



## THE TC400-TC450 SERIES TELESCOPIC CRANES

Versatile. Affordable. User friendly.

The TC400-TC450 series telescopic cranes are built to meet the wide-ranging needs of owner operators who may use it for residential construction one day and bridge work the next. No matter what the task, the 40-45-ton line of telescopic cranes are designed to get you to the job quickly.

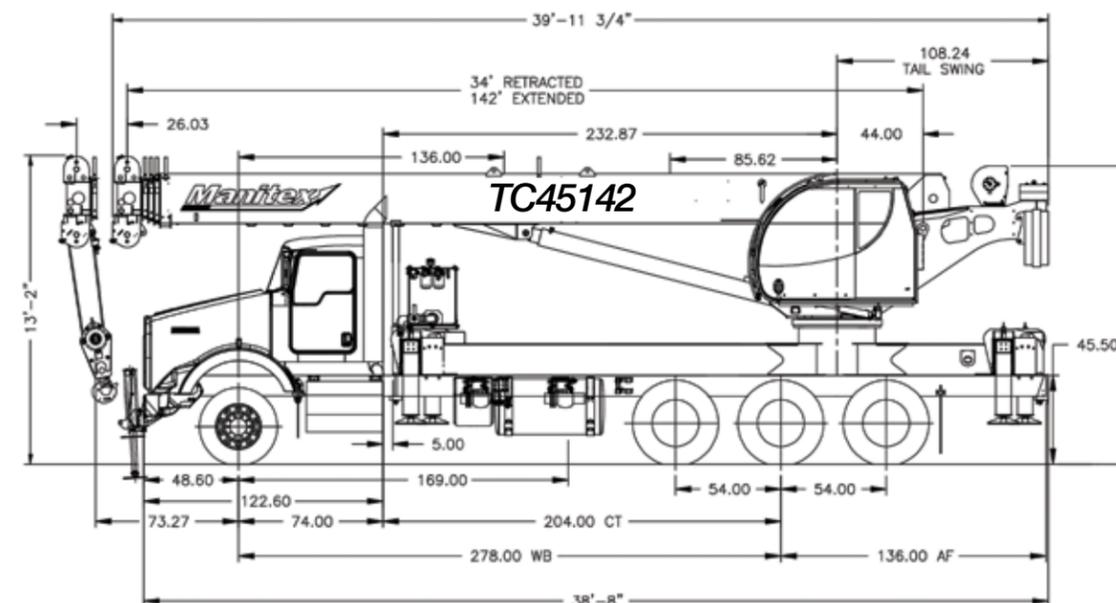
With it, you can:

- Travel to and from job sites at highway speed on a commercial chassis
- Set up quickly with radio outrigger controls
- Operate comfortably and with confidence in its tiltable cab

### Other features include:

- 45-ton capacity @7 ft. radius
- 40-ton capacity @7 ft. radius
- Optional telescopic jib
- 152' (46,3 m) maximum boom tip height
- Out and down outriggers

## TC450 SERIES CHASSIS DATA



### CHASSIS DATA

Model	TC45142
Wheel Base (WB)	278 in. (7,061 mm)
Cab to Tridem (CT)	204 in. ( 5281.6 mm)
Frame section modulus at 360° area of operation	27.0 in <sup>3</sup> , 110,000 psi, 758,422 kPa
Cab to End of Frame (EOF)	316 in. (8026 mm)
Nominal Frame Width	34 in. (864 mm)

### CRANE WEIGHTS

Model	TC45142
Crane with cab	45,550 lb. (18,8847 kg)
Aluminum Platform	621 lb. (282 kg)
Tele Jib	1620 lb. (735 kg)

### TRUCK AXLE WEIGHTS

Model	TC45142
Front axle (GW)	20,000 lb. (9,790 kg)
Rear axle	40,000 lb. (19,580 kg)
Tag Axle Rating	12,500 lb. (5669 kg)
Min. truck axle W - Front**	9,000 lb. (4082 kg)
Min. truck axle W - Rear**	9,600 lb. (4354 kg)

\*\* Minimum chassis weight is required to meet 85% stability requirements. Chassis data is general - not for engineering. Some dimensions depend on truck selection. Data published herein is intended as a guide only. Crane operation is subject to machine specific load charts and information.

