

 **MANITOU**

MRT SERIES

ROTATING telescopic handlers





SUCCESS THROUGH IMAGINATIVE POWER

MANITOU, the world's largest manufacturer of rough terrain forklift trucks, has its roots in a family tradition of innovation and imaginative power. For generations, the Braud family has dedicated themselves to creating innovative products for the lifting and handling markets.

Manufacturing its first truck in 1953, MANITOU is a pioneer in the rough terrain forklift market. By responding to market trends, MANITOU offers a complete line of rough terrain handling equipment adapted to the specific needs and challenges of each industry.

The long history of reliable, relevant equipment has led to more than 300,000 MANITOU rough terrain forklifts operating daily in more than 120 countries. This worldwide presence is backed up by a MANITOU dealer network staffed with trained mechanics and sales specialists to help you with your material handling requirements.

TRIPLE PERFORMANCE

The MANITOU MRT Series rotating telescopic handlers bring complete versatility to any jobsite.

These all-terrain machines combine practicality and performance with their impressive lift heights, optimal visibility, powerful diesel engines and 3-in-1 capabilities with telehandler, winch and platform modes. Paired with a wide variety of attachments, the MRT Series are the right machines for the job.

MRT 1840 EASY 360°

8,800 lbs. (4000 kg) lift capacity
58'9" (17.9 m) lift height
101 hp (74.5 kW)



MRT 2150 PRIVILEGE PLUS

11,000 lbs. (5000 kg) lift capacity
67'7" (20.6 m) lift height
150 hp (110 kW)



MRT 2540 PRIVILEGE PLUS

8,800 lbs. (4000 kg) lift capacity
80'9" (24.6 m) lift height
150 hp (110 kW)



x1 telehandler mode

When utilized as rough terrain telescopic handlers, the MRT Series machines are capable of moving a variety of bulky and loose materials with forks or buckets.



x2 winch mode

Stabile platform provided by outriggers, combined with select attachments, allow MRT Series telescopic handlers to lift and place heavy loads.



x3 platform mode

Work platforms provide secure access at elevation with impressive capacity and precise control. A choice of work platform, swing arm or 3D system offers increased flexibility.

POWER and PRECISION

TURBOCHARGED

150-hp (110 kW) on the Privilege Plus models with 101-hp (74.5 kW) Interim Tier IV engine on the MRT 1840 Easy 360°

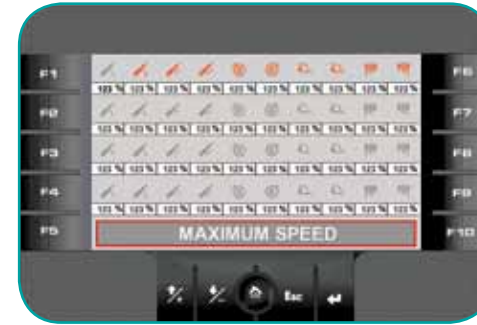
HYDROSTATIC TRANSMISSION

Coupled with a two speed gearbox, this system provides optimum power and control of travel for precise placement of the machine.

ECOLOGICAL MODE

Engine system automatically adapts itself to the needs of the transmission system, allowing you to significantly reduce fuel consumption during movements.

STORE UP TO 4 SPEED PARAMETERS WITH HYDRAULIC FUNCTION SPEED MEMORY



INDUSTRY-LEADING ATTACHMENT RECOGNITION SYSTEM WITH ADAPTIVE LOAD CHARTS

LIFT CAPACITIES UP TO **11,000 lbs** [5000 kg]

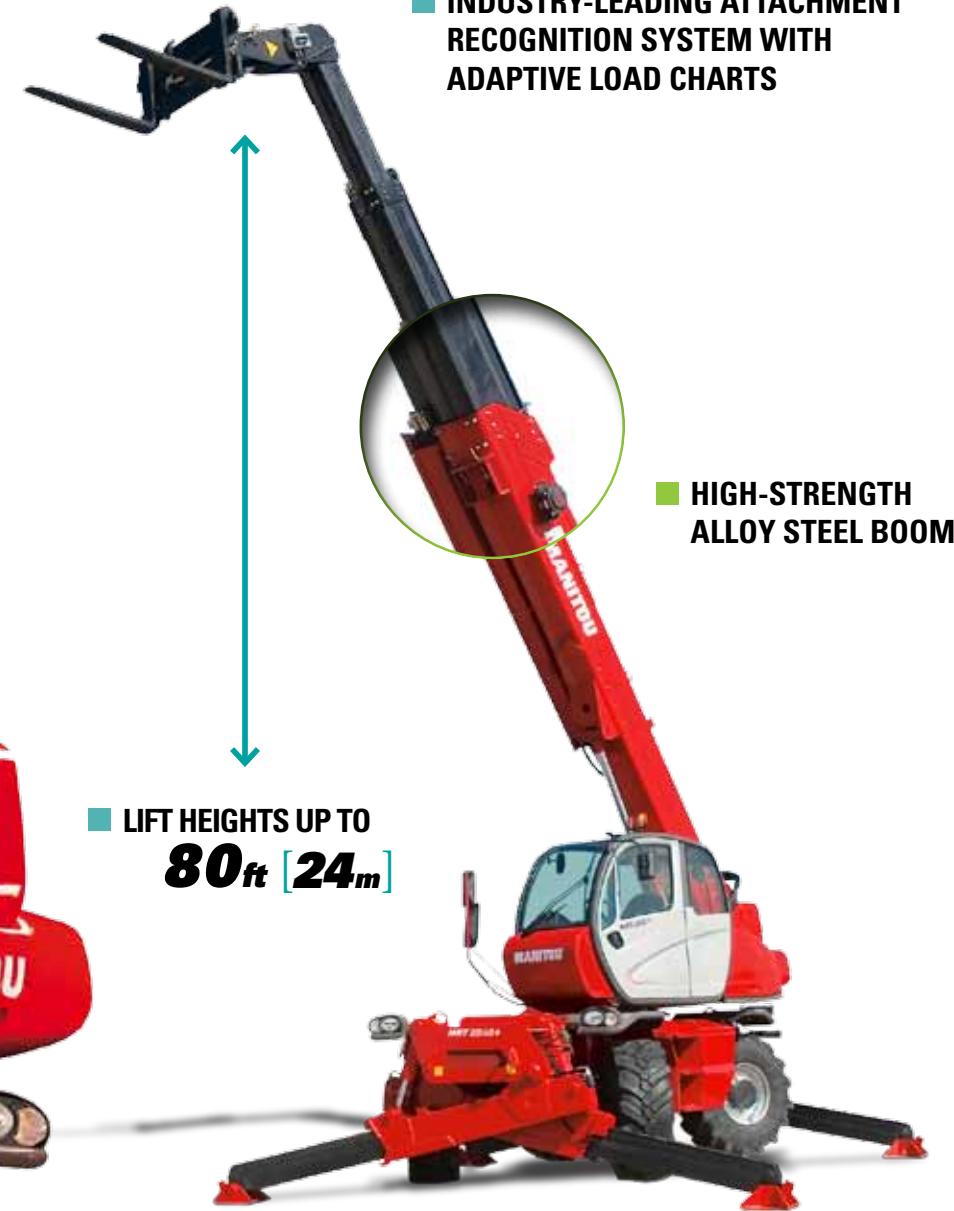


FORWARD REACH TO **60ft** [18m]



SPACIOUS, ERGONOMIC CAB WITH DUAL-JOYSTICK CONTROLS

4-WHEEL DRIVE AND OSCILLATING REAR AXLE



HIGH-STRENGTH ALLOY STEEL BOOM

LIFT HEIGHTS UP TO **80ft** [24m]

360° ROTATION ON ALL MODELS

SYSTEMS and STABILIZERS

FRAME LEVELING SYSTEM

Tackle rough or sloping terrain with ease. Simply push a lever to keep your load horizontal.

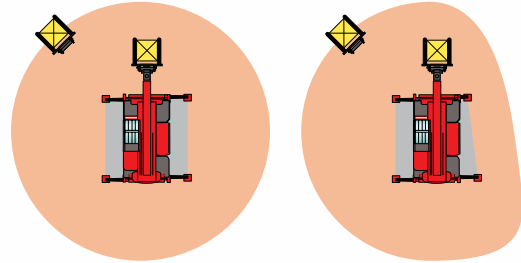
Not available on MRT 1840 Easy 360°



ADAPTABLE CALCULATOR

Adjusts the load chart and lifting zones based on the stabilizer position.

Not available on MRT 1840 Easy 360°



FULLY PROTECTED CYLINDERS



ADJUSTABLE STABILIZATION

Telescopic scissor design on the stabilizers enables the legs to be partially deployed when obstacles are present or space is limited.

