

SALES GUIDE

MLT 960

MULTI-PURPOSE TELESCOPIC LOADER



SALES GUIDE

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STRATEGY

The MLT 960 multi-purpose telescopic loader combines reliability, high capacity, and rough terrain capability for maximum performance.

Lifting up to 13,200 lbs. (6000 kg), with lift heights up to 29'6" (9 m) and a continuously variable transmission, these machines provide capacity and productivity without sacrificing the comfort, quality and durability you expect.



MANITOU, the world's largest manufacturer of rough terrain material handling equipment, 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.

The MLT 960 telescopic loader is the latest addition to the Manitou material handling product line, dominating the competition with its high lift height, heavy-duty capacity and impressive forward reach. Its sturdy, reliable build offers intuitive features that are sought out by the agriculture, environment, cooperative, waste management and bio-gas sectors. New features, including a continuously variable transmission, high-speed hydraulics, and a Tier IV-certified diesel engine, set the MLT 960 telescopic loader above the rest.



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OVERVIEW

KEY SALES ARGUMENTS

141 HP (104 kW)

Interim Tier IV-certified John Deere diesel engine utilizes diesel particulate filter (DPF) technology.

With an electronic regulating device, fan speed is automatically controlled according to engine temperature, resulting in significant fuel savings.



MAXIMUM CAPACITY

13,200 lbs.
[6000 kg]

MAXIMUM LIFT HEIGHT

29'6"
[9 m]

LOAD SENSING HYDRAULICS

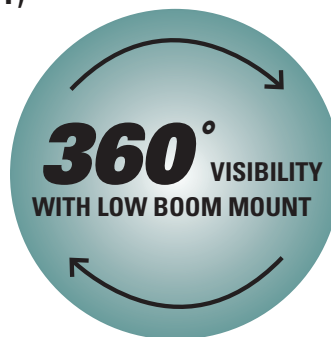
Variable piston pump delivers more efficiency and less heat than standard gear pump.

CONTINUOUSLY VARIABLE TRANSMISSION (CVT)

The new CVT gearbox provides smooth drive operation while maintaining maximum tractive effort at any speed.

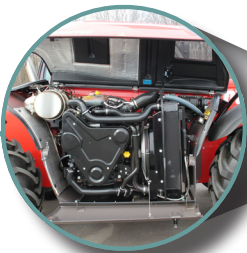
The transmission control reacts to the demand on the machine to provide the correct torque and speed automatically without interruption.

By enabling the engine to run at its most efficient speed, the CVT system provides better fuel economy than other transmission systems.



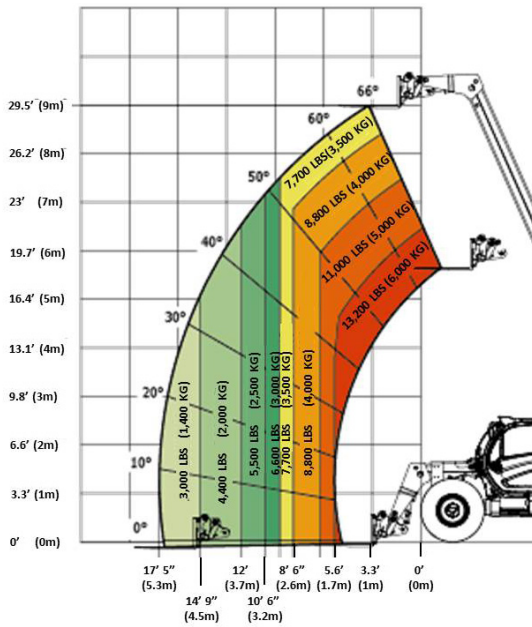
FLIP-OPEN ENGINE COVER

Maintenance and daily checks are made easy with convenient access to all major components.

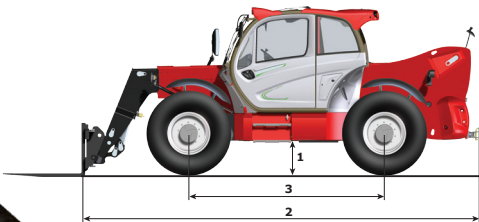
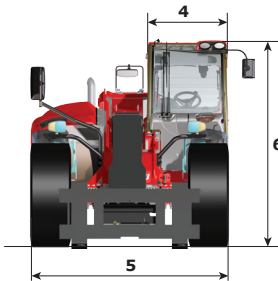


OVERVIEW

SPECIFICATIONS



Load charts based on 24" load center per ANSI/ITSDF B56.6



1	Ground Clearance (mm)	18" (457)
2	Overall Length (m)	20' (6.1)
3	Wheel Base (m)	9'10" (3)
4	Cab Width (mm)	3'3" (991)
5	Overall Width (mm)	8'2" (2489)
6	Overall Height (mm)	8'4" (2540)

