

# Owner's Manual & Safety Instructions

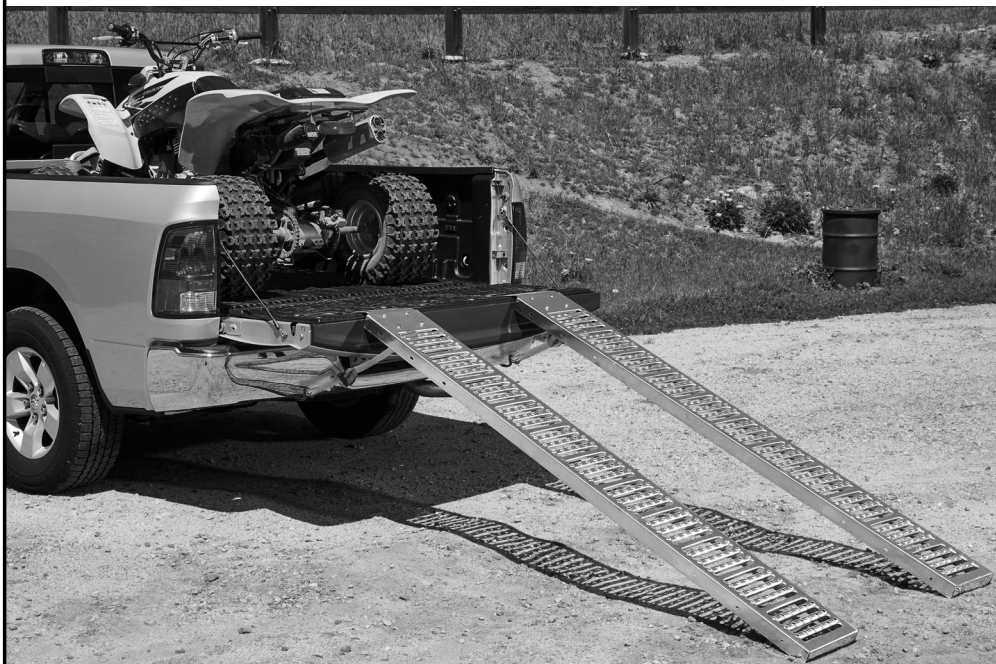
**Save This Manual** Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual near the assembly diagram (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

221

**1/2 TON**

**HaulMaster®**

## STEEL LOADING RAMPS



Visit our website at: <http://www.harborfreight.com>  
Email our technical support at: [productsupport@harborfreight.com](mailto:productsupport@harborfreight.com)

**44649**

When unpacking, make sure that the product is intact and undamaged. If any parts are missing or broken, please call 1-888-866-5797 as soon as possible.

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No portion of this manual or any artwork contained herein may be reproduced in any shape or form without the express written consent of Harbor Freight Tools. Diagrams within this manual may not be drawn proportionally. Due to continuing improvements, actual product may differ slightly from the product described herein. Tools required for assembly and service may not be included.

### **⚠ WARNING**

Read this material before using this product.  
Failure to do so can result in serious injury.  
**SAVE THIS MANUAL.**

## Specifications

Capacity	1,000 lb. combined, 500 lb. individually (Static Conditions)*
Max. Tailgate Height	36"
Dimensions	72" L x 9" W x 2" H

## Important Safety Information

- Before use:**
  - Read and understand manual.
  - Inspect before every use; do not use if parts loose or damaged.
  - Turn vehicle's ignition OFF and set parking brake.
  - Clean dirt, oil and debris off ramps and allow ramps to dry.
  - Set up only on solid, level, dry surface.
  - Turn ramps so flange end faces downward. Position ramps so that tongues fully contact tailgate.
  - Properly connect safety chains (not included).
- Load and unload vehicle slowly. Do not ride vehicle up or down ramps.**
- Do not exceed 500 lb. capacity per ramp or 1,000 lb. capacity evenly distributed across two ramps. Be aware of dynamic loading! Sudden load movement may briefly create excess load causing product failure.
- Use safety chains as intended only.
- Use as intended only. Do not use:
  - as ladder,
  - to load/unload 3-wheeled vehicles,
  - if tailgate on carrying vehicle is higher than 36", or
  - to load vehicle with wheel width wider than ramp.
- Ground contact. Use your Ramps on a solid, level, flat, dry surface. Make sure the Tongue edge fully contacts the tailgate of the vehicle.
- Clean Ramps.** Prior to each use, clean dirt, oil, or any debris off ramps.
- This product is not a toy.** Do not allow children to play with or near this item.
- Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- All persons not involved in the loading process must stand clear of the loading ramps. Keep children away.** Children must not be allowed in the work area.
- Do not exceed tailgate weight capacity.

