



**ROBERT YOUNG'S AUTO & TRUCK**

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**2024 PETERBILT 389 TRI-AXLE, 380" WHEELBASE w/NRC 40TB 30.5' TRIDEM  
AXLE**

1. TOTAL SPECIFICATIONS (Driver's and Passenger's Side)

- a. *Total Length.....528" (44')*
- b. *Wheelbase.....380" (31.6')*
- c. *Gross Vehicle Weight Rating..... 62,500 lbs.*
- d. *Tare Weight (Estimated & Max Weight Preferred)...25,000 lbs.*
- e. *23,000 lbs Front Steer Axle Center Hub Location (Front to Rear).....31" (2.5')*
- f. *Peterbilt 389 Stainless Steel 100 - Gallon Fuel Tank with Steps (Front to Rear).....81" to 129"*
- g. *Zips In The Ditch SP50000 Sidepuller, (2) 25,000 lbs. Winches Boom 50,000 lbs. Capacity Integrated (Front to Rear):.....132" to 138"*
- h. *Vulcan Omnipro 220 Industrial Multiprocess Welder with 120/240V Input - Enclosure*
- i. *Fortress 5-Gallon 225 psi High Performance Wheeled Jobsite Air Compressor - Enclosure*
- j. *Predator 3500 Watt Super Quiet Inverter Generator w/CO Secure Technology - Enclosure*
- k. *Titanium 65-Amp Plasma Cutter Cuts 1 3/16" Thick Metal - Enclosure*
- l. *(1) Heavy Duty Spreader Bars*
- m. *23,000 lbs. Lift Steerable Axle Hub Location (Front to Rear).....299"*
- n. *23,000 lbs. Front Drive Axle Hub Location (Front to Rear).....353"*
- o. *23,000 lbs. Rear Drive Axle Hub Location (Front to rear) .....407"*
- p. *Wheel Lift in Travel Position (Front to Rear).....528" (44')*



**NRC 40-TON INDUSTRIAL CAR CARRIER CAPABILITIES LIMITATIONS**

*Chassis Height - 39" Max. Height*

*Loading Angle - 14.5 Degrees Max. Angle*

*Carrier Deck Height - 49.81" Max Deck Height*

<b>LOADING CAPABILITY</b>	<b>CARRIER DECK MAX. LOADING ANGLE</b>	<b>DECK HEIGHT IN FRONT @ 14.5-DEGREES</b>	<b>SHIPMENT MAX. HEIGHT AT 13'6"</b>	<b>EQUIPMENT</b>	<b>LOADING &amp; UNLOADING REQUIREMENTS (Mathematically Defined)</b>
<i>Tunnel 13'6" Height</i>	<i>14.5 Degrees</i>	<i>90"</i>	<i>112" [9.3']</i>	<i>John Deere 310 Backhoe Height - 109" [9.16'] Length - 23.5' Width - 7.17' Weight - 14,429 lbs.</i>	<i>Back the backhoe on to the carrier deck. Make sure the front bucket is even or 1 to 2" on the interior of the deck. When i Slide the deck to load or off load. I need the highest point of the backhoe before the halfway point. So i will not exceed the 13'6" when i am unloading in a tunnel</i>
<i>Residential Block (Tree Limbs 13' Height Clearance)</i>	<i>14.5 Degrees</i>	<i>90"</i>	<i>112" [9.3']</i>	<i>John Deere 204K Compact Wheel Loader Height - 95" [7.9']</i>	<i>Loading or unloading i will drive the loader unto deck with front wheel just past center mark and leave in</i>