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

MLT 960

	KEY PERFORMANCE	Maximum Lift Capacity – 24" Load Center (kg)	13,200 lbs. (6000)
		Maximum Lift Height (m)	29'6" (9)
		Capacity at Maximum Lift Height (kg)	7,700 lbs. (3500)
		Maximum Forward Reach (m)	17'5" (5.3)
		Capacity at Maximum Reach (kg)	3,000 lbs. (1400)
		Cycle Times – Unloaded / Loaded	
		Lifting	9.5 / 8.5 sec.
		Lowering	6.1 / 6.5 sec.
		Boom Extension	9.7 / 7.0 sec.
		Boom Retraction	7.8 / 6.0 sec.
	ENGINE	Type	John Deere
		Power (kW)	141 hp (104)
		Displacement (cm ³)	275 cu.in (4500)
		Maximum Torque @ 1500 rpm (Nm)	394 ft.lbs. (534)
		Injection / Cooling	Direct / Water
	TRANSMISSION	Type	Dana Continuously Variable Transmission
		Maximum Travel Speed (km/hr)	25 mph (40)
	HYDRAULICS	Pump Type	Variable Displacement Piston
		Pressure (bar)	3900 psi (270)
		Flow Rate (L/min.)	47.6 gpm (180)
	CAPACITIES	Hydraulic Oil (L)	40 gal. (153)
		Fuel Tank (L)	35.6 gal. (135)
	SPECIFICATIONS	Weight – with Forks (kg)	25,794 lbs. (11,700)
		Turning Radius (m)	14'1" (4.3)
		Ground Clearance (mm)	18" (457)
		Overall Length (m)	20' (6.1)
		Wheel Base (m)	9'10" (3)
		Cab Width (mm)	3'3" (991)
		Overall Width (mm)	8'2" (2489)
		Overall Height (mm)	8'4" (2540)
		Breakout Force (daN)	16,411 lbf. (7300)
	TIRES	Maximum Drawbar Pull (daN)	22,480 lbf. (19,000)
			500/70-R24

SALES GUIDE

FEATURES

PERFORMANCE



HEAVY-DUTY BOOM DESIGN

Durable, high-strength boom ideal for heavy loading.

ACTIVE REGENERATION

Automatic system cleans the engine DPF while the machine is operating, reducing downtime.

VARIABLE PISTON PUMP

Delivers faster hydraulic movements, more efficiency and less heat than standard gear pump.

CYCLE TIMES

LIFTING	8.5 sec
LOWERING	6.5 sec
BOOM EXTENSION	7 sec
BOOM RETRACTION	6 sec
DUMP	3.8 sec



GREAT VISIBILITY OVER FORKS WHEN BOOM IS LOW

NO EXPOSED HOSES

FRONT AND REAR HITCH

THREE STEERING MODES

2-wheel, 4-wheel and crab.

EXTENDABLE / RETRACTABLE ROAD LIGHTS on wing brackets for better vision.



TURNING RADIUS

14'1"
[4.3m]

ALLIANCE 500 / 70 R24 STANDARD TIRES

More options available to suit application needs.

COOLING PACKAGE

With an electronic regulating device, fan speed is automatically controlled according to engine temperature, resulting in significant fuel savings.



CONTINUOUSLY VARIABLE TRANSMISSION (CVT)

HYDROSTATIC DRIVE MOTORS

The CVT provides smooth drive operation while maintaining maximum tractive effort at any speed.

NO-SHIFT SOLUTION

The transmission control reacts to the demand on the machine to provide the correct torque and speed automatically without interruption.

TOP TORQUE

Reinforced Dana axles ensure no drop in torque from 0 to 25 mph (40 km/hr).

INCHING PEDAL

Located next to the brake, this pedal lets you manage forward movement while increasing hydraulic-powered attachment speed separate from vehicle speed.



HIGH EFFICIENCY

By enabling the engine to run at its most efficient revolutions per minute, the CVT system provides better fuel economy than other transmission systems.

CVT CONTROL DISPLAY

CHOICE OF ROAD MODE OR HANDLING MODE

SPEED LIMITER



SET THE MAXIMUM SPEED

LINE A HYDRAULICS

LINE B HYDRAULICS

FEATURES

OPERATOR'S STATION



- **DELUXE CAB WITH HEAT & A/C**
Features include air conditioning, CVT control display, hand throttle, inching pedal, working lights, and pneumatic seat with active suspension.
- **INTERACTIVE DASHBOARD**
All machine notifications are located in one clear, easy to read display. Fuel level, engine temperature, wheel alignment, tachometer, speed, hour meter, warning lights and more information are displayed.





