### MULTIDIRECTIONAL REACH TRUCK



(P) TOYOTA

## ALL-STAR WIDE RECEIVER

- AC Drive and Lift Motors
- Articulating Load Wheels for Horizontal Travel
- Up to 4,500 lb. Capacity
- Auxiliary Fork Carriage Option
- 7" Color Touchscreen Display

RF1-MD1X45

# WIDE LOADS: HANDLED

WHEN IT COMES TO WAREHOUSING, wide loads and narrow aisles typically don't mix. Attempting to stack products like lumber, pipe, or carpet at right angles necessitates wider aisles that can put a hamper on your storage density and productivity.

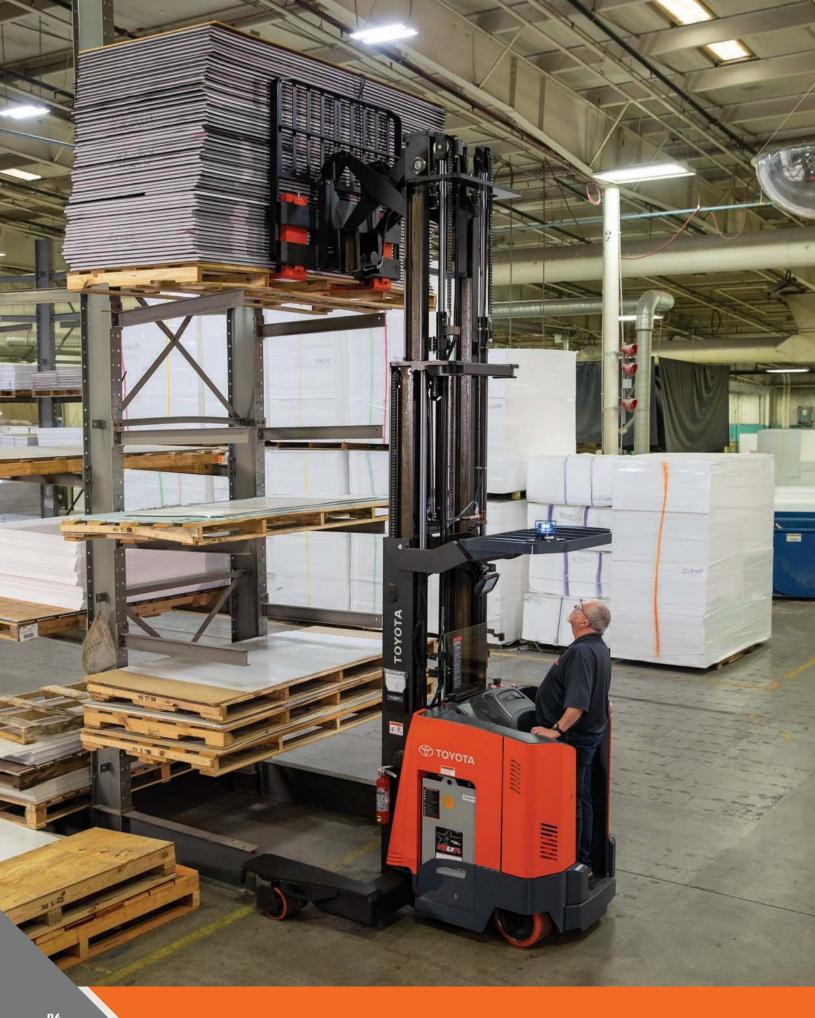
Specially designed to handle wide, bulky loads, Toyota's Multidirectional Reach Truck provides an innovative alternative to traditional material handling. Articulating load wheels allow the forklift to travel horizontally, permitting compact travel and stacking wide loads in narrow aisles without the need to turn.

Operators can easily control and view load wheel placement and travel direction using the operator's display with directional and mode indicator lights. Combined with the easy-to-use multifunction control handle and open view mast, navigating wide loads through your bustling warehouse has never been easier.

#### IDEAL APPLICATIONS:

- Palletless Load Handling: Loads that are difficult or impractical to palletize, such as carpet or steel.
- Long Load Handling: Wide loads such as lumber and building supplies requiring wider aisles for right-angle stacking.
- Specialty Racking: Items stored in cantilever, push back, and other specialty racking for optimal storage and retrieval.





