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.



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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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"–51" | |
| Maximum Lift Height | 23-5/8" | Upper Safety Latch Lift Height 21-1/4" | |

IMPORTANT SAFETY INFORMATION

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

Assembly Precautions

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

Use Precautions

- 1. 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 Lift platforms.
- 5. Lift only using tires.
- 6. Immediately after lifting load, ensure Lift 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.
- 15. Keep your work area clean and well lit. Cluttered work areas invite accidents.
- Do not allow anyone on the vehicle while using the Lift. Keep bystanders a safe distance away from the vehicle and Lift.

- 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.
- 17. Stay alert. Watch what you are doing, and use common sense when operating a Lift. Do not use a Lift while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating Lifts may result in serious personal injury.
- Store idle Lifts out of reach of children and other untrained persons. Lifts are dangerous in the hands of untrained users.
- Lift 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 Lift, use only identical replacement parts. Follow instructions in the "Maintenance and Servicing" 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 Lift, 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.



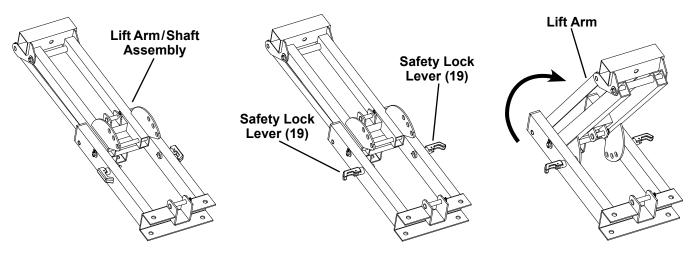
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OPERATIO

Assembly Instructions

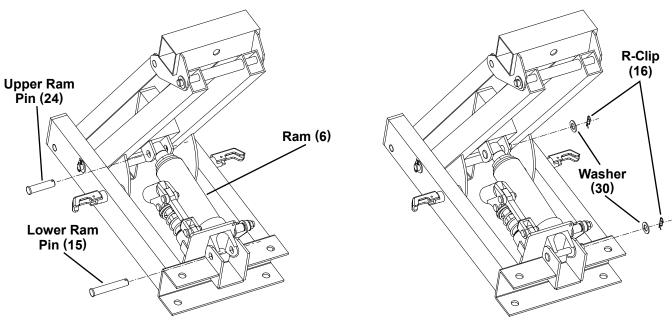
Read the <u>ENTIRE</u> IMPORTANT SAFETY INFORMATION section at the beginning of this document including all text under subheadings therein before set up or use of this product.

Place Lift Arm/Shaft Assembly flat on a horizontal surface.
 Move the two Safety Lock Levers (19) to the unlocked position as shown.
 Raise the Lift Arm portion of the assembly to an upright position.



Step 1: Prepare Lift Arm/Shaft Assembly

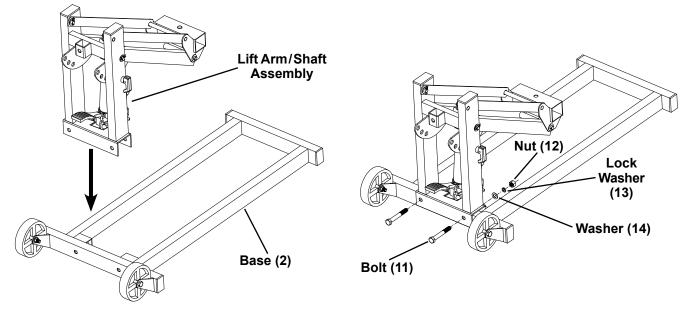
Position the Ram in Lift Arm/Shaft Assembly as shown.
 Slide Lower Ram Pin (15) through the shaft bracket and the clevis base of the Ram.
 Slide Upper Ram Pin (29) through the bracket on the Lift Arm and the top of the Ram.
 Place Washer (30) over the end of each Pin.
 Secure each Pin with an R-Clip (16).