Not available on MRT 1840 Easy 360°



EXTRA LARGE BEARING SURFACES ON THE PADS

Not available on MRT 1840 Easy 360°

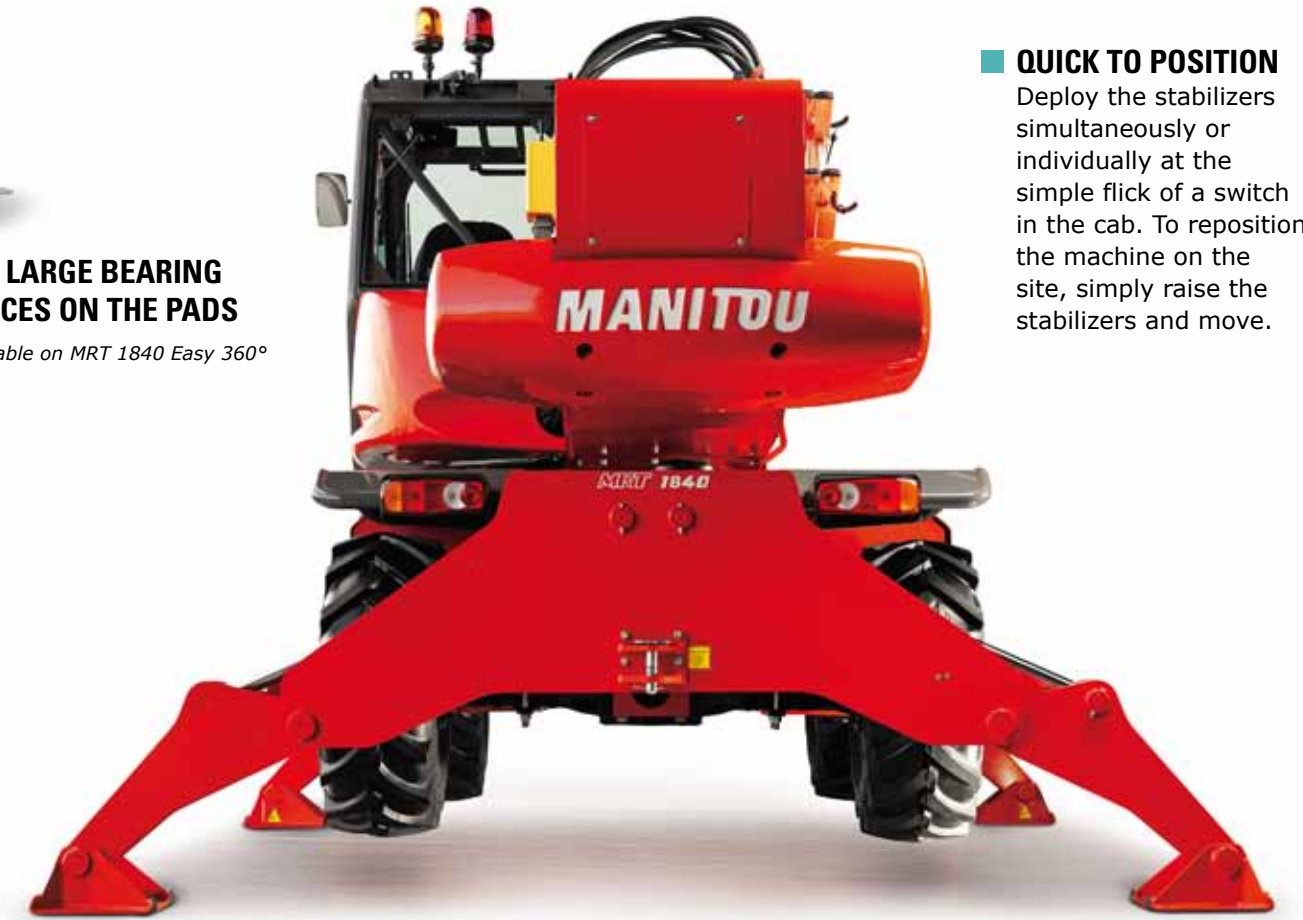
LEVEL CORRECTION FRONT AXLE

OPTIMUM SUPPORT

Enjoy excellent stability on all terrain. The stabilizers form a square when fully deployed, guaranteeing uniform stability regardless of upper structure position.

QUICK TO POSITION

Deploy the stabilizers simultaneously or individually at the simple flick of a switch in the cab. To reposition the machine on the site, simply raise the stabilizers and move.



COMPACT SETUP

When the pads are retracted, they are automatically integrated into the machine's body, resulting in no loss of ground clearance.



OSCILLATING AXLE LOCK-OUT SYSTEM

When the machine is standing on its wheels and the upper structure is rotated by more than 15°, rear axle oscillation is locked out. You can work in safety and retain maximum capacity.

CONTROLS and ERGONOMICS

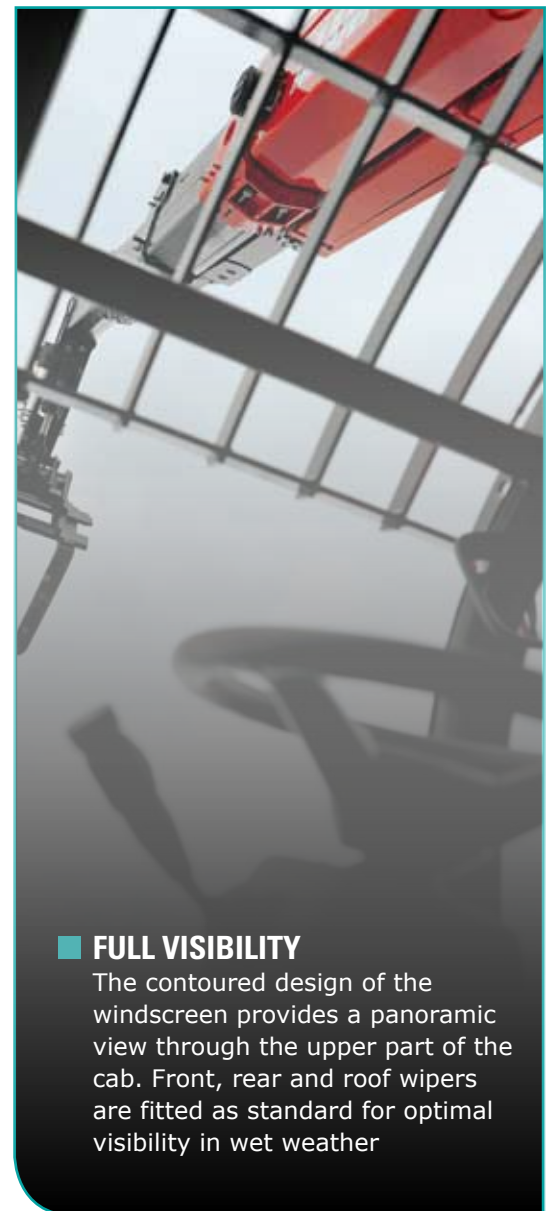


LEFT JOYSTICK
Simultaneous control of telescope extension/turret swing/accessory control

RIGHT JOYSTICK
Simultaneous control of load lifting/fork tilting

MRT PRIVILEGE PLUS CAB

- LCD WORKING DATA DISPLAY**
Keep informed on the state of your machine. Identification of the machine's operating mode (stabilized, frontal on tires, rotation etc.), attachment recognition, hydraulic movement speed selection and more are on an alphanumeric LCD display.
- STORE UP TO 4 SPEED PARAMETERS**
- HYDRAULIC FUNCTION SPEED MEMORY**
According to the working situation and type of work, you are able to store the maximum movement speeds of the boom lift, extend, fork tilt, turret rotation and auxiliary hydraulic function.
- SHIFTING MADE EASY**
The drive control is integrated into the right-hand joystick so your hands do not need to leave the wheel to shift the machine.
New on the MRT 1840 Easy 360!
- 2 JOYSTICKS ARE STANDARD FOR SIMULTANEOUS CONTROL OF ALL MOVEMENTS**



FULL VISIBILITY
The contoured design of the windscreen provides a panoramic view through the upper part of the cab. Front, rear and roof wipers are fitted as standard for optimal visibility in wet weather



MRT 1840 EASY 360° CAB

- COMPLIES WITH ROPS/FOPS SAFETY STANDARDS**
- ADJUSTABLE SEAT AND STEERING WHEEL**
- CAB OPTIONS**
Self-cleaning step, wide door for easier access, tilting seat, clear comprehensive dashboard and electric windows.
- INTUITIVE HANDLING**
Two electro-hydraulic joysticks are fitted to the armrests and are always within reach, regardless of seat position.



CAMERA VIEW (OPTIONAL)
Perform close maneuvers without compromising safety. Lateral and rear cameras are also available to increase visibility to areas of the machine that are difficult to view.

REMOTE CONTROL
Machine can be controlled from a distance to provide additional versatility. It can also be used to work with your machine in platform mode.



SAFETY and SERVICEABILITY



RESTRICTIVE WORKING AREA

To ensure the safety of your repeated handling movements in congested sites, you can limit the operational area of the machine, restricting the lift height and front and side distance.



SAFE, RELIABLE BRAKING

Oil-bath multiple-disc brakes are integrated into the axles for precise machine stopping.

