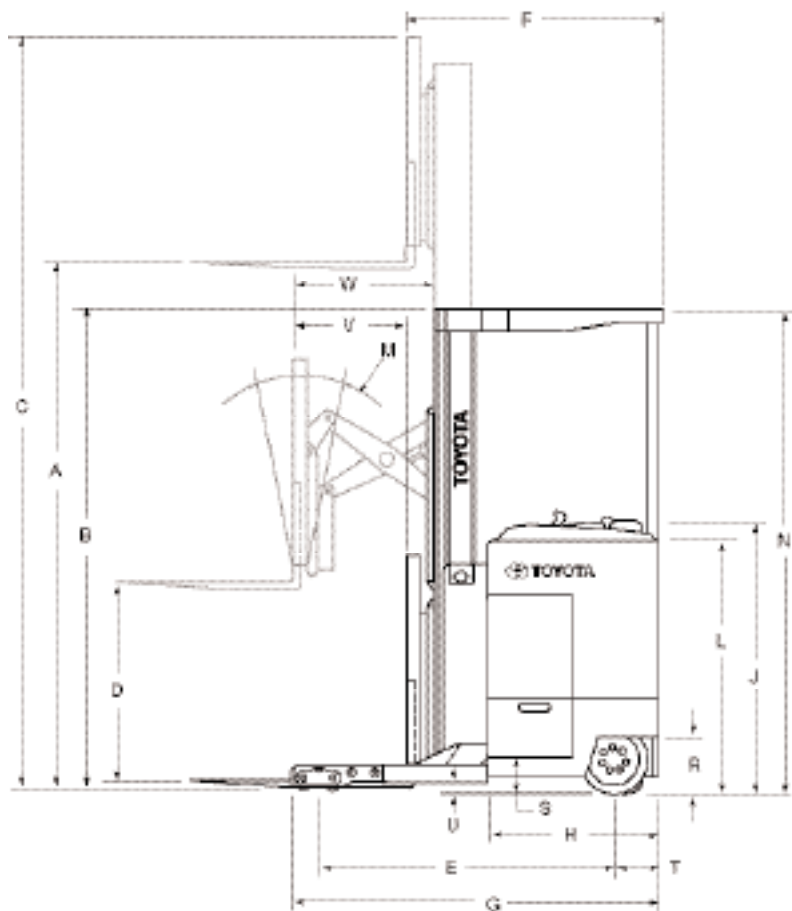
Height of standard load backrest is 48 inches.

* Not recommended for general application.

† UL-approved model type E not available on 24V trucks equipped with FSV 119/270* mast.

(1) Tilting load backrest.

3,000 – 5,000 lbs • Specifications



3,000 – 5,000 lbs • Specifications

Model	7BRU18	7BRU23	7BDRU15	7BSU20	7BSU25
Type	Single Reach	Single Reach	Double Reach	Straddle	Straddle
Load Capacity (with 24-inch load center)	3500	4500	3000	4000	5000
Body Frame Construction	Welded steel body and frame	Welded steel body and frame	Welded steel body and frame	Welded steel body and frame	Welded steel body and frame
Steering Type	180-degree electronic power steering	180-degree electronic power steering	180-degree electronic power steering	180-degree electronic power steering	180-degree electronic power steering
Brake Type	Electric Disc (foot)	Electric Disc (foot)	Electric Disc (foot)	Electric Disc (foot)	Electric Disc (foot)

PERFORMANCE DATA

Model	7BRU18	7BRU23	7BDRU15	7BSU20	7BSU25		
Maximum Travel Speed	24V Full Load/No Load	m.p.h.	5.5/6.0	–	–	5.5/6.0	–
	36V Full Load/No Load	m.p.h.	6.0/6.5	6.8/6.8 ⁽¹⁾	6.8/6.8 ⁽¹⁾	6.0/6.5	6.8/6.8 ⁽¹⁾
	24V/36V Out of Free Lift	m.p.h.	2.5/2.5	–/2.5	–/2.5	2.5/2.5	–/2.5
Lifting Speed	24V Full Load/No Load	f.p.m.	40/60	–	–	40/60	–
	36V Full Load/No Load	f.p.m.	60/80	60/95	60/95	60/80	60/95
Lowering Speed	Full Load/No Load	f.p.m.	80/80	95/90	95/90	80/80	95/90
Reach/Retract (to maximum capacity)	24V Full Load/No Load	sec.	5.0/4.0	–	–	–	–
	36V Full Load/No Load	sec.	4.5/3.5	4.0/3.0	5.0/4.0	–	–
Grade Clearance	%	10	10	10	10	10	

