# 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.

20a

# PITTSBURGH AUTOMOTIVE

61523

**Patent Pending** 



Visit our website at: http://www.harborfreight.com Email our technical support at: productsupport@harborfreight.com

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.

## **AWARNING**

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

#### **Specifications**

Rated Capacity	300 lb.	Axle Width	36" - 50"
Maximum Lift Height	24"	Wheel Bracket Size	11" W x 5-13" L

**Patent Pending** 

# **IMPORTANT SAFETY INFORMATION**

Failure to heed these warnings may result in personal injury and/or property damage:

## **Assembly Precautions**

- Assemble only according to these instructions. Improper assembly can create hazards.
- Wear ANSI-approved safety goggles and heavy-duty work gloves during assembly.
- 3. Keep assembly area clean and well lit.

- 4. Keep bystanders out of the area during assembly.
- 5. Do not assemble when tired or when under the influence of alcohol, drugs or medication.
- 6. Weight capacity and other product capabilities apply to properly and completely assembled product only.

#### Use Precautions

- Study, understand, and follow all instructions before operating this device.
- 2. Do not exceed rated capacity.
- 3. Use only on hard, level surfaces.
- 4. Center load on Jack platforms.
- 5. Lift only using tires.
- Immediately after lifting load, ensure Jack mechanical load holding means is engaged.
- 7. Do not move while loaded.
- 8. Secure load with appropriate restraint device.
- 9. Do not adjust safety valve.
- 10. Wear ANSI-approved safety goggles and heavy-duty work gloves during use.
- 11. Keep clear of load while lifting and lowering.
- 12. Lower load slowly.
- 13. Do not use for aircraft purposes.
- 14. Inspect before every use; do not use if parts loose or damaged.
- Keep your work area clean and well lit. Cluttered work areas invite accidents.
- Do not allow anyone on the vehicle while using the Jack. Keep bystanders a safe distance away from the vehicle and Jack.
- 17. Stay alert. Watch what you are doing, and use common sense when operating a Jack. Do not use a Jack while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating Jacks may result in serious personal injury.

- Store idle Jacks out of reach of children and other untrained persons. Jacks are dangerous in the hands of untrained users.
- Jack service must be performed only by qualified repair personnel.
   Service or maintenance performed by unqualified personnel could result in a risk of injury.
- 20. When servicing a jack, use only identical replacement parts. Follow instructions in the "Inspection, Maintenance, And Cleaning" section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of injury.
- 21. Maintain labels and nameplates. These carry important information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
- 22. Before use, read manufacturer's instruction manual for the vehicle you will lift.
- 23. Do not support both ends of the vehicle at the same time.
- 24. Before lowering the Jack, remove all tools and equipment from under the vehicle.
- 25. The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator must understand 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**

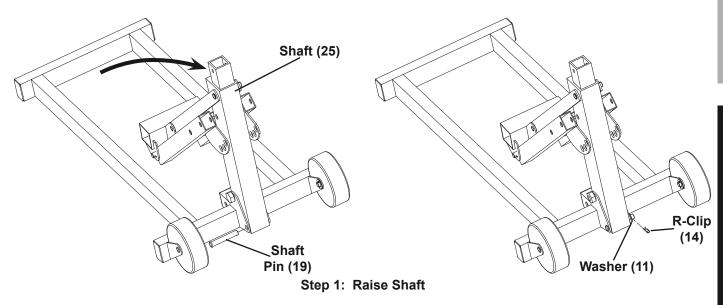


Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

1. Raise Shaft (25) and insert Shaft Pin (19) through its base.

Place Washer (11) over the end of the Shaft Pin (19).

Insert R-Clip (14) through the end of the Shaft Pin (19) to secure it.

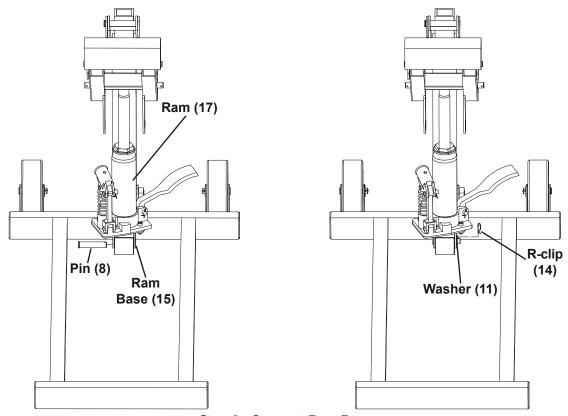


2. Position the Ram (17) as shown.

Slide a Pin (8) through the Ram Base (15) and the Base (6).