CHAIN TENSION BALANCER

Tension is split equally between the chains. A hard-wired sensor system continuously checks the state of the chains.

MANITOU LOAD SYSTEM

Continuously analyzes the position of your load in accordance with the machine's work configuration. The system restricts the working area based on the accessory used and load being handled.



SIMPLIFIED ACCESS

The engine positioned to the side of the chassis allows easy access from three sides. The air filter and battery are accessible through a hood at the rear of the chassis.

EXTERNAL HYDRAULIC HOSES

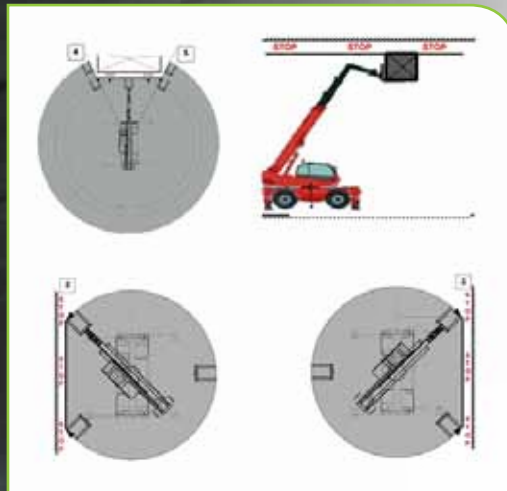
Hydraulic hoses are positioned on the outside of the boom for quicker maintenance access.

AUTO DIAGNOSIS

Displays the state of the machine on the screen. In the event of a problem, this device switches to safe state and prevents all movements. The faulty component is displayed on the screen in order to minimize machine downtime.

ELECTRICAL CIRCUIT PROTECTION

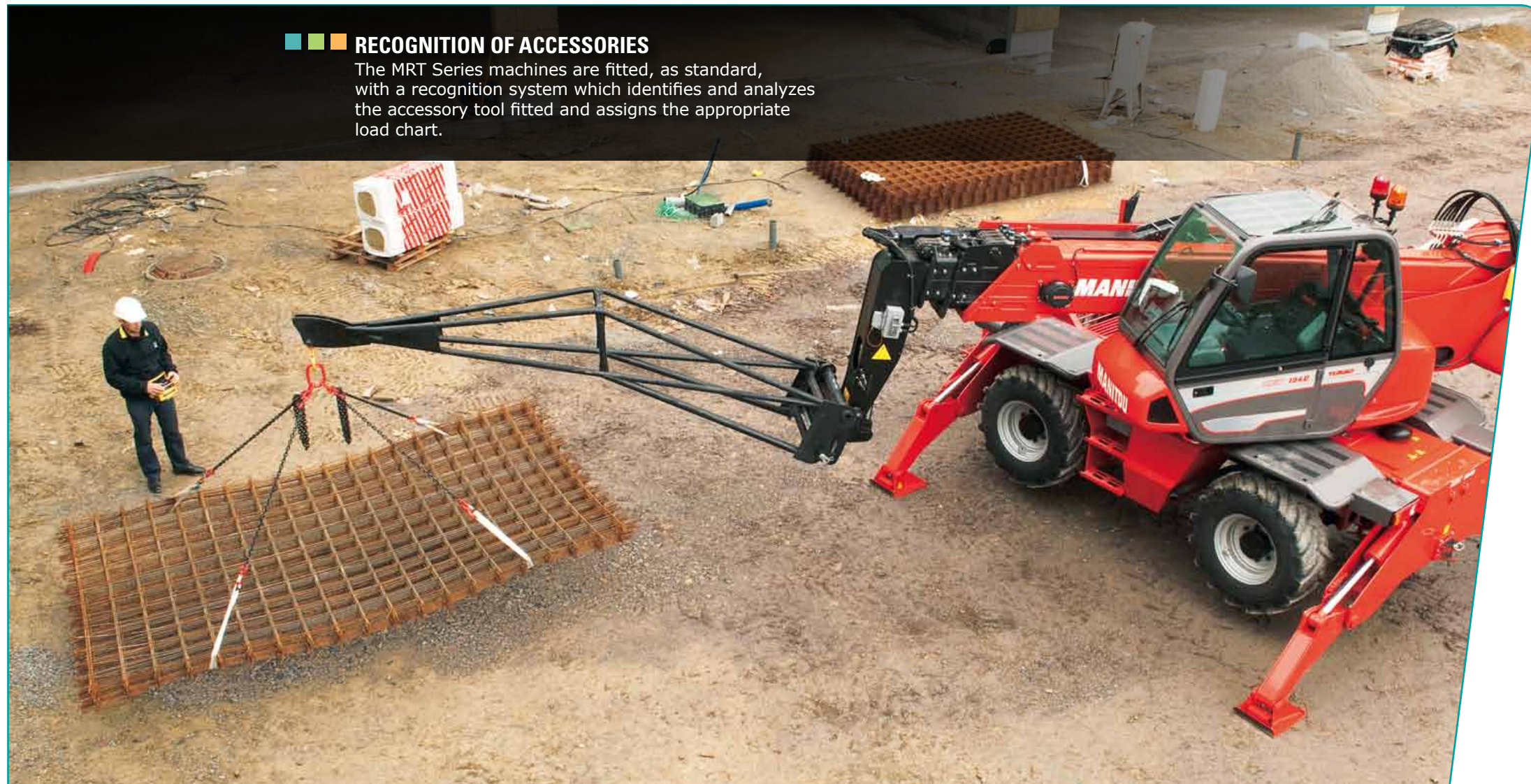
The entire electrical installation and all components (printed circuit boards, fuse boxes and connections) are rated IP67, ensuring that they are dust free and watertight.



TELEHANDLER WINCH & PLATFORM MODES

RECOGNITION OF ACCESSORIES

The MRT Series machines are fitted, as standard, with a recognition system which identifies and analyzes the accessory tool fitted and assigns the appropriate load chart.



ITA FORK CARRIAGE

Equipped with forks that meet the FEM classification (ISO2328), it suits all pallet load handling tasks. Options include load backrest, fork extension and side shift carriage.

FLOATING FORK CARRIAGE

Designed for placing materials on uneven surfaces, its integrated backrest optimizes the stability of the load.

BUCKETS

Ideal for bulk handling, specifically sand, gravel and other light materials, various buckets are available to suit your applications.

JIBS

With short lift hook or longer jibs with hooks to choose from, you are sure to find the jib to meet your requirements for lifting, positioning, or placing loads.

WINCH

Providing additional flexibility, the single winch can be mounted on the boom tip for transportation and storage on your worksites.

JIB WITH WINCH

Combines all of the advantages of the winch and the jib. It will allow you to position your loads in places which are difficult to access.

STANDARD PLATFORM

Available in 805 lbs. (365 kg) or 2,205 lbs. (1000 kg) versions. Rotating and extendable.

AERIAL JIB PLATFORM

With an extra telescopic rotating arm, it allows you to extend the platform 21 feet (6.4 m) horizontally or vertically, or to work below wheel level (for example, working below grade).

SPECIAL PLATFORM

3D platform or raised platform for working inside buildings.

