

SPECIFICATIONS



2,500 - 4,500 LBS

REACH TRUCK

AC POWERED

2,500 - 4,500 lbs • Standard

PERFORMANCE

- 24V Electrical System ^[1]
- 36V Electrical System
- Variable Speed Lift and Lowering
- Electric Power Steering Motor
- Two Speed Reach/Retract
- Current Controlled Proportional Valve
- Coast Control
- Multifunction Control Handle
- Interactive Digital Display Panel
 - Multifunctional Hour Meter
 - Time & Date Display
 - Programmable Travel, Acceleration, Lift/Lower Speeds, Reach/Retract
 - Fault Code Memory
- AC Powered Drive System with Torque Control
- AC Hydraulic System
- Lowering Flow Limiter
- Lift system Relief Valve
- UL “E” Rating

OPERABILITY

- 180-Degree Electronic Power Steering
- Auto-Position Hold
- Flexible Dock Stance Operator Compartment
- Wide-View 3-Stage Mast (FSV)
- Hydraulically Cushioned Mast Staging
- Hydraulic Cushioned Retract System
- Hydraulic Fork Deceleration at Floor Level
- Lift Slowdown at Max Lift
- 33 in. to 50 in. Base Leg Openings (ID)
 - in 1 in. increments ^[2] ^[3]
- Polyurethane Drive Tire
- Tandem Articulated, Bolt-On Polyurethane Load Wheels
- Polyurethane Caster Wheel
- Proportional Handle Plugging
- Tapered Toe Box 5” x 3.63” (9BDRU13, 9BDRU15 only)
- Universal Dead-Man Pedal w/ Cushioned Pad
- Electric Disc Brake
- Regenerative Braking
- Ventilated Compartment
- 48” Tilting Load Backrest Extension
- ITA CLASS II Hook-Type Carriage
- Anti-Static Ground Strap
- Adjustable Speed Limit above Free Lift

ERGONOMICS

- Bubble Cushioned Padded Floor & Brake Pedal
- Ergonomically Angled Floorboard
- Integrated Clipboard & Cup Holder
- High Visibility Overhead Guard
- Safety Glass Mast Guard ^[4]
- Comfort-Padded Lean Points
- Cushioned Knee Pad

SERVICEABILITY

- Battery Compartment Rollers
- Adjustable Battery Retaining Gates
- SB350 Red Connector ^[5]
- SB350 Gray Connector ^[6]
- Battery Discharge Indicator w/ Lift Interrupt
- Self Diagnostics
- Built-In Analyzer
- Over Temperature Indicator w/ Protection
 - On Drive & Lift Motor
- Emergency Power Disconnect Switch
- Electric Horn
- Key Switch
- Self-Adjusting Electric Disc Brake

[1] Only available on 9BRU18 and 9BDRU13.

[2] Specify base leg opening size (Inside Dimension)

[3] When ordering the truck without a Sideshifter, in order to straddle the load ensure that the baseleg opening size (ID) is at least 2 in. greater than the load width.

[4] When the cold storage/freezer condition option is ordered, the safety glass mast guard is replaced with the wire mesh mast guard.

[5] Standard on 24 Volt trucks

[6] Standard on 36 Volt trucks

OPTIONAL EQUIPMENT

- Dockstance Package
 - Tall Operator Backrest
 - 3rd Pillar
 - Battery Sidegate Interlock Switches
 - Poly Drive Tire Options
 - Poly Load Wheel Options
 - Load Weight Display
 - Operator Compartment Fan
 - LED Overhead Guard Mounted Work Lights
 - Operator Compartment Dome LED Dome Light
 - LED Strobe Light Options (Top Mounted)
 - Directional Travel Alarm Options
 - Fire Extinguisher
 - Mast Lift Limit Switch w/ Bypass
 - Height and Tilt Indicator
 - Acculaser
 - Reach Interlock Switch
 - RF Bracket options w. 2 amp power hookup
 - Keyless On/Off Switch
 - Operator PIN Code Entry System
 - Optional Battery Connector Colors
 - UL Type “EE” Rating
 - Cold Storage/Freezer Conditioning
- NOTE: Please check with your local Toyota sales professional for additional options.