Place Washer (11) over the end of the Pin (8).

Secure Pin with R-clip (14).

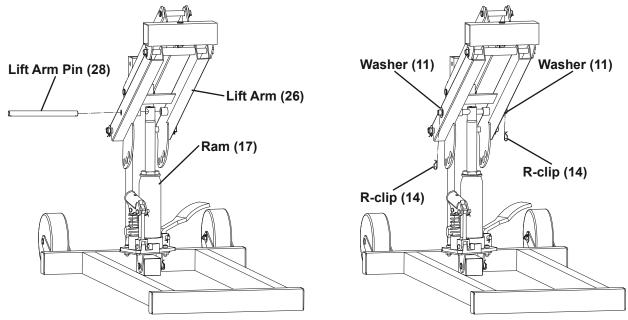


Step 2: Connect Ram Base

3. Connect top of Ram (17) to Lift Arm (26) using Lift Arm Pin (28).

Slide a Washer (11) over each end of the Lift Arm Pin.

Secure Lift Arm Pin using an R-clip (14) on each end.

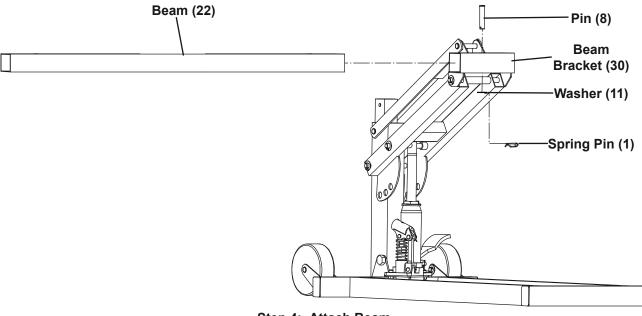


Step 3: Connect top of Ram

4. Insert Beam (22) through the Beam Bracket (30).

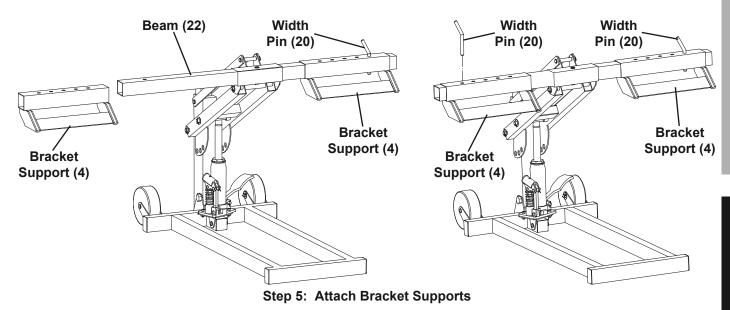
Insert Pin (8) through center of Beam Bracket.

Hold Washer (11) over end of Pin and secure it with Spring Pin (1).



Step 4: Attach Beam

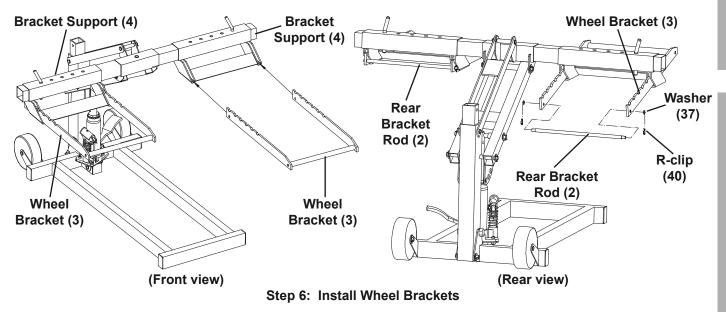
Slide one Bracket Support (4) over each end of the Beam (22).
 Insert Width Pins (20) to secure them in place.



6. Insert one Wheel Bracket (3) into each Bracket Support (4) from the front.

Place one Rear Bracket Rod (2) inside the back of each Wheel Bracket (3).

Place a Washer (37) over each end of each Rear Bracket Rod and use an R-clip (40) to secure each end of each Rod in place.