				<p><i>Width - 75" [6.25'] Length - 208" [17.3'] Weight - 11,806 lbs. [5.9 Tons]</i></p>	<p><i>place with securement. If off loading i will move the machine while on deck and in place, so the front wheels is just past the center mark before i slide the deck. I will then slide and lower the deck and i should not damaged the equipment while unloading</i></p>
<p><i>Van Lines Trailer (Ground Clearance 40") (Interior Height -122")</i></p>	<p><i>14.5 Degrees</i></p>	<p><i>90"</i></p>	<p><i>112" [9.3']</i></p>	<p><i>Lincoln Navigator Height - 77" Length - 210" Width - 94" Weight - 5,854 lbs.</i></p>	<p><i>If loading or unloading i will slide my deck back 2' Before i raise up the deck 10" to meet the Trailer height and load the vehicle unto my deck. No problems.</i></p>
<p><i>Parking Garage (Ground Clearance - 10').</i></p>	<p><i>14.5 Degrees</i></p>	<p><i>90"</i></p>	<p><i>112" [9.3']</i></p>	<p><i>John Deere 5090E Farm Tractor Weight - 8,150 lbs. Width - 85.1" Height - 102" Length - 160"</i></p>	<p><i>I will leave the farm tractor secured in place and slide the deck back 2' then lower the deck right at opening of the parking garage. I will then measure the front of the deck to see my height and measure the height of the opening to the parking. I will then go to the center of the deck and subtract my deck height from the opening of the garage. I should be 70" at the the center of my deck with 50" above 10' mark. I will then measure the deck at half way and then subtract the height from the distance and if the height is more then the feet measured. I will then move my truck or carrier forward to allow the tractor to go inside. Then i will used the force of the deck to push the tractor inside.</i></p>
<p><i>Warehouse (Ground Clearance - 12')</i></p>	<p><i>14.5 Degrees</i></p>	<p><i>90"</i></p>	<p><i>112" [9.3']</i></p>	<p><i>Moving PODS Length - 16' Height - 8' Width - 8'</i></p>	<p><i>Height on deck at transporting is 146"which is 2" higher than the warehouse. LOADING: I would had my carrier deck in the loading</i></p>

					<p><i>position and once the container pass half way. I would of slide the deck up just to move the container and truck to the entrance door. Then fully loaded the container to transport.</i></p> <p><i>UNLOADING: I would of move the POD to the rear of the deck and slide the deck back 2' and tilt the deck enough to get the POD inside and then off-loaded the POD</i></p>
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***NRC 40TB INDUSTRIAL CARRIER RECOVERY PULLING CAPABILITIES  
LIMITATIONS***

*90" Max. Height / 0 - 14.5 Degrees*

*THERE ARE 4 TYPES OF RESISTANCE ENCOUNTERED IN OUR INDUSTRY*

***1. ROLLING RESISTANCE***

- 1.1. ROLLING HARD: Hard Flat Ground and the load on the wheels on concrete and tires are inflated*
- 1.2. ROLLING SOFT: It is on soft surface such as grass or gravel*

***2. MIRE RESISTANCE***

- 2.1. TIRE MIRE: When tire is sunk into the dirt, gravel, mud, sand or other soft surface*
- 2.2. WHEEL MIRE: If it is sunk up to lower part of the wheel Rim*
- 2.3. BODY MIRE: If it is sunk up to the body*

***3. GRADIENT RESISTANCE***

- 3.1. 15% OF GRADIENT: The force of gravity moving up or down a grade*
- 3.2. 30% OF GRADIENT: The force of gravity moving up or down a grade*
- 3.3. 45% OF GRADE: The force of gravity moving up or down a grade*

***4. DAMAGE RESISTANCE***

- 4.1. DAMAGE: Is the force that resist the movement when rolling object is damaged*

<b><i>RECOVERY CAPABILITY</i></b>	<b><i>RECOVERY Angle</i></b>	<b><i>12" x 30' HEAVY DUTY RECOVERY STRAP (134,250 lbs. Working Load Limit)</i></b>	<b><i># OF CARRIERS REQUIRED</i></b>
<b><i>DECK RECOVERY PULL MAX.</i></b>	<i>14.5</i>	<i>1. # of Straps per 20' Length:..1</i>	<i>I need to position the Industrial</i>