Step 2: Install Ram

3. Place the Lift Arm/Shaft Assembly onto the wheeled end of the Base (2) as shown and align the bolt holes.

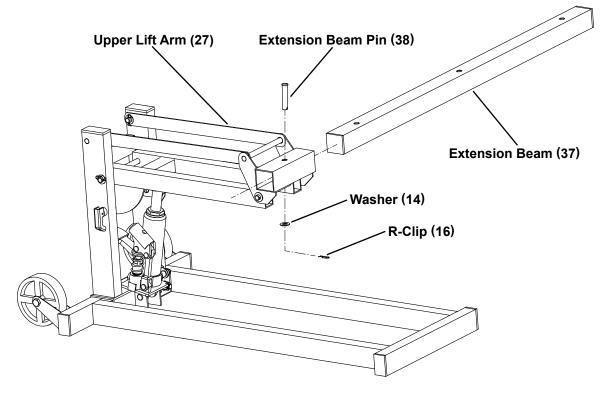
Secure the Lift Arm/Shaft Assembly to the Base using two Bolts (11), Lock Washers (13), Washers (14), and Nuts (12).





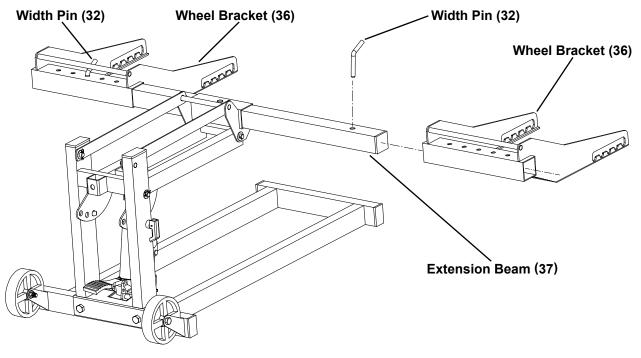
Insert Extension Beam (37) through the bracket on the Upper Lift Arm (27).
 Insert Extension Beam Pin (38) through center of bracket.

Hold Washer (14) over end of Extension Beam Pin and secure it with R-Clip (16).



Step 4: Attach Extension Beam

Slide one Wheel Bracket (36) over each end of the Extension Beam (37).
 Insert Width Pins (32) to secure them in place.

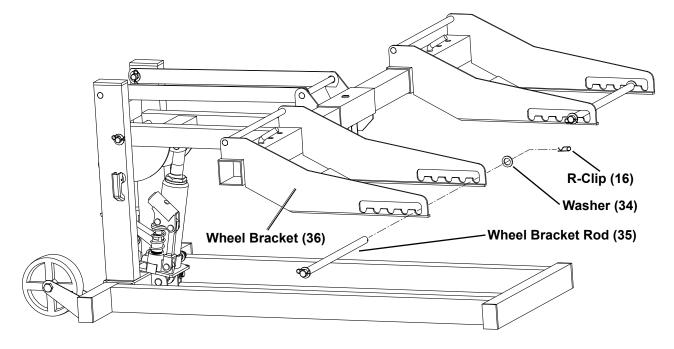


Step 5: Install Wheel Brackets

6. Remove the R-Clip (16) and Washer (34) from one end of each Wheel Bracket Rod (35).

Insert one Wheel Bracket Rod through the slots on each Wheel Bracket (36).

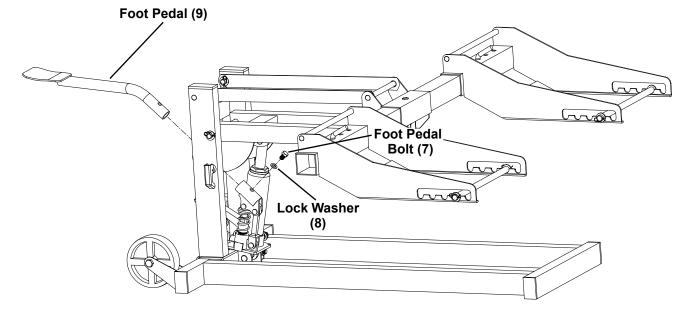
Replace the Washer over the end of each Wheel Bracket Rod and use an R-Clip to secure the end of each Rod in place.