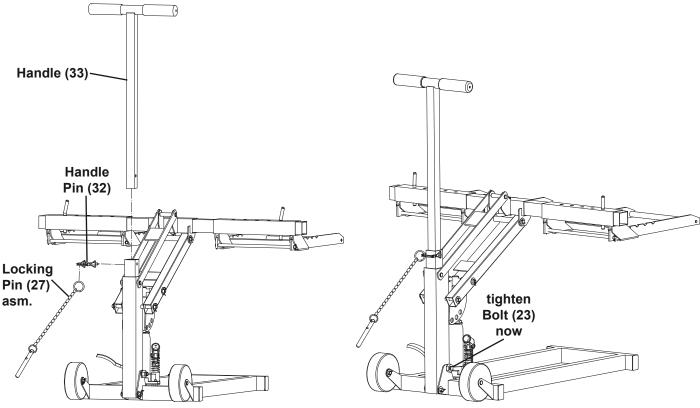


7. Insert the Handle (33) into the Shaft (25) and align the holes.

Insert the Handle Pin (32) through the holes on the Handle and Shaft.

Hook the spring arm on the Handle Pin through the Ring (38) on the Locking Pin (27) asm. and hook it around the other end of the Handle Pin.

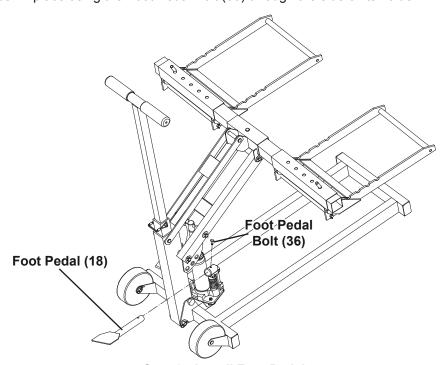
Tighten Bolt (23) securely at this point.



Step 7: Install Handle and Locking Pin

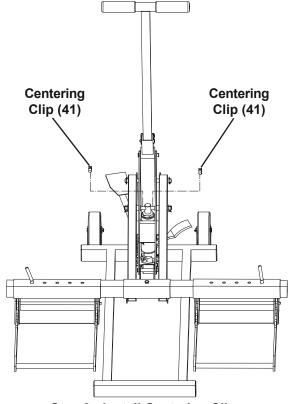
8. Insert Foot Pedal (18) into its holder on the Ram (17).

Secure Foot Pedal in place using the Foot Pedal Bolt (36) through the side of its holder.

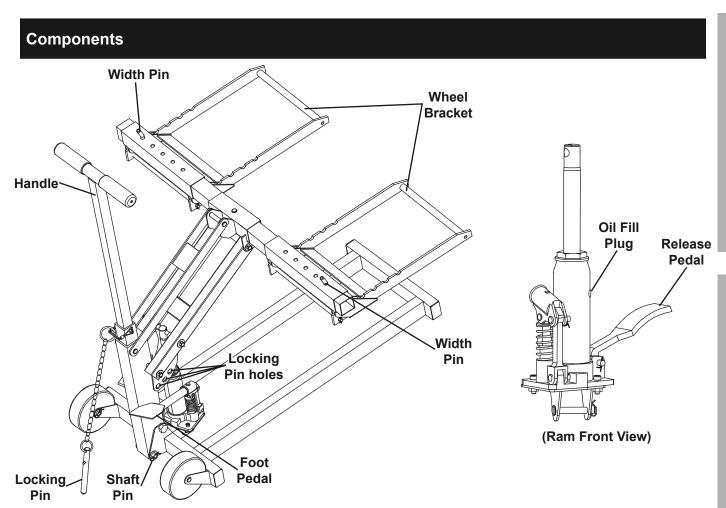


Step 8: Install Foot Pedal

9. Clip the two Centering Clips (41) to the Lift Arm Pin (28), one on each side of the Ram (17).



Step 9: Install Centering Clips



#### **Operating Instructions**



Read the entire Important Safety Information section at the beginning of this document including all text under subheadings therein before set up or use of this product.

## **Bleeding**

<u>IMPORTANT!</u> Before first use, check for proper hydraulic oil level in the Ram. Then thoroughly test the Jack for proper operation prior to its actual use. If the Jack appears *not* to be working properly, it may be necessary to *bleed* its hydraulic system of excess air.