## VERTICALLY INCLINED

**THE MULTIDIRECTIONAL REACH TRUCK** makes light work of more than just horizontal travel. The truck design provides great visibility and ergonomics when working in high racking. For extra assistance when working in tall racking, the optional carriage-mounted camera system feeds video of the forks and pallet to the standard 7" color touchscreen display for optimal control and precision. Optional Acculaser technology projects a light beam where the forks are positioned. The height and tilt indicator shows mast and fork positioning on the touchscreen display for even more precise load handling. UP TO **22** FT. WIDE LOADS

#### INTELLIGENTLY BUILT, COMFORTABLY PRODUCTIVE

The Multidirectional Reach Truck's intelligent design empowers operators to complete tasks confidently and efficiently, shift after shift. The single-axis, multifunction control handle allows simultaneous use of hydraulic functions and travel in one intuitive and ergonomic package. Rigid mast construction and an innovative suspension system help minimize mast sway for precise load handling at maximum lift heights.

An inertial dampener minimizes mast sway when right angle stacking at high lift heights for exceptional control and reduced product and racking damage.

#### EFFICIENCY TO KEEP YOU ON THE MOVE

Moving from pick to pick as quickly and efficiently as possible is the name of the game, and the Multidirectional Reach Truck delivers. Its powerfully efficient AC drive and lift motors offer superior acceleration, travel, and lift/lower speeds to maximize throughput while minimizing downtime. Regenerative plugging returns energy to the battery when plugging and coasting for more efficient operation and reduced energy costs.

## WORK HARD, Play hard

Built using the Toyota Production System, the Multidirectional Reach Truck exemplifies the quality, durability, and reliability you've come to expect from Toyota. When handling loads, you'll appreciate the solid reach mechanism design with anti-friction scissors, radial thrust bearings, and a torsion tube scissor tie that helps mitigate lateral stresses. Even our control handle, with only 35 parts and flex circuit technology, offers low-maintenance operation.

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# **500** HOUR PLANNED MAINTENANCE INTERVAL

## TOYOTA MOVES WITH YOU



#### **A NAME YOU CAN TRUST**

Our material handling equipment carries something no others can: The Toyota name. As one of the most recognized and respected global brands, the Toyota name is synonymous with quality, durability, and value. It also provides a peace of mind that few companies of any kind can match.

Every Toyota Forklift is built using the world-renowned Toyota Production System (TPS), which features Just-in-Time parts delivery and quality checks at every step of the manufacturing process.

It's all part of the Toyota philosophy of "kaizen," the dedication to continuous improvement. Instituted by our founder more than 80 years ago, it's a principle that still guides us today. As long as our forklifts carry the Toyota name, we'll continue striving to improve processes and quality.

#### THE TOYOTA 360 SUPPORT PROMISE

In addition to moving more pallets more quickly through your facility, you can count on Toyota's dedication to quality and world-renown manufacturing methods to deliver unprecedented uptime and lower maintenance costs. Toyota 360 Support comes standard with every Toyota Reach Truck, meaning you benefit from an industry-leading two-year parts warranty, the support of over 65 dealerships, 3500+ Toyota Certified Technicians, and guaranteed 4-hour emergency response time.

65<sup>+</sup>



4-HOUR **GUARANTEED** EMERGENCY RESPONSE TIME



#### **STANDARD EQUIPMENT**

#### PERFORMANCE

- 36 Volt Electrical System
- AC Powered Drive System with Torque Control
- AC Hydraulic System
- Multifunction Control Handle
- Variable Speed Lift and Lowering
- Electric Power Steering Motor
- Two Speed Reach / Retract

#### **OPERABILITY**

- 180-Degree Electronic Power Steering
- Multi-Directional Travel
- Auto-Position Hold
- Fore-Aft Stance Operator Compartment
- Open-View 3-Stage Mast (FSW)
- Hydraulically Cushioned Mast Staging
- Hydraulic Cushioned Retract System
- Hydraulic Fork Deceleration at Floor Level
- Polyurethane Drive Tire
- (13.5 in. dia. x 6.0 in.)