2,500 - 4,500 lbs • Specifications

Model		9BRU18	9BRU23	9BDRU13	9BDRU15
Type		Single Reach	Single Reach	Double Reach	Double Reach
Load Capacity (with 24-inch load center)	lb.	3500	4500	2500	3000
Body Frame Construction		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
Brake Type		Electric Disc (foot)	Electric Disc (foot)	Electric Disc (foot)	Electric Disc (foot)

PERFORMANCE DATA

Model				9BRU18	9BRU23	9BDRU13	9BDRU15
Maximum Travel Speed	24V	Full Load/No Load	m.p.h.	6.5/6.5	–	6.5/6.5	–
	36V	Full Load/No Load	m.p.h.	7.5/7.5	7.5/7.5	–	7.5/7.5
	24V/36V	Out of Free Lift	m.p.h.	3.5/3.5	–/3.5	–/3.5	–/3.5
Lifting Speed	24V	Full Load/No Load	f.p.m.	40/64	–	40/60	–
	36V	Full Load/No Load	f.p.m.	70/100	65/115	–	75/110
Lowering Speed		Full Load/No Load	f.p.m.	110/110	110/110	110/110	110/110
Reach/Retract (maximum capacity)	24V	Full Load/No Load	sec.	4.8/4.8	–	5.0/5.0	–
	36V	Full Load/No Load	sec.	4.8/4.8	4.8/4.8	–	5.0/5.0
Grade Clearance			%	14	14	14	14

BATTERY

Model				9BRU18	9BRU23	9BDRU13	9BDRU15
Compartment Dimensions	14.5" Compartment	LxWxH		14.5 x 38.62 x 31	–	14.5 x 38.62 x 31	–
	16.5" Compartment	LxWxH		16.5 x 38.62 x 31	16.5 x 38.62 x 31	16.5 x 38.62 x 31	16.5 x 38.62 x 31
	18.5" Compartment	LxWxH		18.5 x 38.62 x 31	18.5 x 38.62 x 31	–	18.5 x 38.62 x 31
	21.5" Compartment	LxWxH		–	21.5 x 38.62 x 31	–	21.5 x 38.62 x 31
Voltage Capacity (6-hour ratings)	24V	V/AH		24/1125	–	24/1125	–
	36V	V/AH		36/1240	36/1240	–	36/1240
Minimum & Maximum Weight ⁽²⁾	min/max	14.5 x 38.62 x 31	lbs.	1600/2000	–	1600/2000	–
		16.5 x 38.62 x 31	lbs.	2000/2300	2000/2300	2000/2300	2000/2300
		18.5 x 38.62 x 31	lbs.	2300/2600	2300/2600	–	2300/2600
		20.5 x 38.62 x 31	lbs.	–	2600/2900	–	2600/2900

CONTROL TYPE

Model		9BRU18	9BRU23	9BDRU13	9BDRU15
Drive		AC	AC	AC	AC
Load Handling	24V	AC	–	AC	–
	36V	AC	AC	AC	AC
Power Steering		Transistor	Transistor	Transistor	Transistor

TIRES

Model			9BRU18	9BRU23	9BDRU13	9BDRU15
Type	Drive		Polyurethane	Polyurethane	Polyurethane	Polyurethane
	Caster		Polyurethane	Polyurethane	Polyurethane	Polyurethane
	Load		Polyurethane	Polyurethane	Polyurethane	Polyurethane
Size	Drive	in.	13.5 x 6.0	13.5 x 6.0	13.5 x 6.0	13.5 x 6.0
	Caster	in.	8 x 4	8 x 4	8 x 4	8 x 4
	Load	in.	5 x 3.63	5 x 3.63	5 x 3.63	5 x 3.63