<p style="text-align: center;"><b>10 Tons 20,000 lbs.</b></p> <ol style="list-style-type: none"> <li>1. Rolling Hard Resistance (lbs. X 0.05)       <ol style="list-style-type: none"> <li>a. 1,000 lbs.</li> <li>b. 21,000 lbs (total)</li> </ol> </li> <li>2. Rolling Soft Resistance (lbs. X 0.15)       <ol style="list-style-type: none"> <li>a. 3,000 lbs.</li> <li>b. 23,000 lbs. (total)</li> </ol> </li> <li>3. Tire Mire Resistance (lbs. X 0.75)       <ol style="list-style-type: none"> <li>a. 15,000 lbs.</li> <li>b. 35,000 lbs. (total)</li> </ol> </li> <li>4. Wheel Mire Resistance (lbs. X 1.0)       <ol style="list-style-type: none"> <li>a. 20,000 lbs.</li> <li>b. 40,000 lbs. (total)</li> </ol> </li> <li>5. Body Mire (lbs. X 1.5)       <ol style="list-style-type: none"> <li>a. 30,000 lbs.</li> <li>b. 50,000 lbs. (total)</li> </ol> </li> <li>6. Resistance @ Gradient of 15 Degrees (lbs. X 0.25)       <ol style="list-style-type: none"> <li>a. 5,000 lbs.</li> <li>b. 25,000 lbs. (total)</li> </ol> </li> <li>7. Resistance @ Gradient of 30 Degrees (lbs. X 0.50)       <ol style="list-style-type: none"> <li>a. 10,000 lbs.</li> <li>b. 30,000 lbs. (total)</li> </ol> </li> <li>8. Resistance @ Gradient of 45 Degrees (lbs. X 0.75)       <ol style="list-style-type: none"> <li>a. 15,000 lbs.</li> <li>b. 35,000 lbs. (total)</li> </ol> </li> <li>9. Damage Resistance (lbs. X 0.6660)       <ol style="list-style-type: none"> <li>a. 13,320 lbs.</li> <li>b. 33,320 lbs.</li> </ol> </li> </ol>	<p style="text-align: center;"><b>Degrees @ 90" Height</b></p>	<ol style="list-style-type: none"> <li>2. # of Snatch Blocks per Strap: 2       <ol style="list-style-type: none"> <li>a. One on Deck to do a side angle pull of casualty to draw to deck for loading</li> <li>b. One on Cable Hook. to pull casualty in longitude to the deck for loading</li> </ol> </li> <li>3. How many Straps on a Hook: 2</li> <li>4. # of 4 Leg Chain Sling on a Hook: 1</li> <li>5. Can you use a Spreader Bar if the length is greater than 40' of the casualty: Yes if you are pulling the the entire machine Longitude towards the Industrial Carrier to be loaded</li> </ol>	<p style="text-align: center;"><i>Carriers Latitude of the casualty and use the 50,000 lbs Sid pull winches to assist me in this recovery.</i></p>
<p style="text-align: center;"><b>SIDE PULL RECOVERY PULL MAX. 25.0 Tons 50,000 lbs.</b></p> <ol style="list-style-type: none"> <li>10. Rolling Hard Resistance (lbs. X 0.05)       <ol style="list-style-type: none"> <li>a. 2,500 lbs.</li> <li>b. 52,500 lbs (total)</li> </ol> </li> <li>11. Rolling Soft Resistance (lbs. X 0.15)       <ol style="list-style-type: none"> <li>a. 7,500 lbs.</li> <li>b. 57,500 lbs. (total)</li> </ol> </li> <li>12. Tire Mire Resistance (lbs.</li> </ol>	<p style="text-align: center;"><b>10 Degrees @ 2.5" Height Per 1' Length</b></p>	<ol style="list-style-type: none"> <li>6. # of Straps per 20' Length:..1</li> <li>7. # of Snatch Blocks per Strap: 2       <ol style="list-style-type: none"> <li>a. One on Deck to do a side angle pull of casualty to draw to deck for loading</li> <li>b. One on Cable Hook. to pull casualty in longitude to the deck for loading</li> </ol> </li> <li>8. How many Straps on a Hook: 2</li> <li>9. # of 4 Leg Chain Sling on a Hook: 1</li> <li>10. Can you use a Spreader Bar if the length is greater than 40' of the casualty: Yes if you are pulling the</li> </ol>	<p style="text-align: center;"><i>At the max. I can only recover and haul away is 38,000 lbs.</i></p> <p style="text-align: center;"><i>On an embankment or downgrade i could only recovery with Deck and side winches a total of 70,000 lbs.</i></p> <p style="text-align: center;"><i>I will a Travel Axle Trailer to load the casualty and a rotator on the scene to handle this type of recovery</i></p>

*X 0.75)*

- a. 37,500 lbs.
- b. 87,500 lbs. (total)

13. *Wheel Mire Resistance  
(lbs. X 1.0)*

- a. 50,000 lbs.
- b. 100,000 lbs.  
(total)

14. *Body Mire (lbs. X 1.5)*

- a. 75,000 lbs.
- b. 125,000 lbs.  
(total)

15. *Resistance @ Gradient of  
15 Degrees (lbs. X 0.25)*

- a. 12,500 lbs.
- b. 62,500 lbs. (total)

16. *Resistance @ Gradient of  
30 Degrees (lbs. X 0.50)*

- a. 25,000 lbs.
- b. 75,000 lbs. (total)

17. *Resistance @ Gradient of  
45 Degrees (lbs. X 0.75)*

- a. 37,500 lbs.
- b. 87,500 lbs. (total)

18. *Damage Resistance (lbs.  
X 0.6660*

- a. 33,300 lbs.
- b. 83,300 lbs.

*the entire machine Longitude  
towards the Industrial Carrier to be  
loaded*