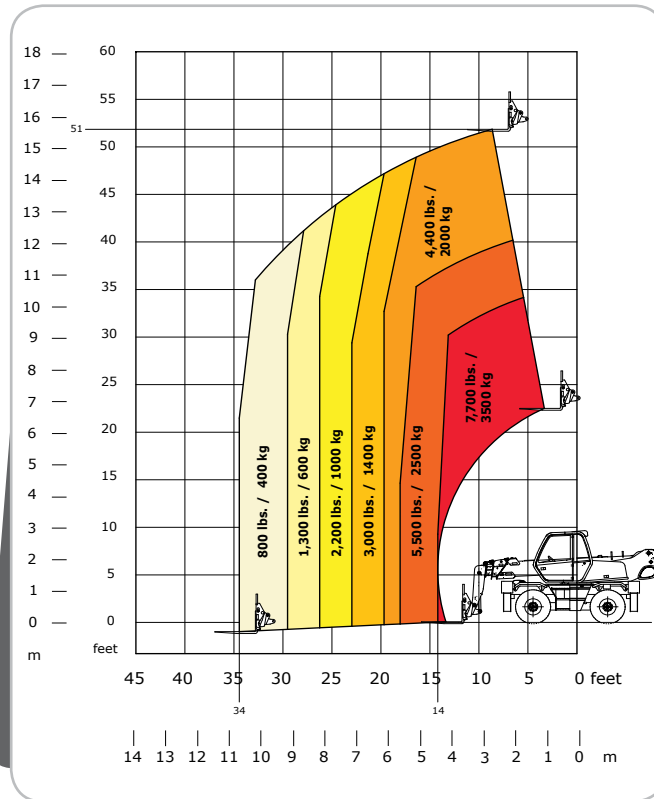
OTHER ACCESSORIES

Concrete Buckets
I-Beam Clamps

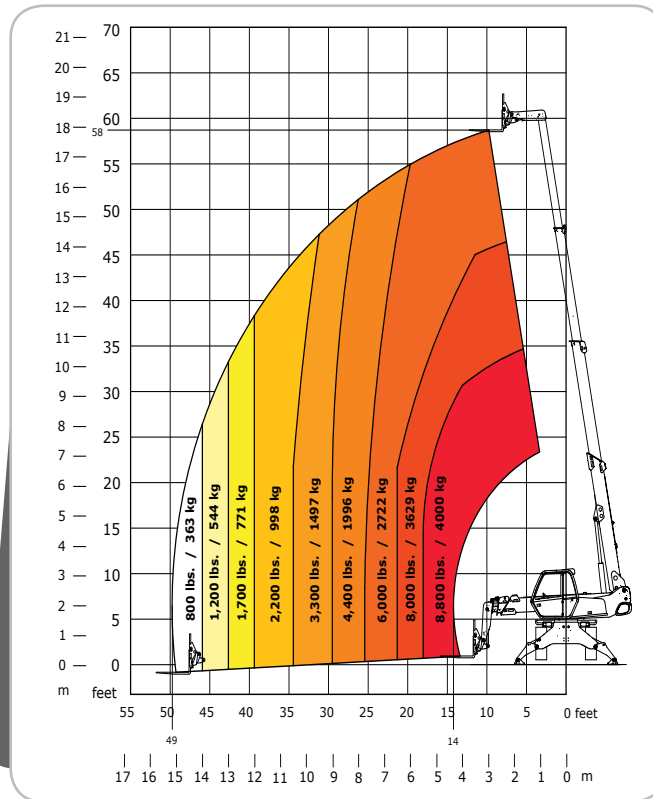
MRT SERIES FEATURES	MRT 1840 EASY 360°	MRT 2150 PRIV. +	MRT 2540 PRIV. +
360° Continuous Rotation	●	●	●
Return to Tank	●	●	●
Enclosed Cab with Heat & A/C	●	●	●
Front/Rear Wipers and Washers	●	●	●
Roof Wiper	●	●	●
Cloth Seat	●	●	●
Rear View Mirror	●	●	●
Front/Rear Work Lights	●	●	●
Road Lights	●	●	●
Rotating Light	●	●	●
Boom-mounted Work Lights	●	●	●
Audio Warning Back-up Alarm	●	●	●
Sunscreen Roof and Windshield	●	●	●
Boom Angle	●	●	●
Frame Level Indicator	●	●	●
Boom Extension Decals A-B-C-D-E	●	●	●
Battery Cut-Off in Engine Compartment	●	●	●
Automatic Stabilizer Leveling	●	●	●
Work Platform Predisposition	●	●	●
Remote Boom Control	●	●	●
Remote Boom Control - Battery Charger	●	●	●
E-RECO Attachment Recognition System	●	●	●
7" (178 mm) Color Control Display	●	●	●
Restrictive Work Zone System	●	●	●
Hydraulic Function Adjustment System	●	●	●
F-N-R Directional Control on Joystick	●	●	●
Windshield Protector - Front Window	○	○	○
Emergency Brake	○	○	○
Cold Weather Package	○	○	○
Radio/CD	○	○	○
Stabilizer Pads (4)	○	○	○
Tool Box	○	○	○
Telma Brake System		○	○
Video Camera System		○	○

● Standard ○ Optional

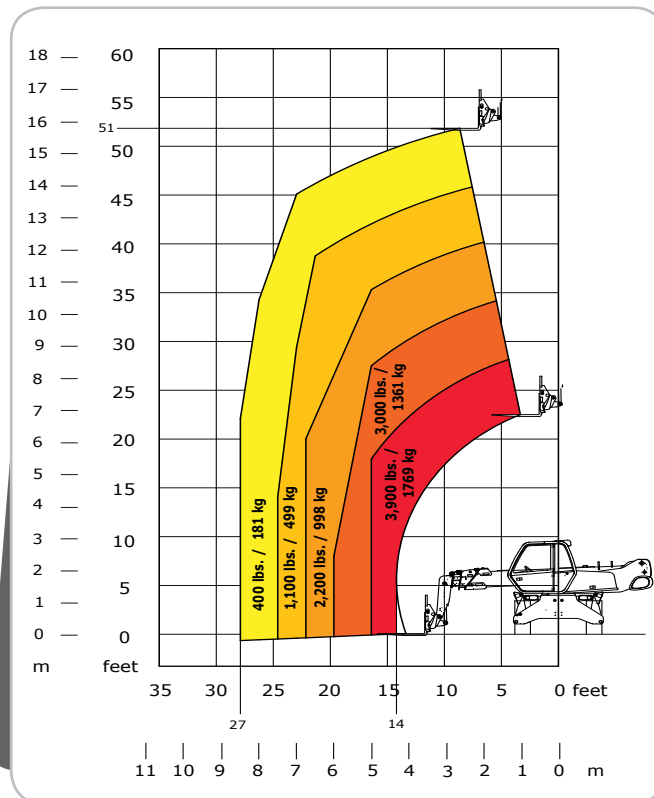
MRT 1840 EASY 360° ROTATING TELESCOPIC HANDLER LOAD CHARTS



Frontal Position on Tires with Forks



Rotation on Stabilizers with Forks



Rotation on Tires with Forks

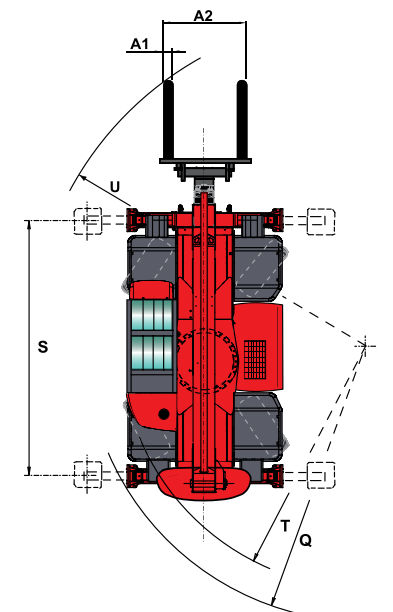
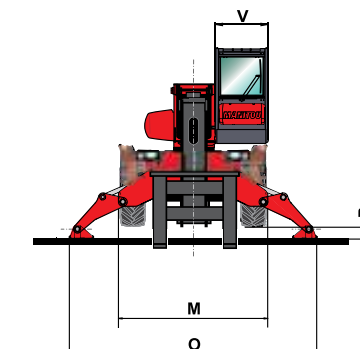
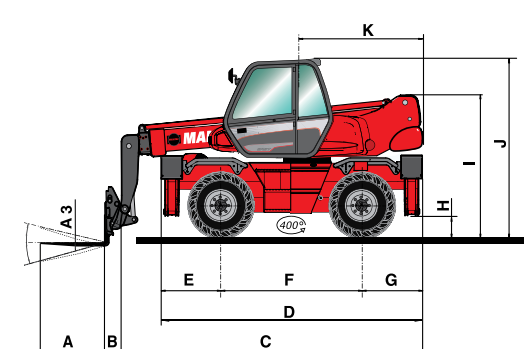