2,500 - 4,500 lbs • Specifications

			9BRU18			9BRU23			9BDRU13		9BDRU15		
	Load Capacity	lb.	3500 (1588)			4500 (1588)			2500 (1134)		3000 (1360)		
A	Battery Compartment Size	in. (mm)	14.5 (368)	16.5 (419)	18.5 (470)	16.5 (419)	18.5 (470)	21.5 (546)	14.5 (368)	16.5 (419)	16.5 (419)	18.5 (470)	21.5 (546)
B	Maximum Fork Height	in. (mm)	271 (6883)	301 (7645)	301 (7645)	301 (7645)			264 (6706)		302 (7671)		
C	Mast Lowered Height	in. (mm)	119 (3022)	131 (3327)	131 (3327)	131 (3327)			118 (2997)		135 (3429)		
D	Mast Extended Height	in. (mm)	319 (8103)	349 (8865)	349 (8865)	349 (8865)			312 (7925)		350 (8890)		
E	Free Lift	in. (mm)	76 (1930)	88 (2235)	88 (2235)	88 (2235)			79 (2007)		96 (2438)		
F	Wheelbase	in. (mm)	57.1 (1450)	59.1 (1501)	61.1 (1552)	59.1 (1501)	61.1 (1552)	64.1 (1628)	59.6 (1514)	61.6 (1565)	61.6 (1565)	63.6 (1615)	66.6 (1692)
G	Head Length	in. (mm)	55.3 (1405)	57.3 (1430)	59.3 (1506)	57.3 (1430)	59.3 (1506)	62.3 (1582)	60 (1524)	62 (1575)	62 (1575)	64 (1626)	67 (1702)
H	Truck Length	in. (mm)	76.2 (1935)	78.2 (1986)	80.2 (2037)	78.2 (1986)	80.2 (2037)	83.2 (2113)	81.3 (2065)	83.3 (2116)	83.3 (2116)	85.3 (2167)	88.3 (2243)
I	Power Unit Length	in. (mm)	35.5 (902)	37.5 (953)	39.5 (1003)	37.5 (953)	39.5 (1003)	42.5 (1080)	35.5 (902)	37.5 (952)	37.5 (953)	39.5 (1003)	42.5 (1080)
J	Power Unit Width	in. (mm)	42.5 (1080)			42.5 (1080)			42.5 (1080)		42.5 (1080)		
K	Power Unit Height	in. (mm)	51.5 (1308)			51.5 (1308)			51.5 (1308)		51.5 (1308)		
L	Carriage Width	in. (mm)	32 (813)			32 (813)			32 (813)		32 (813)		
M	Load Backrest Height	in. (mm)	48 (1220)			48 (1220)			48 (1220)		48 (1220)		
N	Tilt Range (fwd/bkwd)	deg.	3/4.5			3/4.5			3/4.5		3/4.5		
O	Overhead Guard Height	in. (mm)	90.81 (2307)			90.81 (2307)			90.81 (2307)		90.81 (2307)		
P	Baselegs Opening	in. (mm)	33 to 50 (838 to 1270)			33 to 50 (838 to 1270)			33 to 50 (838 to 1270)		33 to 50 (838 to 1270)		
Q	Baselegs Overall Width	in. (mm)	44 to 61 (1118 to 1550)			44 to 61 (1118 to 1550)			43 to 60 (1092 to 1524)		43 to 60 (1092 to 1524)		
	Baseleg Width	in. (mm)	5.5 (140)			5.5 (140)			5 (127)		5 (127)		
	Fork Size (TxWxL)	in. (mm)	1.75 x 4 x 42 (45 x 100 x 1070)			1.75 x 4 x 42 (45 x 100 x 1070)			1.75 x 4 x 42 (45 x 100 x 1070)		1.75 x 4 x 42 (45 x 100 x 1070)		
R	Fork Adjustment (min/max)	in. (mm)	15 (381) / 30 (762)			15 (381) / 30 (762)			15 (381) / 30 (762)		15 (381) / 30 (762)		
S	Step Height	in. (mm)	9 (229)			9 (229)			9 (229)		9 (229)		
T	Battery Roller Height	in. (mm)	7 (178)			7 (178)			7 (178)		7 (178)		
U	Bumper to Centerline of Drive Wheel	in. (mm)	11.35 (288)			11.35 (288)			11.35 (288)		11.35 (288)		
V	Underclearance (centerline of wheelbase)	in. (mm)	2 (50)			2 (50)			2 (50)		2 (50)		
	Reach Stroke	in. (mm)	22.75 (578)			22.75 (578)			42.75 (1086)		42.75 (1086)		
	Maximum Reach	in. (mm)	28.5 (724)			28.5 (724)			53.25 (1353)		53.25 (1353)		
W	Outside Turning Radius	in. (mm)	70.8 (1798)	72.8 (1849)	74.8 (1900)	74.2 (1885)	76.2 (1935)	79.2 (2012)	73.6 (1869)	75.6 (1920)	75.6 (1920)	77.6 (1971)	80.6 (2047)