- 7" Color Touchscreen Display Panel
- Multifunctional Hour Meter
- Time & Date Display
- Programmable Travel, Acceleration, Lift/Lower Speeds, Reach/Retract & Coast Control

• Steerable Load Wheels (8 in. x 4 in.)

• Polyurethane Caster Wheel (8 in. x 4 in.)

• Ventilated Tractor Compartment w/ Door

Mounted High Capacity Cooling Fan

• 36 in Tilting Load Backrest Extension

ITA Class II Hook-Type Carriage

- Fault Code Memory
- Weight Display

• Electric Disc Brake

Regenerative plugging

(4.5° Fwd / 3° Bwd)

- Current controlled proportional valve
- Lowering flow limiter
- Lift system relief valve
- UL "E" Construction
- Forks: 42 in. x 1.75 in. x 4 in.
- Anti-Static Ground Strap
- Proportional Handle Plugging
- Lift Slowdown at Max Lift
- Adjustable Speed Limit Above Freelift (0-3.5 mph)
- View-through Carriage

- ERGONOMICS
- Bubble Cushioned Padded Floor & Brake Pedal
- Low Step Height

#### SERVICEABILITY

- Battery Compartment Rollers
- Battery Retaining Gates (Adjustable)
- SB350 Gray Connector
- Battery Discharge Indicator w/ Lift Interrupt

Overhead Guard

(48 in. Wide)

- Safety Glass Mast Guard<sup>1</sup>
- Comfort-Padded Lean Points
- Self Diagnostics
- Built-In Analyzer
- Self-Adjusting Electric Disc Brake
- Emergency Power Disconnect Switch
- Electro-Mechanical Horn

Cushioned Knee Pad

- Key Switch
- Enclosed Battery Compartment:
- 16.2 in. x 38.62 in. x 31 in.
- 18.2 in. x 38.62 in. x 31 in.
- 21.2 in. x 38.62 in. x 31 in.