### NEW COMBINED RADIO REMOTE



#### RADIO OUTRIGGER CONTROLS

One control to operate the outriggers, winch controls and the boom.

Operate the outriggers remotely, with a clear view of the machine, using radio remote controls.

### CAB UPGRADES



All cabs now come equipped with Heat and AC with more air flow. Adjustable cab tilt speed and crane functions. USB ports for quick software updates or phone charging.

More leg space and only one display unit needed for both crane and chassis monitoring.

### TELEMATICS



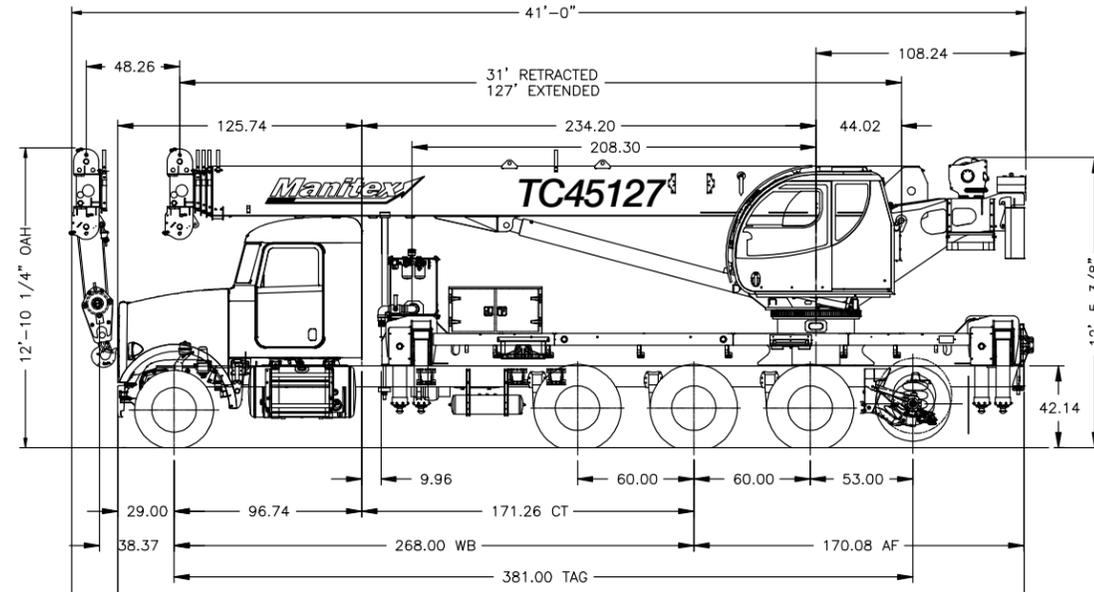
A modem has been added to the crane PLC system to aid troubleshooting machines in the field. Crane software updates can now be uploaded to the machine without having to send a technician to the field! GPS ready for tracking through the ManiTex web portal.

### OPERATOR AIDS



TC400-TC450 with LMI system for crane function cut-offs for overload protection. color graphic display, event recorder, WADS-Work Definition System.