MRT 1840 EASY 360° ROTATING TELESCOPIC HANDLER SPECIFICATIONS

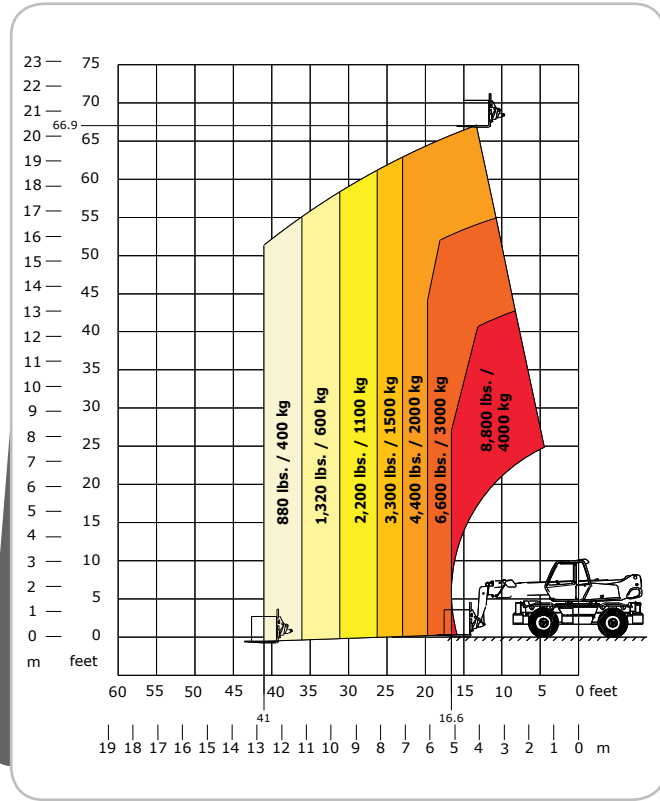
MRT 1840 Easy 360°			
	CAPACITIES	Lift Capacity (kg)	8800 lbs. (4000)
		Max. Lift Height (m)	58'9" (17.9)
		Capacity at Max. Lift Height (kg)	6000 lbs. (2721)
		Max. Forward Reach (m)	49'6" (15.1)
		Cap. at Max. Forward Reach (kg)	800 lbs. (363)
	ENGINE	Manufacturer	Perkins
		Power (kW)	101 hp (74.5 EPA Interim Tier IV)
		Aspiration	Turbocharged
		Model	854E-E34TA
		Rated Speed	2200 rpm
	COMPONENTS	Transmission	Hydrostatic with Automatic Power Regulation (variable displacement pump and motor with control inching)
		Max Travel Speed (km/hr)	20 mph (32)
		Selective Steering	2-Wheel, 4-Wheel, Crab
		Service Brake	Multiple disc brakes hydraulic front and rear axles
		Parking Brake	Hydraulic Front Axle
	HYDRAULIC SYSTEM	Axles	Automatic Rear Axle Locking System at a Rotation Over 15°
		Pump Type	Gear Pump
		Total Capacity (L/min)	30.4 gpm (115)
		System Pressure (bar)	3916 psi (270)
		GENERAL SPECIFICATIONS	Approximate Weight (kg)
		Length - Less Forks (m)	17'3" (5.26)
		Width (m)	7'11" (2.4)
		Ground Clearance (m)	13" (0.34)
		Wheelbase (mm)	7'7" (2320)
		Turning Radius - Outside Tire (m)	11'10" (3.6)
		Overall Height (mm)	99" (2.97)
		Standard Tires	400/70 - 20 14 PR
		Drawbar Pull (daN)	19,334 lbf. (8600)
		FLUID CAPACITIES	Cooling System (L)
		Engine Oil (L)	2.14 (8.1)
		Hydraulic Oil (L)	39.6 (150)
		Fuel Tank (L)	34.3 (130)

MRT 1840 Easy 360°	
A	3'11" (1200)
A1	5" (125)
A2	4'4" (1320)
A3	2" (50)
B	11" (290)
C	17'3" (5255)
D	14'3" (4350)
E	3'4" (1015)
F	7'7" (2320)
G	3'4" (1015)
H	13" (340)
I	7'9" (2375)
J	9'9" (2970)
K	8'2" (2485)
M	7'11" (2400)
O	13'0" (3975)
P	6" (160)
Q	12'9" (3900)
S	13'1" (4000)
T	11'10" (3600)
U	17'2" (5235)
V	3'1" (950)
Y	12°
Z	105°

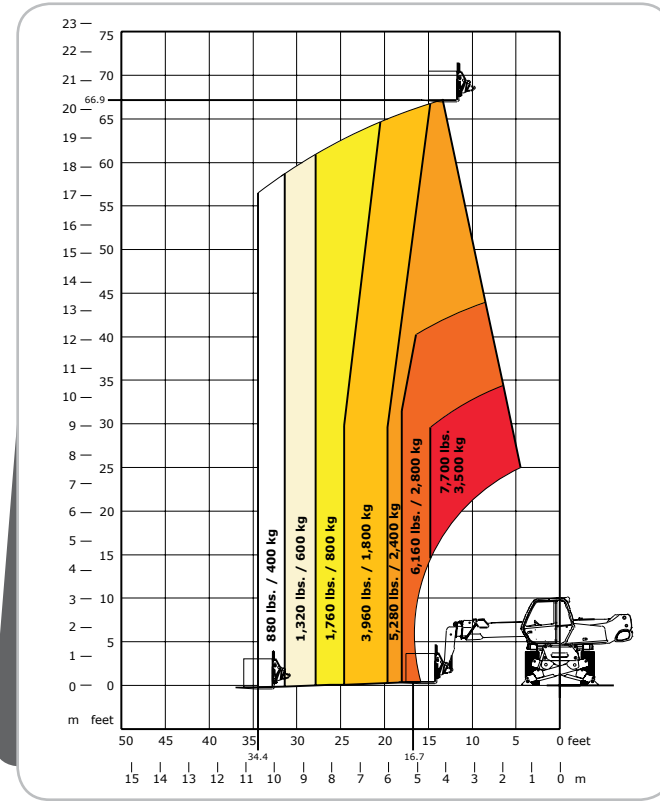
DIMENSIONS REFERENCE DIAGRAMS



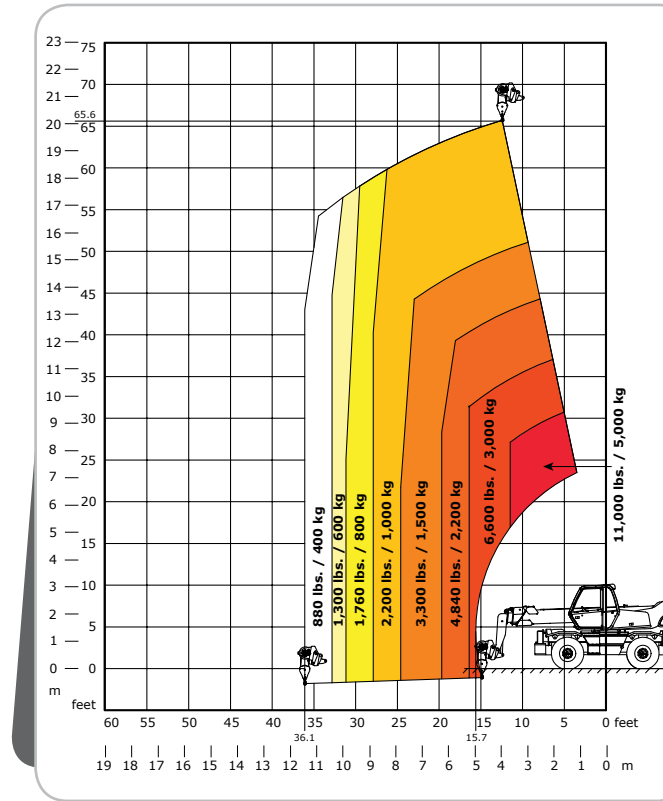
MRT 2150 PRIVILEGE PLUS ROTATING TELESCOPIC HANDLER LOAD CHARTS



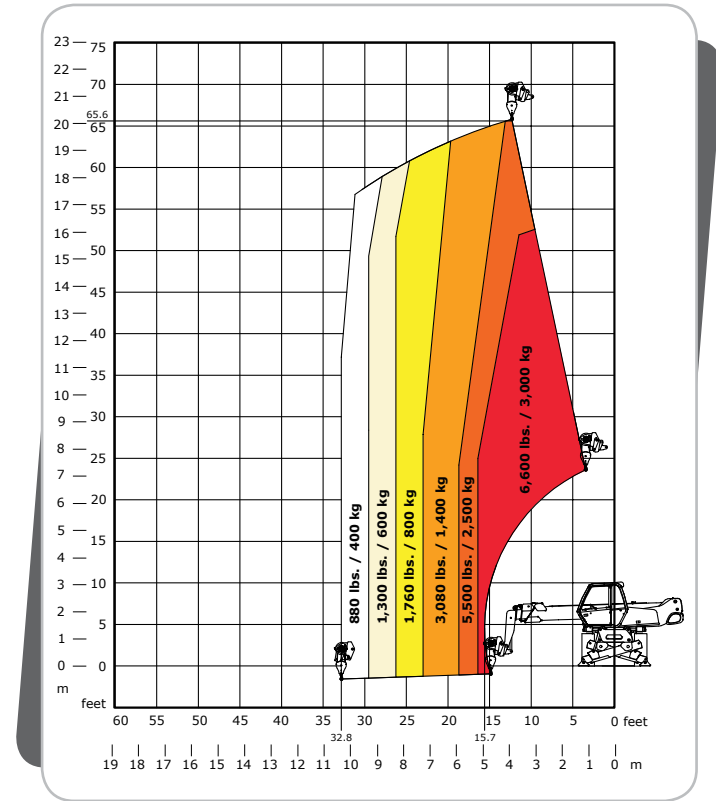
Frontal Position on Tires with Forks



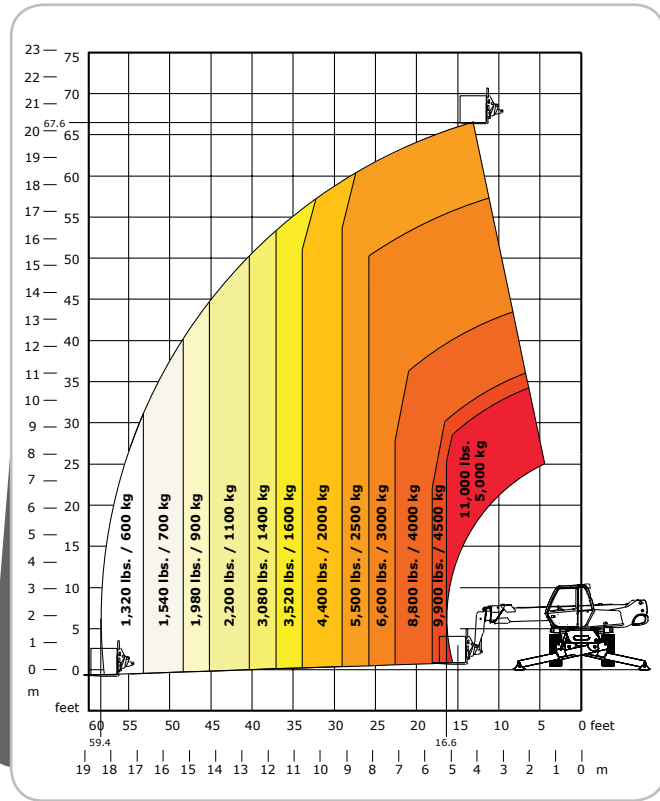
Rotation on Partial Stabilizers with Forks