#### **OPTIONAL EQUIPMENT**

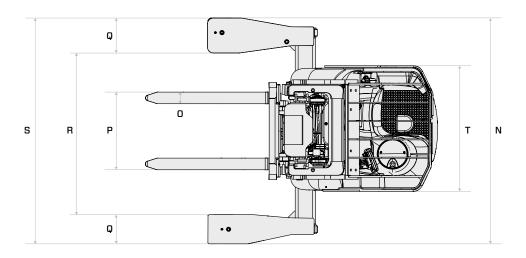
LOAD HANDLING				
<ul> <li>Various Fork Length Options</li> <li>Forks Fully Tapered with Floor Lowered Height</li> </ul>	• Less Forks • Forks Lower to Floor Height • Auxiliary Fork Carriage Options	<ul> <li>Custom Mast Height (1 in. increments), Standard Overlap</li> <li>Integral Sideshifter, 2 in. Each Way</li> </ul>		
• Custom Fork Lengths up to 48" (Specify Length)	<ul> <li>Tilting Load Backrest Extension Options</li> <li>Custom Mast Height (1 in. increments), Non-standard Overlap</li> </ul>			
BODY				
• Full Height Mast Guard, Glass	• Hinged Rear Operator Guard	<ul> <li>Overhead Guard Mesh Shield</li> </ul>		
• Wire Mesh Mast Guard, Partial Height	(partial length)	Custom Overhead Guard Height		
• Wire Mesh Mast Guard, Full Height	<ul> <li>Hinged Rear Operator Guard (full length)</li> <li>Overhead Guard Clear Shield</li> </ul>	• Inertial Dampener • Fire Extinguisher, 2.5 lb. Dry Chemical		
WHEELS AND TIRES				
• Various Drive Tire Options	• Caster Wheel, Smoothy®	• Poly Load Wheels, Smoothy®		
LIGHTS, INDICATORS & MISC.				
<ul> <li>LED Overhead Guard Mounted Work</li> </ul>	<ul> <li>LED Amber Strobe Light</li> </ul>	• Blue Spot Light, Key-on, Tractor First Only		
Lights (Pair)	LED Red Strobe Light	• Blue Spot Light, Key-on, Both Directions		
Operator Compartment LED Dome Light	LED Blue Strobe Light	• All Travel Alarm		
• LED Travel Activated Work Lights (1 facing forward and 1 reverse)	<ul> <li>Special Mounting for Strobe Light (Bottom Mounted)</li> </ul>	<ul> <li>Electronic Horn</li> <li>Crating for 107 in. OALH and Below</li> </ul>		
PRODUCTIVITY				
<ul> <li>Various RF Bracket Options</li> </ul>	• Camera System Cable	<ul> <li>Mast Lift Limit Switch w/ Bypass</li> </ul>		
<ul> <li>Power Hook-Up for On-Board Terminal</li> </ul>	<ul> <li>Carriage-Mounted Camera System</li> </ul>	(1 in. increments)		
(2 amp)	<ul> <li>Height Indicator</li> </ul>	<ul> <li>Mast Lift Limit Switch w/o Bypass</li> </ul>		
<ul> <li>Power Hook-Up for On-Board Terminal</li> </ul>	<ul> <li>Height and Tilt Indicator</li> </ul>	(1 in. increments)		
(10 amp)	• Weight Height Limit Display	Travel Speed Limit Switch		
Acculaser (Red)	Auto Height Select (Includes Reach	Mechanical Lift Stop		
• Acculaser (Green)	Interlock Switch)	Reach Interlock Switch		
OPERABILITY AND COMFORT				
Steer tiller friction block     Steering Wheel Per	Compartment Sensing System for     Could Storage (Freezer)	Operator Compartment Fan		
Steering Wheel Bar     Poverse Steering	Cold Storage/Freezer • Keyless On/Off Switch	<ul> <li>Heated Handle and Floor</li> </ul>		
<ul><li> Reverse Steering</li><li> Compartment Sensing System</li></ul>	Electronic Key (Operator PIN Code Entry)			
BATTERY ACCESSORIES				
Various Battery Connector Options	<ul> <li>21.2 inch Battery Compartment</li> </ul>	<ul> <li>Dual SBX Battery Connectors</li> </ul>		
• 18.2 inch Battery Compartment	Battery Side Gate Interlock			
SPECIAL MODELS				
• UL Type "E" Rating	• Special Paint Color with Black Mast	<ul> <li>Cold Storage/Freezer Conditioning</li> </ul>		