## TC450 SERIES CHASSIS DATA



### CHASSIS DATA

Model	TC45127
Wheel Base (WB)	268"
Cab to Tandem (CT)	181"
Frame section modulus at 360° area of operation	27.0 in <sup>3</sup> , 110,000 psi, 758,422 kPa
Cab to End of Frame (EOF)	346"
Nominal Frame Width	34"

### CRANE WEIGHTS

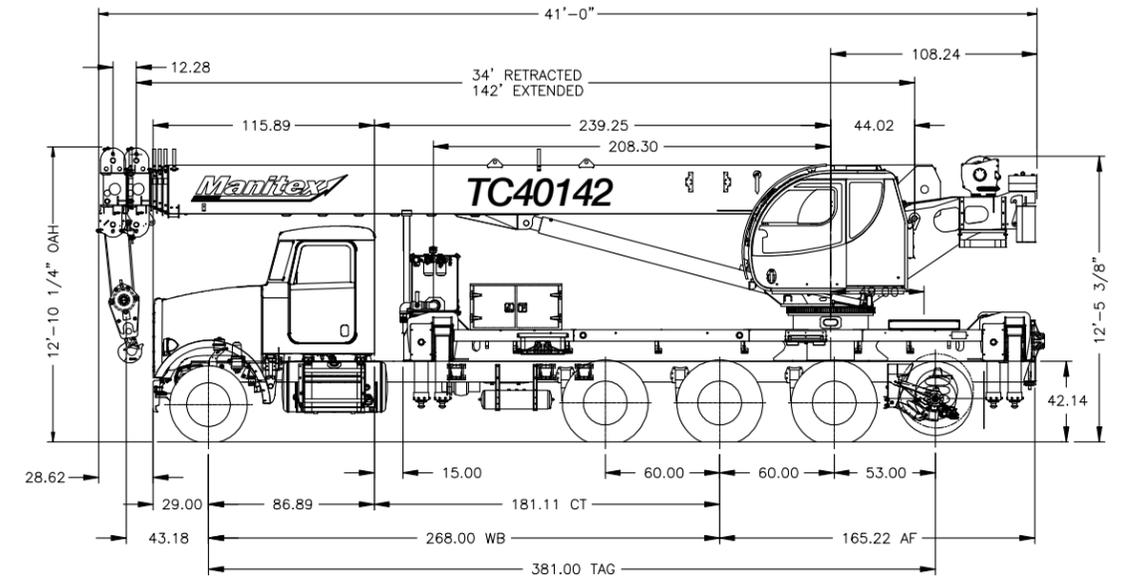
Model	TC45127
Crane with cab	40,738 lb. (18,479 kg)
Aluminum Platform	621 lb. (282 kg)
Tele Jib	1,620 lb. (735 kg)

### TRUCK AXLE WEIGHTS

Model	TC45127
Front axle (GAWR)	20,000 lb. (9,790 kg)
Rear axle (GAWR)	40,000 lb. (19,580 kg)
Tag axle (GAWR)	12,500 lb. (5669 kg)
Min. truck axle W - Front**	9,000 lb. (4082 kg)
Min. truck axle W - Rear**	9,600 lb. (4354 kg)

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## TC400 SERIES CHASSIS DATA



### CHASSIS DATA

Model	TC40142
Wheel Base (WB)	268"
Cab to Tandem (CT)	181"
Frame section modulus at 360° area of operation	27.0 in <sup>3</sup> , 110,000 psi, 758,422 kPa
Cab to End of Frame (EOF)	346"
Nominal Frame Width	34"