- 1. Remove the Oil Fill Plug from the side of the Ram.
- 2. Have an assistant hold the Release Pedal down.
- Use stable weights, such as sand bags (not included) to weigh down the Wheel Brackets evenly.
- 4. Pump the Foot Pedal quickly several times.
- Check the Oil Fill Hole (where the Oil Fill Plug was removed from) and, if necessary, top off the Oil Fill Hole with hydraulic oil.
- 6. Replace the Oil Fill Plug.
- 7. Test the Jack several times for proper operation before attempting to lift a load. If the Jack still does not appear to be working properly after bleeding, do not use the Jack until it has been repaired by a qualified service technician.

### Lifting

**A**<u>WARNING!</u> Set Jack and vehicle on a flat, level, hard, ground surface safely away from oncoming traffic. Turn off vehicle's engine.

- Determine the wheel width of the ATV/mower, and adjust the Wheel Bracket supports to match that width. Lock them in place using the Width Pins. WARNING! TO PREVENT SERIOUS INJURY: Adjust them so that they are equally distant from the center of the jack, or else the jack will be unstable and might tip.
- 2. Examine the bottom of each ATV/mower wheel that is touching the floor. Adjust the depth of both wheel brackets to be slightly larger than that distance.
- Press the Release Pedal to lower the Jack. Once the Jack is fully lowered, release the Release Pedal.
- Use the ATV/mower's steering to straighten its wheels.

- Press the fronts of the Wheel Brackets straight against the fronts of the ATV/mower's wheels.
   Push the Wheel Brackets under the wheels until both wheels rest in the center of the wheel bracket.
- Place the vehicle's transmission in NEUTRAL.
   Hold the Handle and pump the Foot Pedal.
   Use smooth, full strokes for best results.
- Raise the vehicle to the desired height.
   Make sure one pair of the locking pin holes is exposed and insert the Locking Pin through the holes to lock the Lift Arm.
- 8. After the vehicle is lifted, use wheel chocks (sold separately) to block the rear wheels that are *not* being lifted.
- Check that the Lift Arm is locked with the Locking Pin before working on the ATV/mower.

## Lowering

- Remove all tools, parts, etc. from under the vehicle.
   Remove the wheel chocks from the rear wheels.
- Remove the Locking Pin from the locking pin holes.
   If it is too difficult to remove, pump the Foot Pedal slightly to remove weight from it.
- 3. Keep clear while pressing the Release Pedal to lower the ATV/mower.
- To lower slowly, press the Release Pedal all the way down.
- To lower quickly, gently press the Release Pedal until the Ram begins to drop.

Note: Ram will not lower without weight.

Once the Ram is completely lowered, remove it from under the ATV/mower.

## Folding/Storage

# WARNING! TO PREVENT SERIOUS INJURY: Unload Jack before folding.

1. Support Shaft while removing Shaft Pin from base of Jack.

- 2. Lay Shaft down and replace Shaft Pin.
- 3. Store Jack in a safe, dry location out of reach of children.



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

## **AWARNING**

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.

### Cleaning, Maintenance, and Lubrication

- Before each use, inspect the general condition of the Jack. Check for broken, cracked, or bent parts, loose or missing parts, and any condition that may affect the proper operation of the product. If a problem occurs, have the problem corrected before further use.
   Do not use damaged equipment.
- 2. Before each use, thoroughly test the Jack for proper operation prior to its actual use. If the Jack appears *not* to be working properly,

follow Bleeding instructions on facing page.

- 3. Change the hydraulic oil at least once every three years:
  - a. With the Jack unfolded and fully lowered, remove the Oil Filler Plug on the side of the Housing.
  - b. Tip the Jack to allow the old hydraulic oil to drain out of the Housing completely, and dispose of the old hydraulic oil in accordance with local regulations.
  - c. With the Jack upright, completely fill the Housing with a high quality hydraulic oil (not included) until the oil just begins to run out of the Oil Fill Hole.
  - d. Then, reinstall the Oil Filler Plug.
- Clean with a clean cloth with a detergent or mild solvent. Then, store the Jack in a safe, dry location out of reach of children.

## **Troubleshooting**

## **AWARNING**

TO PREVENT SERIOUS INJURY: Use caution when troubleshooting a malfunctioning jack. Stay well clear of the supported load. Completely resolve all problems before use.