Step 6: Attach Wheel Bracket Rods

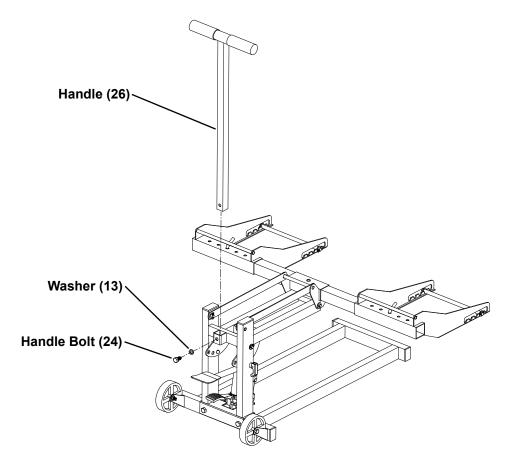
7. Insert the Foot Pedal (9) into its holder on the Ram (6).

Secure the Foot Pedal in place using the Lock Washer (8) and Foot Pedal Bolt (7) through the side of its holder.



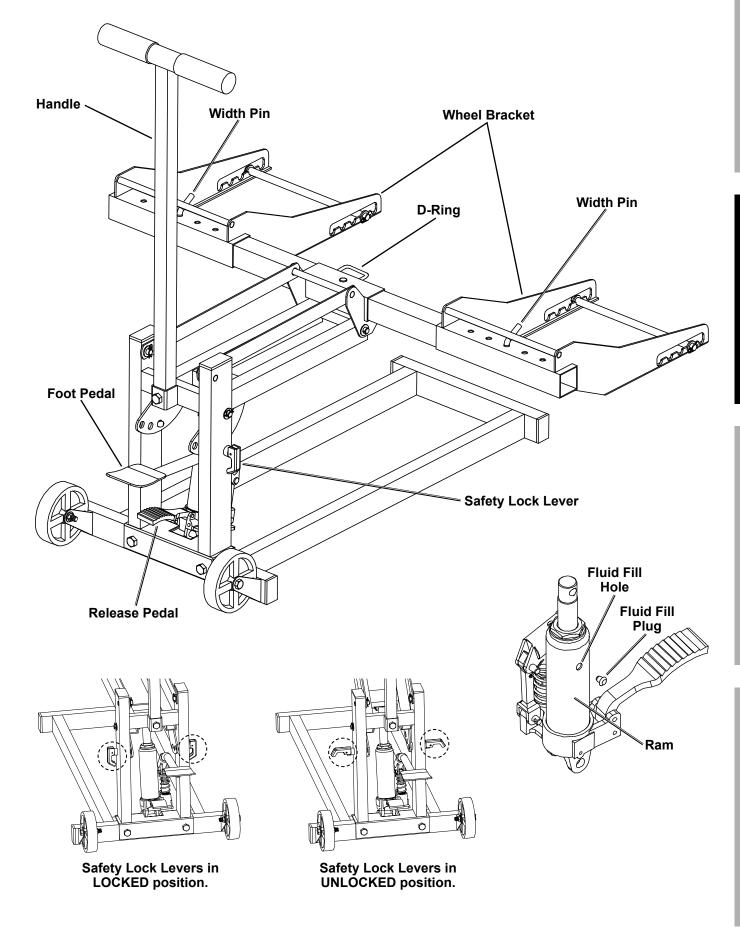
Step 7: Install Foot Pedal

Insert the Handle (26) into the bracket on the Lift Arm/Shaft Assembly and align the holes.
 Secure in place using the Handle Bolt (24) and Washer (13).



Step 8: Install Handle

Page 6



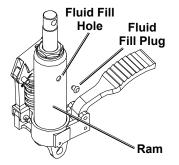
Operating Instructions

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 fluid level in the Ram. Then thoroughly test the Lift for proper operation prior to its actual use. If the Lift appears *not* to be working properly, it may be necessary to *bleed* its hydraulic system of excess air.