○ JSM (JOYSTICK, SWITCH & MOVE)

The exclusive Manitou all-in-one joystick allows the left hand to remain on the steering wheel while the right hand controls all hydraulic and machine movement functions. Boom hoist and bucket dump may be operated simultaneously.



○ ROOF GUARD

Windshield guard is optional

○ PANORAMIC CAB = **360°** VISIBILITY



○ SAFE AND QUICK ACCESS

with a large door and non-slip steps

HEAD2HEAD

How the MLT 960 Stacks Up Against the Competition

TELESCOPIC HANDLERS



	HP Net (kW)	Capacity (kg)	Lift Height (m)	Reach (m)	Turning Radius (m)
Manitou MLT 960	141 (105)	13,200 (6,000)	29'6" (9 m)	17'5" (5.3)	14'1" (4.3)
Merlo P60.9	140 (104)	13,200 (6,000)	28'3" (8.6 m)	15'1" (4.6)	12'6" (3.8)
Merlo P55.9	140 (104)	11,000 (5,000)	28'3" (8.6 m)	15'0" (4.58)	12'6" (3.8)
Dieci Samson 60.9	127 (95)	13,200 (6,000)	28'3" (8.6 m)	16'1" (4.9)	14'5" (4.4)
Dieci Samson 65.8	127 (95)	14,300 (6,500)	25'3" (7.7 m)	13'9" (4.2)	14'5" (4.4)
JCB 550.80	125	11,000 (5,000)	26'7" (8.1 m)	14'8" (4.5)	n/a

MLT 960 Advantages

- ✓ Furthest reach
- ✓ Highest lift height
- ✓ Most horsepower
- ✓ Continuously Variable Transmission



WHEEL LOADERS

MLT 960 Advantages

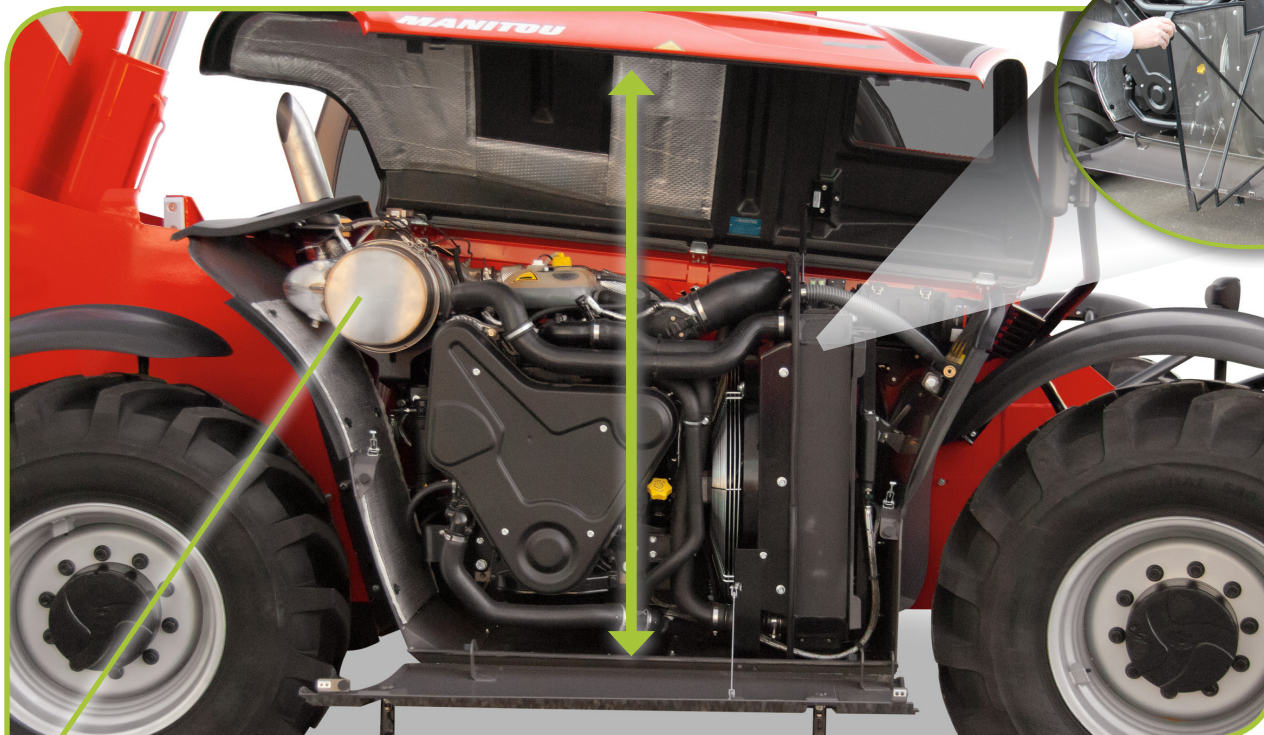
- ✓ Three Steering Modes
- ✓ Capacity never changes while turning
- ✓ Over twice the lift height of a standard wheel loader
- ✓ Four times the forward reach of a standard wheel loader
- ✓ Hydraulic Quick Attach System for fast, easy attachment changes
- ✓ Tight turning radius ideal for compact work areas