Mast Specifications & Rated Capacities

9BRU18

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift With Standard Load Backrest	Tilt Range ^[2]	
		Lowered	Extended		FWD	BWD
			With Standard Load Backrest			
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	deg.	deg.
FSV	193 (4902) ^[1]	89 (2261)	241 (6121)	46 (1168)	3	4.5
	211 (5359)	95 (2413)	259 (6579)	52 (1321)	3	4.5
	217 (5512)	99 (2515)	265 (6731)	56 (1422)	3	4.5
	241 (6121)	107 (2718)	289 (7341)	64 (1626)	3	4.5
	250 (6350)	110 (2794)	298 (7569)	67 (1701)	3	4.5
	271 (6883)	119 (3023)	319 (8103)	76 (1930)	3	4.5
	280 (7112)	122 (3099)	328 (8331)	79 (2007)	3	4.5
	301 (7645)	131 (3327)	349 (8865)	88 (2235)	3	4.5

NOTE: Height of standard load backrest is 48 in (1220 mm).

[1] Overhead guard height with FSV 89"/192" mast is 88.75 in. (2254 mm)

[2] Tilting Load Backrest.

9BRU23

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift With Standard Load Backrest	Tilt Range ^[2]	
		Lowered	Extended		FWD	BWD
			With Standard Load Backrest			
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	deg.	deg.
FSV	193 (4902) ^[1]	89 (2260)	241 (6121)	46 (1168)	3	4.5
	211 (5359)	95 (2413)	259 (6579)	52 (1321)	3	4.5
	226 (5740)	102 (2591)	274 (6960)	59 (1499)	3	4.5
	241 (6121)	107 (2718)	289 (7341)	64 (1626)	3	4.5
	250 (6350)	110 (2794)	298 (7569)	67 (1702)	3	4.5
	268 (6807)	118 (2997)	316 (8026)	75 (1905)	3	4.5
	280 (7112)	122 (3099)	328 (8331)	79 (2007)	3	4.5
	301 (7645)	131 (3327)	349 (8865)	88 (2235)	3	4.5
	321 (8153) ^[3]	142 (3607)	369 (9373)	100 (2540)	3	4.5
	330 (8382) ^[3]	146 (3708)	378 (9601)	103 (2616)	3	4.5
	336 (8534) ^[3]	148 (3759)	384 (9754)	105 (2667)	3	4.5
	348 (8839) ^[3]	152 (3861)	396 (10058)	109 (2769)	3	4.5
	360 (9144) ^[3]	156 (3962)	408 (10363)	113 (2870)	3	4.5
	366 (9296) ^[3]	158 (4013)	414 (10516)	115 (2921)	3	4.5