12. **Avoid working alone.** If an accident happens, an assistant can bring help.
13. **Keep work area clean and well lit.** Cluttered and dark areas invite injuries.
14. **Store idle equipment.** When not in use, store ramps in a dry location to inhibit rust.
15. **Dress properly.** Do not wear loose clothing or jewelry. Protective clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
16. **Wear ANSI-approved impact safety goggles, a safety helmet, and heavy-duty work gloves when loading, unloading or handling ramps.**
17. Keep proper footing and balance when loading or unloading.
18. Do not modify this product.
19. **Stay alert.** Watch what you are doing, use common sense. Do not use any ramp when you are tired.
20. **Check for damaged parts.** Before using any ramp, any part that appears damaged should be carefully checked to determine that it will perform its intended function. Check for any broken parts or mounting fixtures and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician.
21. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with these ramps.
22. **Do not use ramp if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not use the ramp.
23. The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



**SAVE THESE INSTRUCTIONS.**



## Assembly Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

**Note:** For additional information regarding the parts listed in the following pages, refer to Parts List and Diagram on page 10.

**TOP**

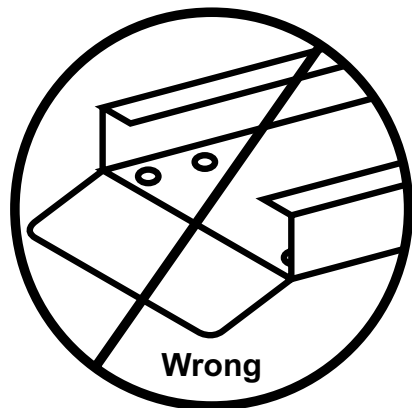
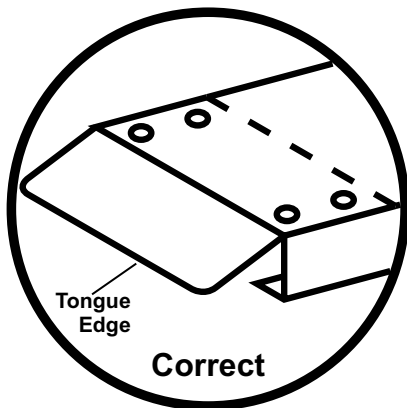


**END VIEW**

Flange

**⚠ WARNING! TO PREVENT SERIOUS INJURY:** In the following assembly process, the flange pictured above must face down with the Tongue (2) edge fully contacting the tailgate. It is designed to keep the Ramps from moving once the weight of the load is riding on the ramps.

1. Line up the four holes on the Ramp (1) with the four holes on the Tongue (2). Insert four Bolts (3) from the top (as pictured on the Assembly Drawing) and secure the Tongue **inside** the ramp with Flat Washers (6), Lock Washers (4), and Nuts (5).
2. Attach a 5/32" grade 30 coil chain to one of the side holes of the Ramp near the Tongue, using an M6x20 bolt and M6 lock nut (all sold separately).
3. Repeat with other Ramp.



## Setup and Operation Instructions



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

### **⚠ WARNING**

#### **TO PREVENT SERIOUS INJURY:**

**Before loading or unloading turn vehicle's engine off, set its transmission in gear or park, engage its emergency brake and block its wheels. Make sure the Ramps are clean and dry before loading or unloading.**

## Setup

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1. The tailgate the ramps will sit on and both of the ramps must be dry and clean. Check for and tighten any loose hardware.
2. Sit the tongue (angled lip) of the Ramps on the tailgate. The Tongue Edge must face down (see Assembly), and fully contact the truck's tailgate. Extend the Safety Chain (not included) on each Ramp up into the inside of the truck bed; attach each Safety Chain to a secure attachment point on the truck chassis.