BATTERY

Compartment Dimensions	LxWxH	in.	38.75 x 14.4 x 32	38.75 x 16.4 x 32	38.75 x 16.4 x 32	38.75 x 14.4 x 32	38.75 x 16.4 x 32	
			38.75 x 16.4 x 32	38.75 x 20.9 x 32	38.75 x 20.9 x 32	38.75 x 16.4 x 32	38.75 x 20.9 x 32	
Voltage Capacity (6-hour ratings)	24V	V/AH	24/1250	–	–	24/1250	–	
	36V	V/AH	36/950	36/875	36/875	36/950	36/875	
Minimum & Maximum Weight ⁽²⁾	min./max.	38.75 x 14.4 x 32	lbs.	1600/2300	–	–	1600/2300	–
		38.75 x 16.4 x 32	lbs.	2000/2300	2000/2300	2000/2300	2000/2300	2000/2300
		38.75 x 20.9 x 32	lbs.	–	2400/2900 ⁽³⁾	2400/2900 ⁽³⁾	–	2400/2900 ⁽³⁾

CONTROL TYPE

Drive	Transistor	Transistor	Transistor	Transistor	Transistor
Load Handling	Transistor	Transistor	Transistor	Transistor	Transistor
Power Steering	Transistor	Transistor	Transistor	Transistor	Transistor

TIRES

Type	Drive	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	
	Caster	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	
	Load	Polyurethane	Polyurethane	Polyurethane	Polyurethane	Polyurethane	
Size	Drive	in.	7 x 2.75	7 x 2.75	7 x 2.75	7 x 2.75	7 x 2.75
	Caster	in.	13.5 x 5.5	13.5 x 5.5	13.5 x 5.5	13.5 x 5.5	13.5 x 5.5
	Load	in.	5 x 4	5 x 4	5 x 4	5 x 4	5 x 4

(1) Maximum travel speed for 7BRU23, 7BDRU15 and 7BSU25 models equipped with a 300° FSV mast or larger is 6.0 with full load and 6.5 with no load.

(2) Minimum battery weight is the lightest battery required to satisfy stability requirements of the lift trucks.

(3) Minimum battery weight for trucks equipped with a 360° FSV mast is 2600 lbs.

3,000 – 5,000 lbs • Mast Specifications

7BDRU15

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ⁽¹⁾	
		Lowered	Extended	With Standard Load Backrest	FWD	BWD
			With Standard Load Backrest			
in.		in.	in.	in.	deg.	deg.
FSV	210	95	258	47	3	4
	240	107	288	59	3	4
	258	115	306	67	3	4
	270	119	318	71	3	4
	300	131	348	83	3	4
	330	143	378	95	3	4
	360	155	408	107	3	4

7BSU20

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ⁽¹⁾	
		Lowered	Extended	With Standard Load Backrest	FWD	BWD
			With Standard Load Backrest			
in.		in.	in.	in.	deg.	deg.
FSV	192	89	240	41	3	4
	210	95	258	47	3	4
	240	107	288	59	3	4
	270 * †	119	318	71	3	4

7BSU25

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ⁽¹⁾	
		Lowered	Extended	With Standard Load Backrest	FWD	BWD
			With Standard Load Backrest			
in.		in.	in.	in.	deg.	deg.
FSV	210	95	258	47	3	4
	240	107	288	59	3	4
	258	115	306	67	3	4
	270 *	119	318	71	3	4
	300	131	348	83	3	4
	330	143	378	95	3	4
	360	155	408	107	3	4

Height of standard load backrest is 48 inches.

* Not recommended for general application.

† UL-approved model type E not available on 24V trucks equipped with a 270" FSV mast.

(1) Tilting load backrest.