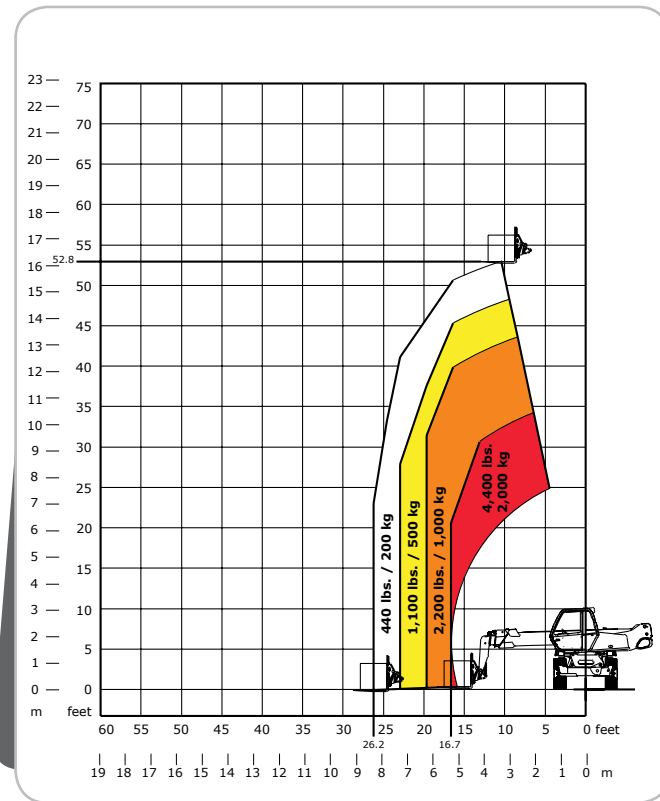
Frontal Position on Tires with 3 Ton Winch



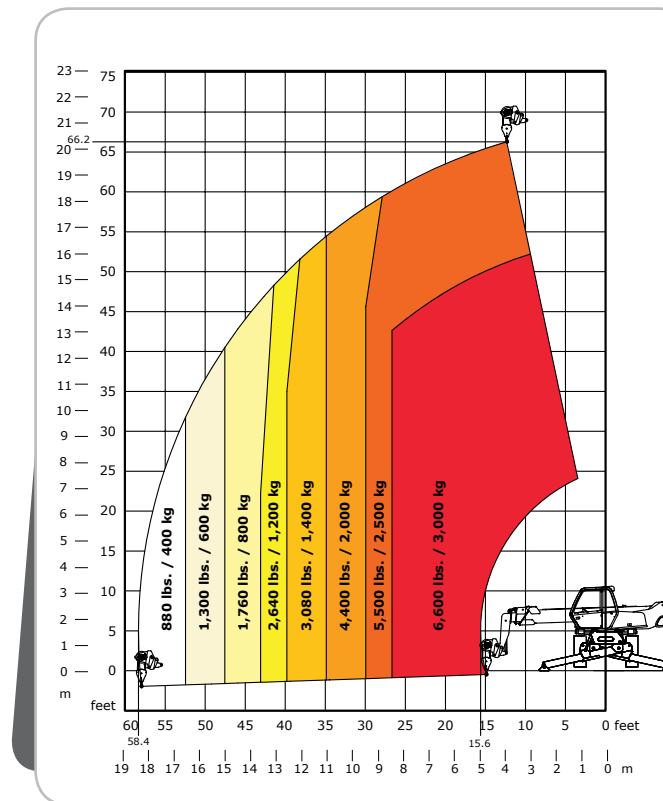
Rotation on Partial Stabilizers with 3 Ton Winch