	HP Net (kW)	Weight (kg)	Lift Height (m)	Reach (mm)	Turning Radius (m)
Manitou MLT 960	141 (105)	25,794 (11,670)	29'6" (9 m)	17'5" (5309)	169" (4.3)
Case 621 XR	138 (103)	27,072 (12,280)	13'11" (4.2 m)	3'5" (1041)	206" (5.2)
Cat 924K	141 (105)	28,360 (12,864)	12'9" (3.9 m)	3'3" (991)	n/a
Doosan DL250	153 (114)	25,515 (11,573)	13'7" (4.1 m)	4'5" (1346)	179" (4.5)
Hyundai HL740XTP-9	143 (107)	27,100 (12,292)	13'11" (4.2 m)	3'6" (1067)	n/a
JCB 427 HT	146 (109)	28,631 (12,987)	13'4" (4 m)	4'1" (1245)	234" (5.9)
John Deere 524K	141 (105)	27,871 (12,642)	13'6" (4.1 m)	3'5" (1041)	n/a
Kawasaki 65ZV	134 (100)	24,270 (11,009)	14'7" (4.4 m)	3'6" (1067)	239" (6.1)
Komatsu WA250-6	138 (103)	24,170 (10,963)	12'3" (3.7 m)	3'6" (1067)	n/a
Volvo L60G	161 (120)	27,000 (12,247)	14'4" (4.3 m)	n/a	210" (5.3)

NOTE: All competitive model information is from manufacturer published literature and/or specifications noted on the respective manufacturer websites. All information noted as of May 2014. Specifications are subject to change.

FEATURES

SERVICEABILITY



AIR FILTER

DIESEL PARTICULATE FILTER

The Diesel Particulate Filter (DPF) system reduces carbon monoxide, hydrocarbon and pollutant particles.

EASY ACCESS

Engine hood lifts out of the way and lower panel drops down for full access to the engine.

AUTO-REVERSING FAN

Cleans out debris that accumulates on the coolers and radiators.



REAR HYDRAULICS

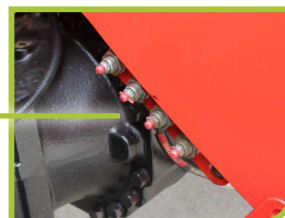
HYDRAULIC / FUEL FILL



ENGINE DRAIN HOSE

CENTRALIZED GREASE POINTS

BATTERY DISCONNECT



SALES GUIDE

ATTACHMENTS

○ MANITOU ATTACHMENT SYSTEM

With the MANITOU Attachment System, numerous attachments can easily be equipped within seconds.



○ VARIETY OF ATTACHMENTS

The versatile MLT 960 telescopic loader meets all of your project needs and optimizes work time with a wide variety of available attachments.



BALE CARRIAGE



BALE CLAMP



BALE GRAB



SCRAP GRAPPLE



SWEeper



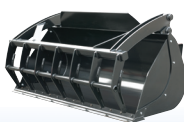
PALLET FORKS



ROCK BUCKET



BUCKET



GRAPPLE BUCKET



BUNKER BUSTER DEFACER

MLT 960

BASE PACKAGE *FEATURES*

- 3 Steering Modes
- 4-Wheel Steering
- 4-Wheel Drive
- ANSI B56.6 Load Charts
- Audio Warning Back-Up Alarm
- Auto-Cleaning Reversible Fan
- Auxiliary Hydraulic Line
- Battery Cut-Off
- Boom Angle
- Boom Extension Decals (A, B, C, D)
- Complete Road Lights
- Continuously Variable Transmission
- Cyclonic Pre-Cleaner
- Enclosed Cab with Heat
- Frame Level Indicator
- Front and Rear Hitch
- Front/Rear & Roof Wipers
- Inching Pedal
- Parking Brake
- RH & LH Mirrors
- Radio
- Rear View Mirror on Back of Machine
- Roof and Windshield Sunshade
- Rotating Light
- Work Lights - Front/Rear Cab

PRIME PACKAGE *FEATURES*

- Air Conditioning
- Cloth Suspension Seat
- Comfort Ride Control (CRC)
- Easy Connect Attachment System
- Hydraulic Locking Quick Attach
- Manual Accelerator
- Work Lights - Boom

OPTIONS

AVAILABLE ON BASE PACKAGE OR PRIME PACKAGE UNITS

- Cold Weather Package
- Continuous Flow Hydraulics
- Dual Hydraulics
- Windshield Guard