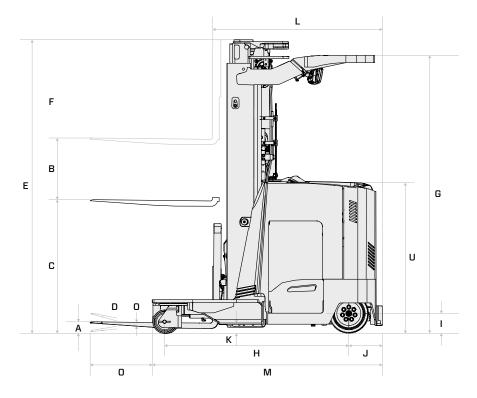
#### MAIN VEHICLE SPECIFICATIONS

				MODEL NUMBERS			
GENERAL DATA					RF1-MD1X45		
_oad Capacity <sup>1</sup>			lb (kg)		4500 (2043)		
.oad Center			in (mm)		24 (600)		
Battery Compartmen	nt Size		in	16.2	18.2	21.2	
ower Type					Battery		
perator Position					Stand-Up Rider		
					RF1-MD1X45		
<b>EXTERIOR DIMENSI</b>	IONS				BATTERY COMPARTMENT SIZE		
				16.2"	18.2"	21.2"	
A Fork Lowered H	Height		in (mm)		3 (76)		
B Maximum Fork	< Height (MFH)1		in (mm)		268 (6807)		
C Free-Lift <sup>1</sup>			in (mm)		69 (1753)		
D Tilt Range (for	ward / backward)		deg		3/4.5		
E Mast Lowered			in (mm)		118 (2997)		
F Mast Extended			in (mm)		304 (7722)		
G Overhead Guar	rd Height1		in (mm)		Contact Dealer		
H Wheelbase			in (mm)	60.1 (1527)	62.1 (1577)	65.1 (1654)	
Battery Roller H			in (mm)		7 (178)		
	nterline of Drive Wheel		in (mm)		11.35 (288)		
	ce (center of wheelbase)	No Load	in (mm)		2 (51)		
	Face (without sideshift)		in (mm)	56.3 (1430)	58.3 (1481)	61.3 (1557)	
	ength to end of base legs)		in (mm)	76 (1930)	78 (1981)	81 (2057)	
N Overall Truck V	Nidth		in (mm)		31 (787)		
O Fork Size		TxWxL	in (mm)		1.75 x 4 x 42 (44 x 102 x 1607)		
	outer edge to edge)	Maximum / Maximum	in (mm)		24 - 48 (610 - 1219)		
Q Base Leg Widt			in (mm)		10 / 12 (254 / 305)		
	de Dimension (ID)		in (mm)		53.5 (1359)		
	side Dimension (OD)		in (mm)		75.5 (1918)		
T Power Unit Wid			in (mm)		42.5 (1080)		
U Power Unit Hei			in (mm)		51.5 (1308)		
V Outside Turnin			in (mm)	82.5 (2096)	84.5 (2146)	87.5 (2223)	
	ngle Stacking Aisle Width <sup>1</sup>		in ()		Contact Dealer		
Carriage Heigh	IL		in (mm)		36 (914)		
Step Height			in (mm)		9.25 (235)		
	ТА				RF1-MD1X45 BATTERY COMPARTMENT SIZE		
ERFORMANCE DAT	IA			10.0"		21.01	
10 12				16.2"	18.2"	21.2"	
ravel Speed <sup>3</sup>	Maximum	Reate:	mph (km/h)		7 (11.3)		
uspension		Caster	%		Spring Loaded 7		
radability rade Clearance		Loaded	%		12		
aue clearance		Loaueu	70				
					RF1-MD1X45		
RUCK WEIGHTS					BATTERY COMPARTMENT SIZE		
				16.2"	18.2"	21.2"	
otal Weight		Without Battery	lb (kg)		5650 (2701)		
					RF1-MD1X45		
IRES					BATTERY COMPARTMENT SIZE		
				16.2"	18.2"	21.2"	
	Tire Type	Drive / Caster / Load			Polyurethane		
	Number (x = driven)	Drive / Caster / Load			1x / 1 / 4		
res		Drive	in (mm)		13.5 x 6 (343 x 152)		
Size (dia. X width)	Caster	in (mm)		8 x 4 (203 x 102)			
	=-== (				8 x 4 (203 x 102)		
	(,	Load	in (mm)				
rake Type		Load	in (mm)		Electric Disc Brake		
rake Type		Load	in (mm)				
		Load	in (mm)		Electric Disc Brake		
		Load	in (mm)	16.2"	Electric Disc Brake RF1-MD1X45	21.2"	
OWER SYSTEM		Load	in (mm)	16.2"	Electric Disc Brake RF1-MD1X45 BATTERY COMPARTMENT SIZE	21.2"	
DWER SYSTEM		Vidth	in (mm)	<b>16.2"</b> 16.2 (412)	Electric Disc Brake RF1-MD1X45 BATTERY COMPARTMENT SIZE 18.2"	<b>21.2"</b> 21.2 (539)	
OWER SYSTEM	Compartment Size				Electric Disc Brake RF1-MD1X45 BATTERY COMPARTMENT SIZE 18.2" Lead Acid		
OWER SYSTEM		Width	in (mm)		Electric Disc Brake RFI-MDIX45 BATTERY COMPARTMENT SIZE 18.2" Lead Acid 18.2 (463)		
OWER SYSTEM attery Type attery	Compartment Size (Maximum)	Width Length Height	in (mm) in (mm) in (mm)		Electric Disc Brake RF1-MD1X45 BATTERY COMPARTMENT SIZE 18.2" Lead Acid 18.2 (463) 38.62 (981) 31 (787)		
OWER SYSTEM attery Type attery	Compartment Size (Maximum) Voltage / Capacity	Width Length	in (mm) in (mm) in (mm) V/AH		Electric Disc Brake RF1-MD1X45 BATTERY COMPARTMENT SIZE 18.2" Lead Acid 18.2 (463) 38.62 (981)		
OWER SYSTEM	Compartment Size (Maximum)	Width Length Height Maximum	in (mm) in (mm) in (mm)	16.2 (412)	Electric Disc Brake	21.2 (539)	
attery Type Battery B-hour ratings)	Compartment Size (Maximum) Voltage / Capacity	Width Length Height Maximum Minimum	in (mm) in (mm) in (mm) V/AH Ib (kg) Ib (kg)	16.2 (412) 2000 (907)	Electric Disc Brake	21.2 (539) 2600 (1179)	
OWER SYSTEM attery Type attery S-hour ratings)	Compartment Size (Maximum) Voltage / Capacity Weight	Width Length Height Maximum Minimum	in (mm) in (mm) in (mm) V/AH lb (kg) lb (kg) hp (kw)	16.2 (412) 2000 (907)	Electric Disc Brake	21.2 (539) 2600 (1179)	
OWER SYSTEM attery Type attery S-hour ratings)	Compartment Size (Maximum) Voltage / Capacity Weight Drive	Width Length Height Maximum Minimum	in (mm) in (mm) in (mm) V/AH Ib (kg) Ib (kg)	16.2 (412) 2000 (907)	Electric Disc Brake	21.2 (539) 2600 (1179)	
OWER SYSTEM attery Type attery	Compartment Size (Maximum) Voltage / Capacity Weight Drive Load Handling	Width Length Height Maximum Minimum	in (mm) in (mm) in (mm) V/AH lb (kg) lb (kg) hp (kw)	16.2 (412) 2000 (907)	Electric Disc Brake	21.2 (539) 2600 (1179)	