### CRANE WEIGHTS

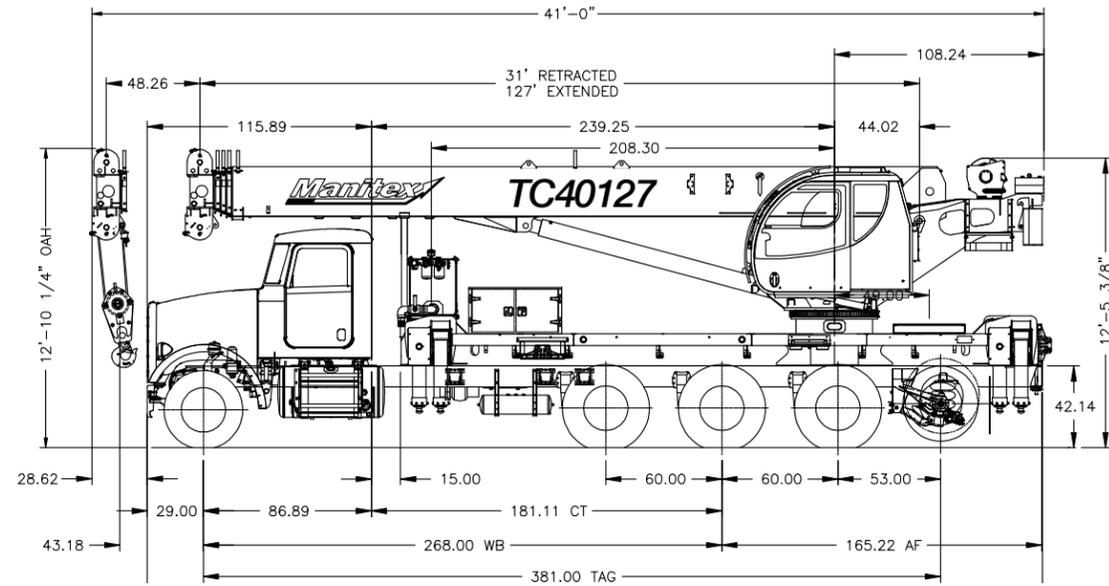
Model	TC40142
Crane with cab	39,500 lb. (17,917 kg)
Aluminum Platform	621 lb. (282 kg)
Tele Jib	1620 lb. (735 kg)

### TRUCK AXLE WEIGHTS

Model	TC40142
Front axle (GAWR)	20,000 lb. (9,790 kg)
Rear axle (GAWR)	40,000 lb. (19,580 kg)
Tag axle (GAWR)	12,500 lb. (5669 kg)
Min. truck axle W - Front**	9,000 lb. (4082 kg)
Min. truck axle W - Rear**	9,600 lb. (4354 kg)

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# TC400 SERIES CHASSIS DATA



## CHASSIS DATA

Model	TC40127
Wheel Base (WB)	268"
Cab to Tandem (CT)	181"
Frame section modulus at 360° area of operation	27.0 in <sup>3</sup> , 110,000 psi, 758,422 kPa
Cab to End of Frame (EOF)	346"
Nominal Frame Width	34"

## CRANE WEIGHTS

Model	TC40127
Crane with cab	38,738 lb. (17,592 kg)
Aluminum Platform	621 lb. (282 kg)
Tele Jib	1,620 lb. (735 kg)

## TRUCK AXLE WEIGHTS

Model	TC40127
Front axle (GAWR)	20,000 lb. (9,790 kg)
Rear axle (GAWR)	40,000 lb. (19,580 kg)
Tag axle (GAWR)	12,500 lb. (5669 kg)
Min. truck axle W - Front**	9,000 lb. (4082 kg)
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# REEVING DIAGRAMS

## TC450

ALLOWABLE LINE PULL									WARNING	
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	8 PART LINE	9 PART LINE		
									ANTI-TWO-BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.  REFER TO THE OWNER'S MANUAL.  KEEP AT LEAST 3 WRAPS OF LOAD LINE ON THE DRUM AT ALL TIMES.	
9500 LBS	19000 LBS	28500 LBS	38000 LBS	47500 LBS	57000 LBS	66500 LBS	76000 LBS	85500 LBS		5/8" ROT RESISTANT (5.0:1 SF) - 47500 LBS MIN BREAKING STRENGTH
10000 LBS	20000 LBS	30000 LBS	40000 LBS	50000 LBS	60000 LBS	70000 LBS	80000 LBS	90000 LBS		5/8" 6 X 25 IWRC (3.5:1 SF) - 35000 LBS MIN BREAKING STRENGTH

## TC400

ALLOWABLE LINE PULL									WARNING	
1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE	8 PART LINE	9 PART LINE		
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## Deductions from rated loads for load handling devices supplied by Manitex