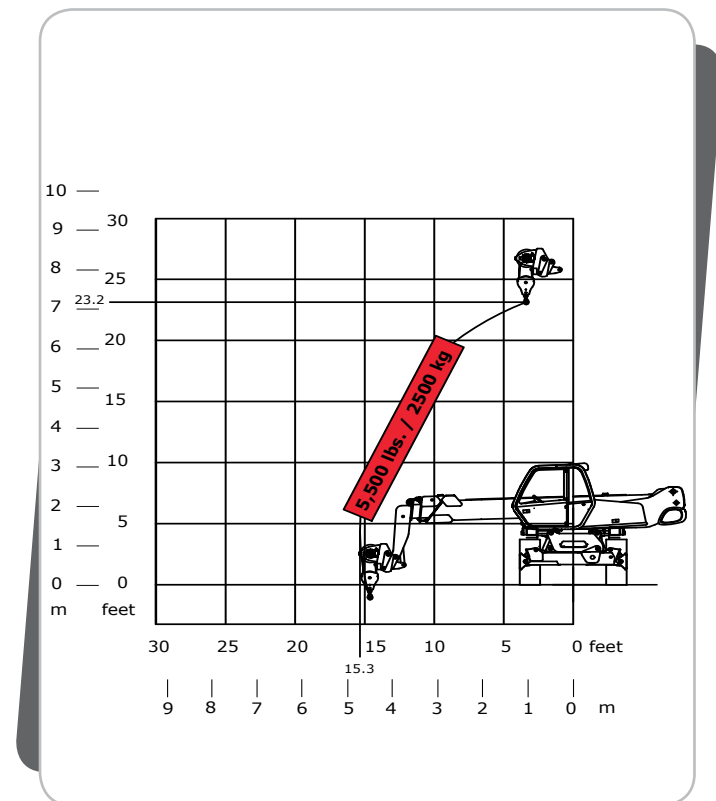
Rotation on Stabilizers with Forks



Rotation on Tires with Forks

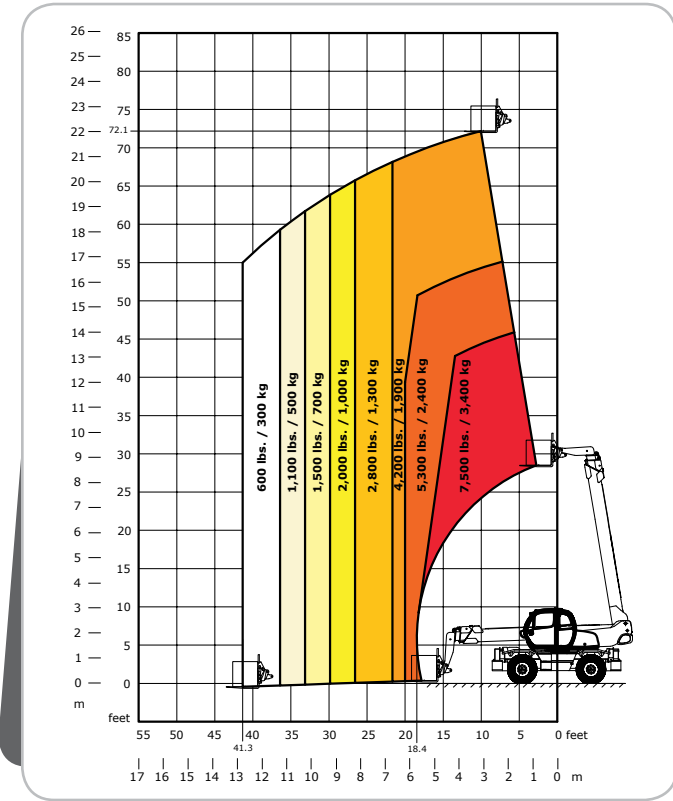


Rotation on Stabilizers with 3 Ton Winch

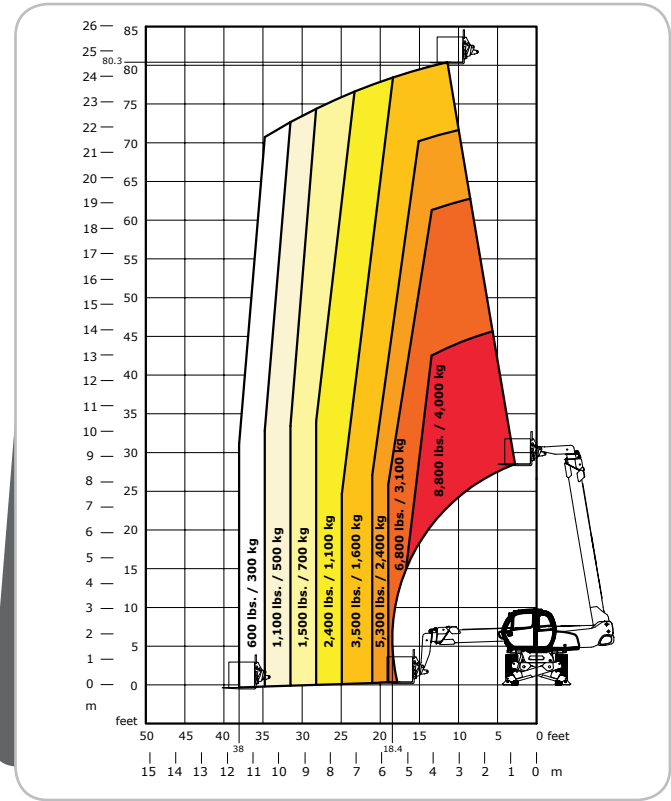


Rotation on Tires with 3 Ton Winch

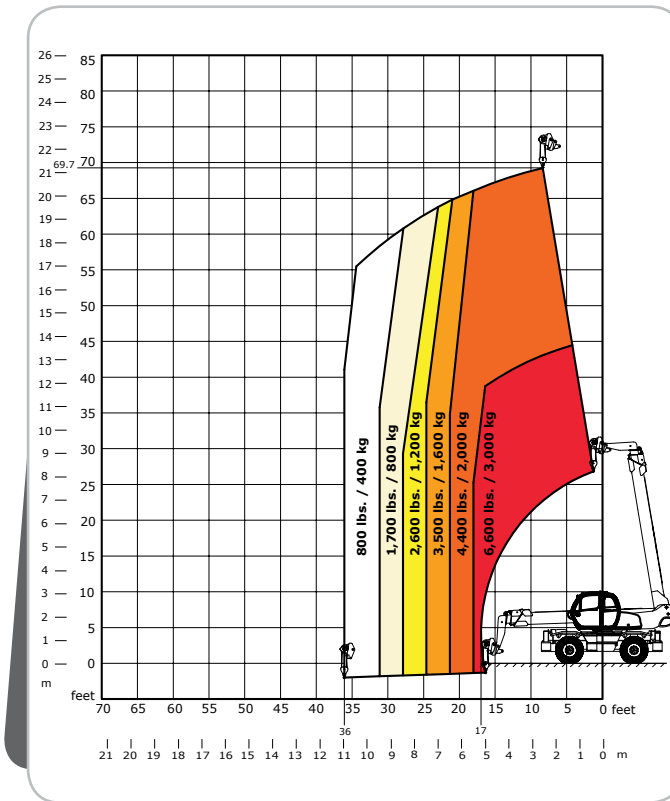
MRT 2540 PRIVILEGE PLUS ROTATING TELESCOPIC HANDLER LOAD CHARTS



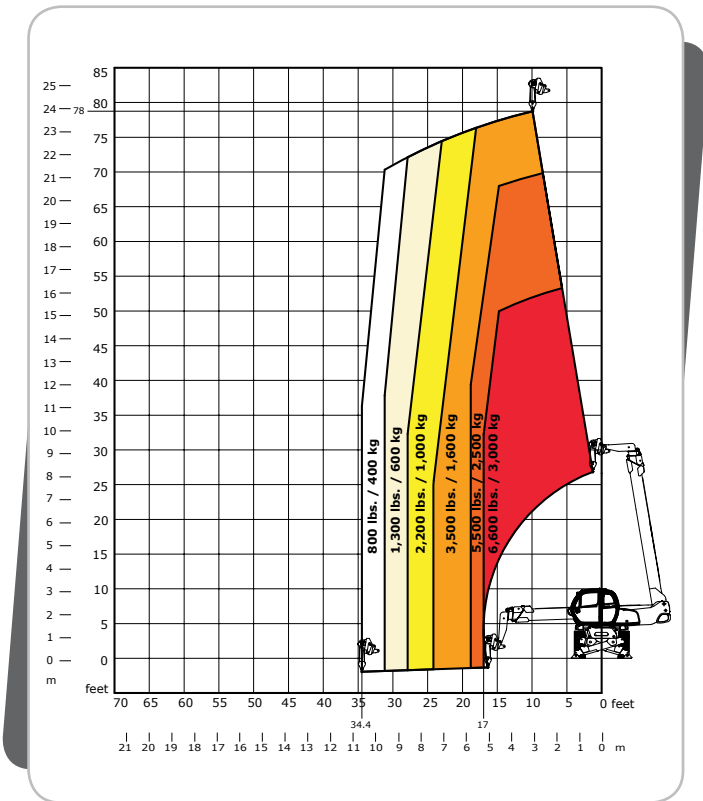
Frontal Position on Tires with Forks



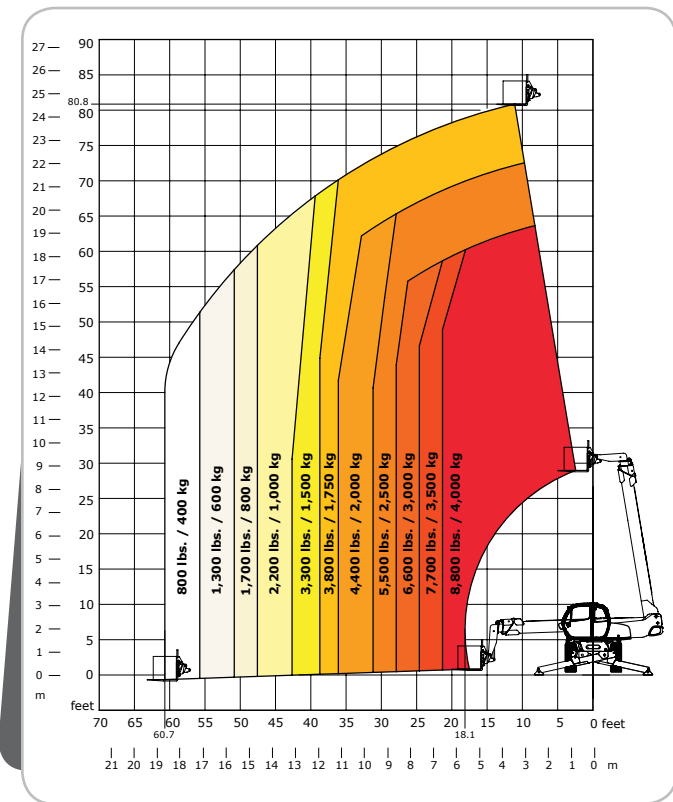
Rotation on Partial Stabilizers with Forks



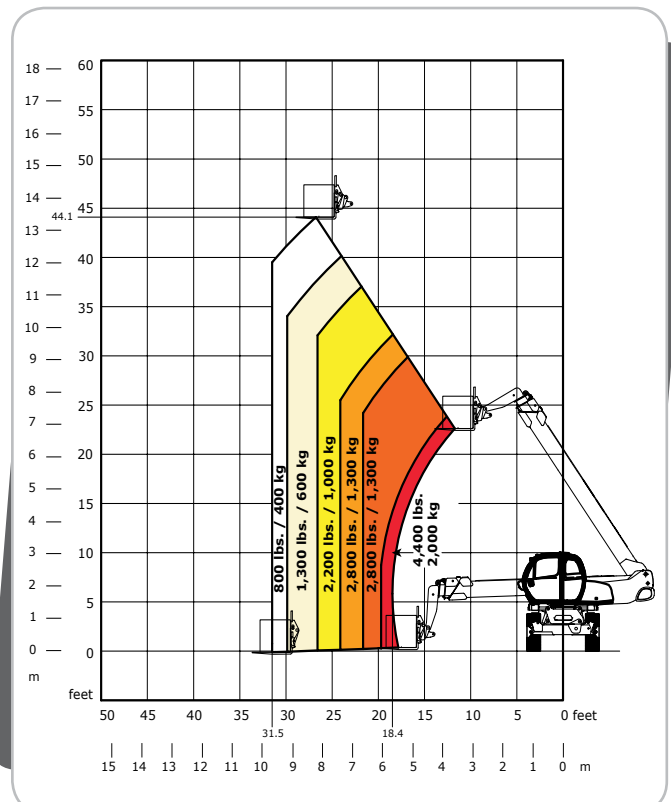
Frontal Position on Tires with 3 Ton Winch