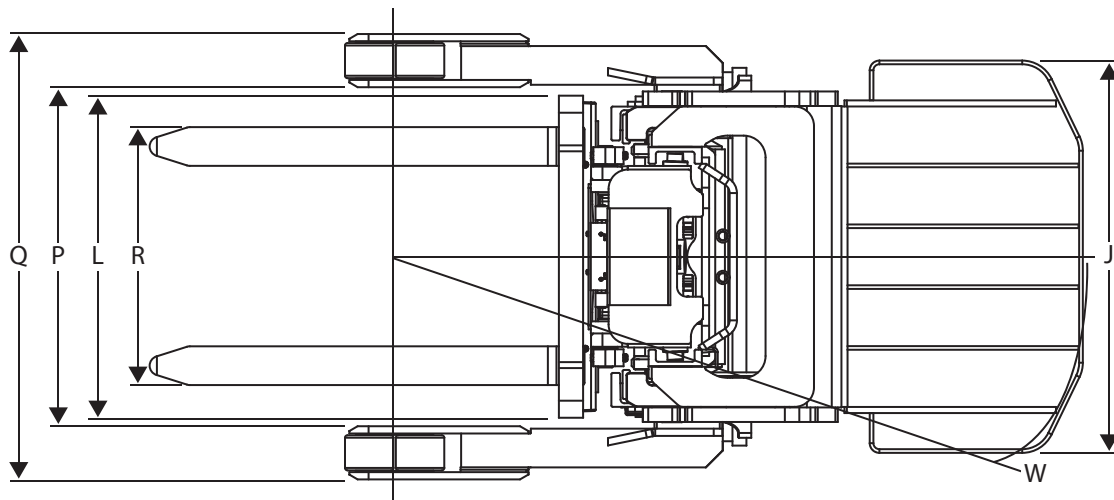
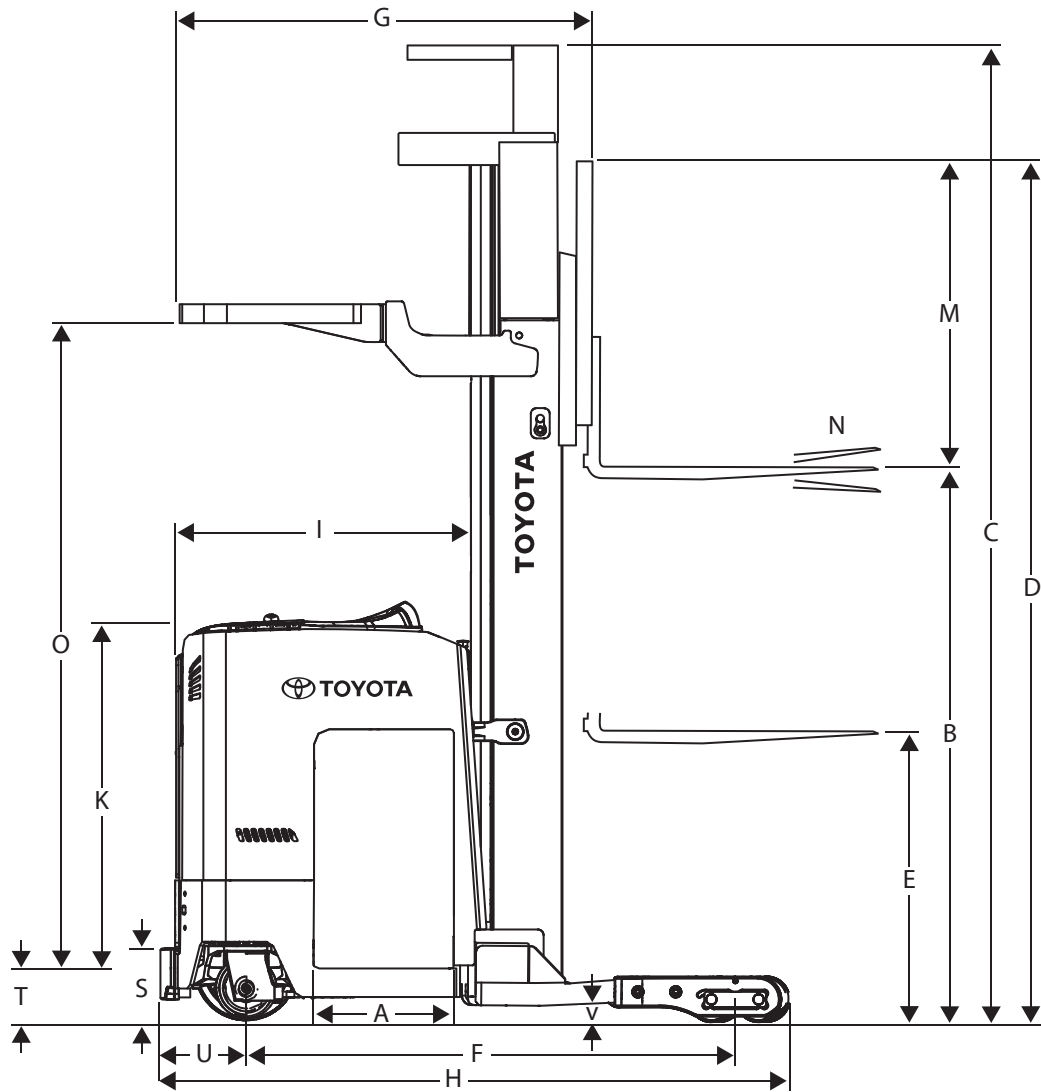
NOTE: Height of standard load backrest is 48 in (1219 mm).