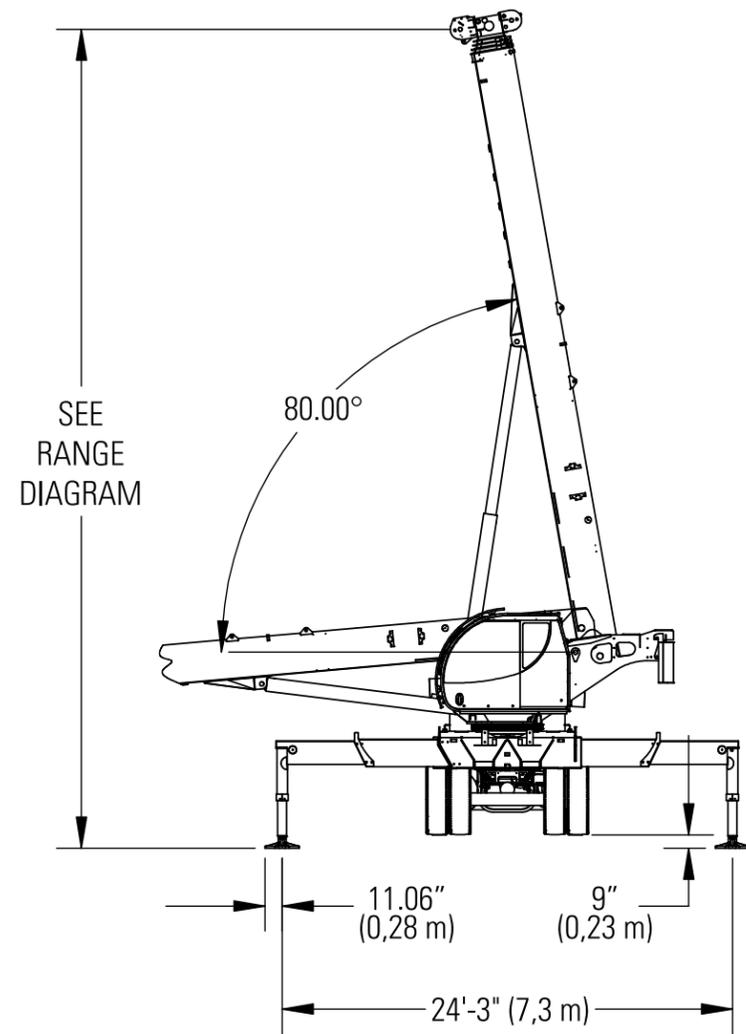
Auxiliary block	50 lbs. (22.7 kg)
Overhaul ball	See overhaul ball mfg. nameplate
Load blocks	See load block mfg. nameplate
Swing around jib (stowed)	See load chart

**WARNING:** Lifting off the main boom point while the jib is erected is not intended nor approved.

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# OUTRIGGERS

## Full Extension



### SUBFRAME

- Pedestal sub-frame and stabilizers are mounted to chassis by threaded rods and clamp plates.
- Sub-frame: Torsion resistant, rigid 4-plate design mounted under crane full length of truck frame.
- Rear underride protection: Standard on factory mounted cranes.