If the solutions presented in the Troubleshooting guide do not solve the problem, have a qualified technician inspect and repair the jack before use. After the jack is repaired: Test it carefully without a load by raising it and lowering it fully, checking for proper operation, BEFORE RETURNING THE JACK TO OPERATION.

#### DO NOT USE A DAMAGED OR MALFUNCTIONING JACK!

POSSIBLE SYMPTOMS							
Jack will not lift at its weight capacity	Saddle lowers under load	Pump stroke feels spongy	Saddle will not lift all the way	Handle moves up when jack is under load	Oil leaking from filler plug	PROBABLE SOLUTION (Make certain that the jack is not supporting a load while attempting a solution.)	
X	X					Check that Release Pedal is not stuck and raises completely.	
х	X			x		Valves may be blocked and may not close fully. To flush the valves, with assistance:  1. Lower the Lift Arm and release the Release Pedal.  2. Manually lift the Lift Arm several inches.  3. Press the Release Pedal and force the Lift Arm down quickly.	
х		х	х			Ram may be low on oil. Check the oil level and refill if needed.  Ram may require bleeding - see facing page.	
					X	Unit may have too much hydraulic oil inside. Check fluid level and adjust if needed.	

#### PLEASE READ THE FOLLOWING CAREFULLY

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.

#### **Parts List**

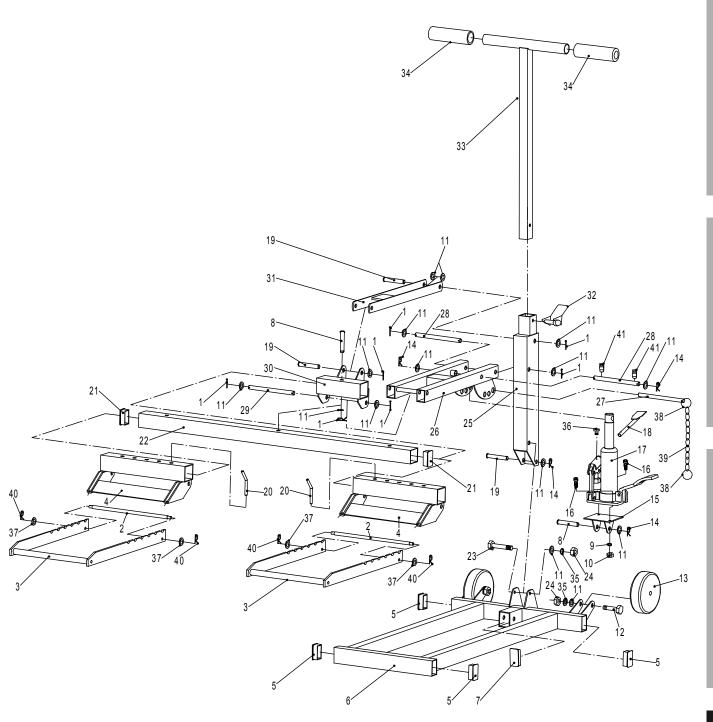
Part	Description	Qty
1	Cotter Pin	8
2	Rear Bracket Rod	2
3	Wheel Bracket	2
4	Bracket Support	2
5	End Cap (50 x 30)	4
6	Base	1
7	End Cap (40 x 40)	1
8	Pin	4
9	Ø6 Spring Washer	2
10	M6 Nut	2
11	Ø12 Flat Washer	16
12	M12*55 Bolt	2
13	Wheel	2
14	R-clip	5
15	Ram Base	1
16	M6*20 Bolt	2
17	Ram	1
18	Foot Pedal	1
19	Shaft Pin	3
20	Width Pin	2
21	End Cap (45 x 45)	2

Part	Description	Qty
22	Beam	1
23	M12*75 Bolt	1
24	M12 Nut	2
25	Shaft	1
26	Lift Arm	1
27	Locking Pin	1
28	Lift Arm Pin	2
29	Beam Bracket Pin	1
30	Beam Bracket	1
31	Upper Lift Arm	1
32	Handle Pin	1
33	Handle	1
34	Grip	2
35	Ø12 Spring Washer	2
36	M6*12 Foot Pedal Bolt	1
37	Ø8 Flat Washer	4
38	Ring	2
39	Chain	1
40	R-clip	4
41	Centering Clip	2

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. Specify UPC 193175319395 when ordering parts.



#### **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.