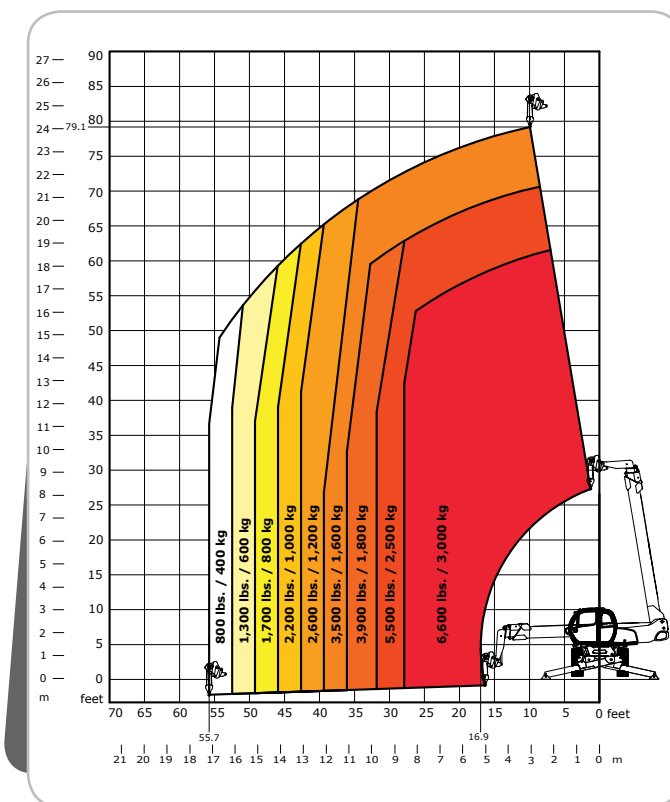
Rotation on Partial Stabilizers with 3 Ton Winch



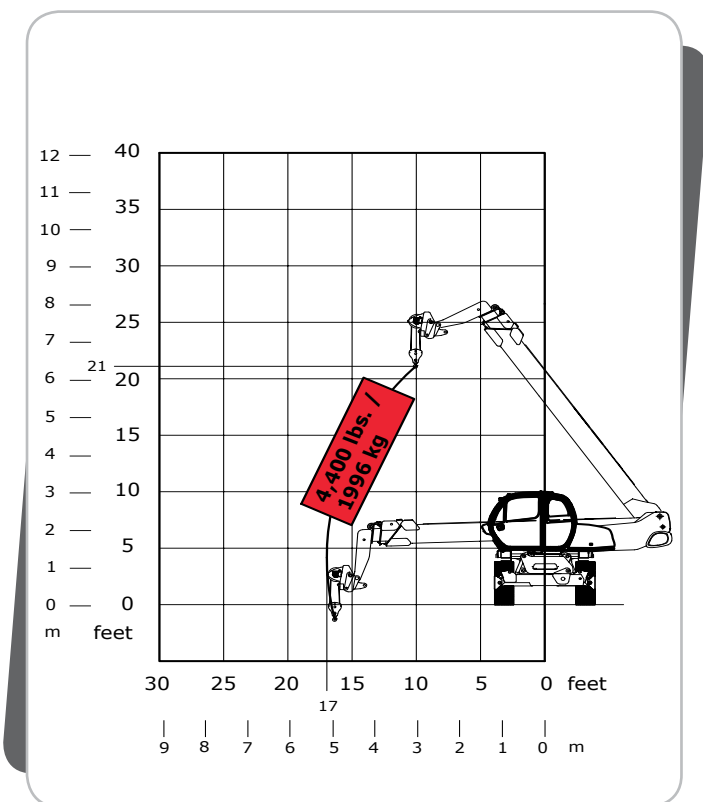
Rotation on Stabilizers with Forks



Rotation on Tires with Forks









Rotation on Stabilizers with 3 Ton Winch



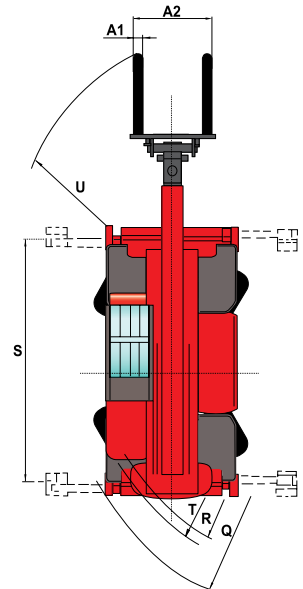
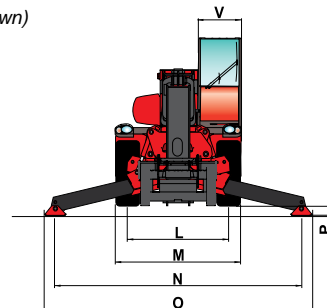
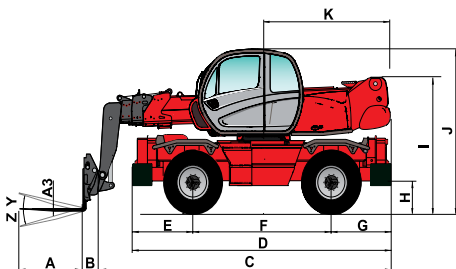
Rotation on Tires with 3 Ton Winch

MRT PRIVILEGE PLUS ROTATING TELESCOPIC HANDLER SPECIFICATIONS

		MRT 2150 Privilege Plus	MRT 2540 Privilege Plus	
	CAPACITIES	Lift Capacity (kg)	11,000 lbs. (5000)	8800 lbs. (4000)
		Max. Lift Height (m)	67'7" (20.6)	80'8.5" (24.6)
		Capacity at Max. Lift Height (kg)	5500 lbs. (2500)	3800 lbs. (1750)
		Max. Forward Reach (m)	59'5" (18.11)	60'8" (18.5)
		Cap. at Max. Forward Reach (kg)	1320 lbs. (600)	800 lbs. (400)
	ENGINE	Manufacturer	Mercedes-Benz	
		Power (kW)	150 hp (110) EPA Tier III	
		Aspiration	Turbocharged	
		Model	OM 904 LA	
		Rated Speed	2200 rpm	
		Torque (Nm) @ rpm	428 ft.-lbs. (580) @ 1200 to 1600	
	COMPONENTS	Transmission	Hydrostatic with Automatic Power Regulation (variable displacement pump and motor with control inching)	
		Max Travel Speed (km/hr)	22.4 mph (36)	
		Selective Steering	2-Wheel, 4-Wheel, Crab	
		Service Brake	Multiple disc brakes hydraulic front and rear axles	
		Parking Brake	Hydraulic Front Axle	
		Axles	Automatic Rear Axle Locking System at a Rotation Over 15°	
	HYDRAULIC SYSTEM	Pump Type	Gear Pump	
		Total Capacity (L/min)	42 gpm (160)	
		System Pressure (bar)	3916 psi (270)	
	GENERAL SPECIFICATIONS	Approximate Weight (kg)	35,483 lbs. (16095)	37,842 lbs. (17,165)
		Length - Less Forks (m)	21'3.5" (6.49)	24'8.5" (7.53)
		Width (m)	8'0" (2.43)	8'0" (2.43)
		Ground Clearance (m)	15" (0.37)	15" (0.37)
		Wheelbase (mm)	9'0" (2750)	9'0" (2750)
		Turning Radius - Outside Tire (m)	13'3" (4.04)	13'3" (4.04)
		Overall Height (m)	10'4" (3.11)	10'4" (3.11)
		Standard Tires	18 x 22.5 16PR	
		Drawbar Pull (daN)	18,434 lbf. (8200)	18,434 lbf. (8200)
	FLUID CAPACITIES	Cooling System (L)	4.75 gal. (18)	
		Engine Oil (L)	4 gal. (15)	
		Hydraulic Oil (L)	55.5 gal. (210)	
		Fuel Tank (L)	58 gal. (220)	

(mm)	MRT 2150 Privilege Plus	MRT 2540 Privilege Plus
A	3'11.2" (1200)	3'11.2" (1200)
A1	5.9" (150)	5.9" (150)
A2	4'4" (1320)	4'4" (1320)
A3	2.4" (60)	2.4" (60)
B	11.4" (290)	11.4" (290)
C	2'13.5" (6490)	2'48.5" (7530)
D	16'6.8" (5050)	16'6.8" (5050)
E	3'9.5" (1155)	3'9.5" (1155)
F	9'0" (2750)	9'0" (2750)
G	3'9.5" (1155)	3'9.5" (1155)
H	1'3" (380)	1'3" (380)
I	8'1.8" (2485)	8'1.8" (2485)
J	10'4" (3150)	10'4" (3150)
K	8'1.8" (2485)	9'9.5" (2985)
M	7'11.5" (2425)	7'11.5" (2425)
N	15'5" (4700)	15'5" (4700)
O	16'8.8" (5100)	16'8.8" (5100)
P	5.9" (150)	5.9" (150)
Q	14'9.2" (4500)	14'9.2" (4500)
R	12'5.6" (3800)	12'5.6" (3800)
S	14'11" (4550)	14'11" (4550)
T	13'3" (4040)	13'3" (4040)
U	20'5.3" (6230)	21'11.8" (6700)
V	3'1.4" (950)	3'1.4" (950)
Y	12°	12°
Z	105°	105°

DIMENSIONS REFERENCE DIAGRAMS (MRT 2150 Privilege Plus shown)



This publication in no way constitutes an offer and the company reserves the right to alter specification without notice.



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