**WARNING! TO PREVENT SERIOUS INJURY: CONNECT SAFETY CHAINS TO SECURE ATTACHMENT POINTS WITHIN THE TRUCK BED ABLE TO WITHSTAND THE PULLING FORCE OF LOADING. THEY MUST ALSO BE TAUT ENOUGH TO PREVENT THE RAMPs FROM COMING OFF THE VEHICLE BEING LOADED.**

3. Pull the loading ramps back until the chains are tight. The entire tongue portion of the ramps must fit onto the tailgate; If not, adjust the Safety Chains accordingly or shorter chains must be used.

## Chain Adjustment

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1. Remove the bolt and washer that hold the safety chain to the ramp.
2. Reinsert the bolt through a link that will shorten the chain so the loading ramp can not be pulled backwards more than an inch or two.
3. Make sure the washer prevents the bolt from slipping through the chain link and tighten the bolt securely.
4. Adjust the other chain to equal length.



## 4- Wheel ATV Loading and Unloading

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### **⚠WARNING**

- These ramps are for use with 2-wheeled dirt bikes and 4-wheeled ATV's only. Do not use these ramps to load/unload 3-wheeled vehicles.
- Do not use these ramps to load or unload any vehicle that weighs more than 1000 lb.
- Do not use these ramps to load or unload any vehicle that is wider than the ramp.
- Do not use these ramps to load or unload any vehicle that is carrying gear on its racks.
- Do not use these ramps if the tailgate on the vehicle being loaded or unloaded is higher than half each ramp's length (36").

**WARNING! TO PREVENT SERIOUS INJURY:** Riding an ATV while loading or unloading is dangerous and should not be attempted.

**WARNING! Be aware of dynamic loading!**

Sudden load movement may briefly create excess load causing the Ramps to fail.

**WARNING! TO PREVENT SERIOUS INJURY:** All persons not involved in the process must stand clear of the Ramps and truck. Make sure no pets are nearby.

### **Loading Using a Winch (not included)**

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1. The winch and mounting/connection points must all have appropriate capacity to pull the ATV up the ramps safely.
2. ATV Mounted Winch Setup: Unwind cable from the winch and attach it to a secure mounting location on the truck, at the same height as the winch will be after the ATV has been loaded.
3. Truck Mounted Winch Setup: Attach the cable to the bottom front part of the frame.
4. While operating the winch, stand back and to the side of the ATV, with the vehicle between you and the winch cable.
5. Operate the winch to slowly load the ATV onto the vehicle.

### **Unloading**

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**WARNING! TO PREVENT SERIOUS INJURY:** Riding an ATV while unloading is dangerous and should not be attempted.

1. Have an assistant monitor the Ramp tongues for slippage on the tailgate.
2. Setup the ramps on the truck bed as explained under operation. Remove all tie down straps and securing equipment from the ATV.
3. While staying off the ATV, start the engine, disengage the parking brake, put the transmission into reverse, and make sure the wheels are in a straight line with the ramps. While holding the brake, position yourself in front of the ATV.
4. Release the brake and push on the ATV to get it started down the ramps. Allow the ATV to roll down naturally, do not attempt to steer it or apply the brakes. If it stops while on the ramps, gently give it throttle to back it off the ramps.

**WARNING! TO PREVENT SERIOUS INJURY:** Be sure the 4-wheel ATV is centered on ramps.

## 2-Wheel Bike Loading

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1. Do not attempt to load any dirt bike or other 2-wheel motor bike alone. Have a qualified adult assist.
  2. Line up the 2-wheel bike with one of the Ramps.
  3. With one person pushing the bike slowly up the Ramp, a helper should be in the bed of the hauling vehicle both to guide and to apply the brake if it is necessary to stop the bike while it is on the ramp. Have one person with a hand on the bike hand brake for safety.
  4. Once the person inside the truck bed has hold of the handle bars, apply the brake and steady the bike while the other person moves behind the bike (but off to one side) and pushes it all the way into the truck bed.
- NOTE:** While most dirt bikes are light enough to safely load with two people, a third person can make the job easier and safer.
5. Once the bike is safely loaded, secure it with four tie down straps (not included), one on each side of the front, and one on each side at the rear of the bike.