### ELECTRICAL SYSTEM

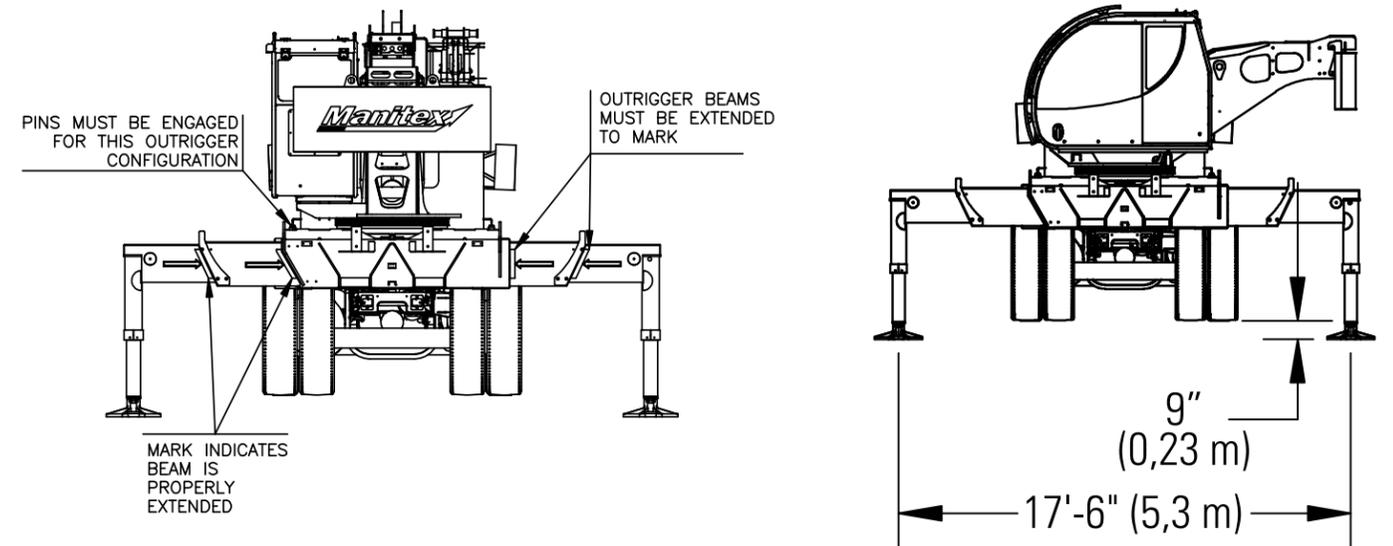
- State-of-the-art weather-resistant components throughout.
- Hermetically sealed enclosure includes power in relays and circuit status LEDs.
- 12-24 Volt Capability.
- PLC/CANBUS Technology

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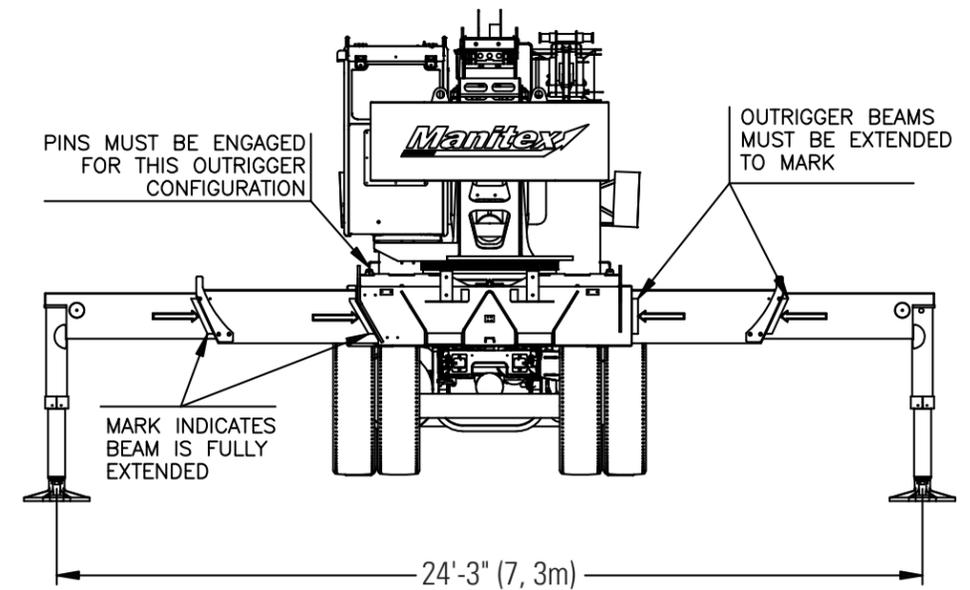


# OUTRIGGERS

## Intermediate Spread



## Fully Retracted Spread



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