[1] Overhead guard height with FSV 89"/189" mast is 88.75 in. (2254 mm)

[2] Tilting Load Backrest.

[3] Available by TSDR only.

Dimensional Drawing



2,500 - 4,500 lbs • Mast Specifications

9BDRU13

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ⁽²⁾	
		Lowered	Extended	With Standard Load Backrest		
			With Standard Load Backrest			
			FWD		BWD	
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	deg.	deg.
FSV	189 (4801) ⁽¹⁾	89 (2261)	237 (6020)	47 (1194)	3	4.5
	207 (5258)	95 (2413)	255 (6477)	57 (1448)	3	4.5
	216 (5486)	100 (2540)	264 6706)	62 (1575)	3	4.5
	237 (6020)	107 (2718)	285 (7239)	68 (1727)	3	4.5
	252 (6401)	114 (2896)	300 (7620)	75 (1905)	3	4.5
	264 (6706)	118 (2997)	312 (7925)	79 (7925)	3	4.5

NOTE: Height of standard load backrest is 48 in (1219 mm).

[1] Overhead guard height with FSV 89"/189" mast is 88.75 in. (2254 mm)

[2] Tilting Load Backrest.

9BDRU15

Mast Type	Maximum Fork Height (top of forks)	Overall Height		Free Lift	Tilt Range ^[2]	
		Lowered	Extended	With Standard Load Backrest		
			With Standard Load Backrest		FWD	BWD
	in. (mm)	in. (mm)	in. (mm)	in. (mm)	deg.	deg.
FSV	189 (4801) ^[1]	89 (2261)	237 (6020)	47 (1194)	3	4.5
	207 (5258)	95 (2413)	255 (6477)	57 (1448)	3	4.5
	216 (5486)	100 (2540)	264 (6706)	62 (1575)	3	4.5
	237 (6020)	107 (2718)	285 (7239)	68 (1727)	3	4.5
	252 (6401)	114 (2896)	300 (7620)	75 (1905)	3	4.5
	264 (6706)	118 (2997)	312 (7925)	79 (2007)	3	4.5
	276 (7010)	122 (3099)	324 (8230)	83 (2108)	3	4.5
	288 (7315)	128 (3251)	336 (8534)	89 (2261)	3	4.5
	302 (7671)	135 (3429)	350 (8890)	96 (2438)	3	4.5
	315 (8001) ^[3]	141 (3581)	363 (9220)	-	3	4.5
	321 (8153) ^[3]	142 (3607)	369 (9373)	-	3	4.5
	330 (8382) ^[3]	146 (3708)	378 (9601)	-	3	4.5
	336 (8534) ^[3]	148 (3759)	384 (9754)	-	3	4.5
	348 (8839) ^[3]	152 (3861)	396 (10058)	-	3	4.5
	360 (9144) ^[3]	156 (3962)	408 (10363)	-	3	4.5
	366 (9296) ^[3]	158 (4013)	414 (10515)	-	3	4.5

NOTE: Height of standard load backrest is 48 in (1219 mm).

[1] Overhead guard height with FSV 89"/189" mast is 88.75 in. (2254 mm)

[2] Tilting Load Backrest.

[3] Available by TSDR only.



Some product features described herein are optional. Please contact your dealer for complete specifications. Details of specifications and equipment are based on information available at time of printing and may change without notice.