## 2-Wheel Bike Unloading

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1. Position the Ramp against the truck tailgate behind the rear tire of the bike and attach the Safety Chain to the truck bed.
2. Remove the tie-down straps (not included).
3. Slowly and carefully while using an assistant, push the bike backwards until the back tire is at the top of the Ramp. With one person on the ground behind and to the side of the Ramp, slowly push the bike onto the Ramp. Someone must always hold the hand brake.
4. Slowly work the bike down the Ramp and onto the ground.

## Maintenance and Servicing



Procedures not specifically explained in this manual must be performed only by a qualified technician.

### **⚠ WARNING**

**TO PREVENT SERIOUS INJURY:**

**Remove the ramps from the vehicle before performing any maintenance or service.**

**Do not use damaged equipment.**

**If Ramps are damaged, have the problem corrected before further use.**

## Cleaning, Maintenance, and Lubrication

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1. **BEFORE EACH USE,** inspect the general condition of the Ramps. Check for:
  - loose hardware,
  - misalignment or binding of parts,
  - cracked or broken parts, and
  - any other condition that may affect its safe operation.
2. Clean the ramps after each use. Make sure any dirt, oil, grease, or debris are not on the Ramps.



## **PLEASE READ THE FOLLOWING CAREFULLY**

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THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

# Parts List and Diagram

## Parts List

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Part	Description	Qty.
1	Ramp	2
2	Tongue	2
3	Bolt M8	8

Part	Description	Qty.
4	Lock Washer Ø8	8
5	Nut M8	8
6	Flat Washer Ø8	8

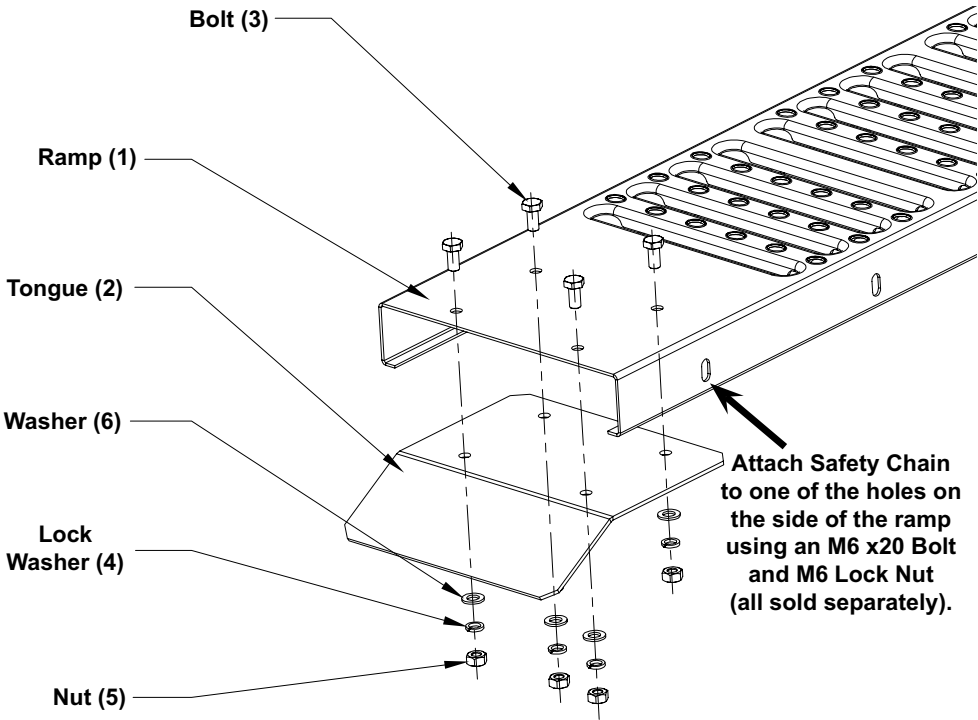
**Record Product's Serial Number Here:** \_\_\_\_\_

**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts. Parts may not be interchangeable. Specify UPC 193175047465 when ordering parts.

# Assembly Diagram

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## Limited 90 Day Warranty

Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that this product is free from defects in materials and workmanship for the period of 90 days from the date of purchase. This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