- Contact your local Toyota dealer for more information.
   Add 8.5 in. (216 mm) for optional extended operator backrest.
   Maximum speed provided is after break-in period. Values vary with truck weight, rolling resistance, mast height, options, and battery condition.

#### **EXTERIOR DIMENSIONS**





#### **MAST SPECIFICATIONS**

MAST TYPE	<b>MAXIMUM</b> FORK HEIGHT (TOP OF FORKS)	OVERALL HEIGHT		FREE LIFT			TILT RANGE <sup>1</sup>	
		LOWERED EXTENDED WITH STANDARD 36" LOAD BACKREST	EXTENDED	WITH	OVERHEAD	OVERHEAD	HEI BANGE	
			STANDARD 36" LOAD BACKREST	GUARD HEIGHT	COMPARTMENT HEIGHT	FWD	BWD	
	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	deg	deg
RF1-MD1X45								
Open View Full-Free Lift Three-Stage Mast (FSW)	187 (4750)	87 (2210)	223 (5664)	43 (1092)	86.75 (2203)	75.5 (1917)	З	4.5
	211 (5359)	95 (2413)	247 (6274)	53 (1346)	94.75 (2407)	83.5 (1835)	З	4.5
	226 (5740)	102 (2591)	262 (6655)	50 (1270)	95 (2413)	83.75 (2127)	3	4.5
	250 (6350)	110 (2794)	286 (7264)	61 (1549)	90.8 (2306)	79.55 (2020)	3	4.5
	268 (6807)	118 (2997)	304 (7722)	69 (1753)	90.8 (2306)	79.55 (2020)	3	4.5

1 Tilting Load Backrest. NOTE: Height of standard load backrest is 36 in (914 mm).



### WORLD-CLASS MATERIAL HANDLING SOLUTIONS

#### PARTNER WITH TOYOTA, AND LET US HELP DEVELOP THE RIGHT SOLUTION FOR YOU.

With access to the world's industry-leading lineup of material handling products, Toyota dealers are uniquely positioned to help you solve your wide-ranging challenges. Built for every application, Toyota can provide the most complete set of solutions for material handling, automation, energy, advanced logistics, and warehouse optimization.

Toyota is here to help optimize your business for maximum efficiency. Utilizing Toyota Lean Management principles, Toyota dealers can provide insights and develop appropriate plans to tackle your specific operational needs. This unique approach to optimization and elimination of waste can provide you with significant competitive advantages and a sustainable lean culture for lasting process improvement.

Visit us at: ToyotaForklift.com for more information.