1. Pull out the rubber Fluid Fill Plug from the side of the Ram housing.



2. Have an assistant hold the Release Pedal down.

- 3. Use stable weights, such as sand bags (not included) to weigh down the Wheel Brackets evenly.
- 4. Pump the Foot Pedal quickly several times.
- 5. Check the Fluid Fill Hole (where the Fluid Fill Plug was removed from) and, if necessary, top off the Fluid Fill Hole with hydraulic fluid (not included).
- 6. Replace the Fluid Fill Plug.
- 7. Test the Lift several times for proper operation before attempting to lift a load. If the Lift still does *not* appear to be working properly after bleeding, do not use the Lift until it has been repaired by a qualified service technician.

Lifting

WARNING! Set Lift 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 mower/ATV and adjust the Wheel Bracket supports to match that width. Lock them in place using the Width Pins. WARNING! Adjust them so that they are equally distant from the center of the Lift, or else the Lift will be unstable and might tip.
- 2. Examine the bottom of each mower/ATV 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 Lift. Once the Lift is fully lowered, release the Release Pedal.
- 4. Use the mower/ATV's steering to straighten its wheels.
- Press the fronts of the Wheel Brackets straight against the fronts of the mower/ATV's wheels. Push the Wheel Brackets under the wheels until both wheels rest in the center of the Wheel Bracket.

Lowering

- 1. Remove all tools, parts, etc. from under the vehicle. Remove the wheel chocks from the rear wheels.
- 2. Pump the Foot Pedal slightly to remove weight from the locking mechanism.
- Raise the two Safety Lock Levers to the horizontal, unlocked position to disengage the locking mechanism. Refer to Components on page 7.

- 6. Secure the load to the D-Ring on the Lift Arm using appropriate tie-down straps (not included).
- Lower the two Safety Lock Levers to their locked position to enable the locking mechanism. Refer to Components on page 7.
- 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. As the load is lifted the locking mechanism will automatically engage to lock the Lift Arm in one of three positions.
- 10. After the vehicle is lifted, use wheel chocks (sold separately) to block the rear wheels that are *not* being lifted.
- 11. Make sure the Lift Arm is locked in one of the three available positions before working on the mower/ATV.
- 4. Keep clear while pressing the Release Pedal to lower the mower/ATV. Once the Lift is completely lowered, remove the tie-down straps and roll Lift out from under the mower/ATV.
- 5. When not in use, store Lift in a safe, dry location out of reach of children.

SAFETY

OPERATION

MAINTENANCE

Maintenance and Servicing

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

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

- 1. **BEFORE EACH USE,** inspect the general condition of the Lift. Check for:
 - · broken, cracked, or bent parts
 - · loose or missing parts
 - any other condition that may affect its safe operation.

If a problem occurs, have the problem corrected before further use. **Do not use damaged equipment.**

2. Before each use, thoroughly test the Lift for proper operation prior to its actual use. If the Lift appears *not* to be working properly, follow *Bleeding* instructions on facing page.

- 3. Change the hydraulic fluid at least once every three years:
 - a. With the Lift fully lowered, pull out the rubber Fluid Fill Plug on the side of the Ram housing.
 - b. With assistance, tip the Lift to allow the old hydraulic fluid to drain out of the Ram housing completely, and dispose of the old hydraulic fluid in accordance with local regulations.
 - c. With the Lift upright, completely fill the Ram housing with a high quality hydraulic fluid (not included) until the fluid just begins to run out of the Fluid Fill Hole.
 - d. Replace the Fluid Fill Plug.
- 4. Clean with a clean cloth with a detergent or mild solvent. Store the Lift in a safe, dry location out of reach of children.

Troubleshooting

TO PREVENT SERIOUS INJURY: Use caution when troubleshooting a malfunctioning Lift. 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 Lift before use. After the Lift is repaired: Test it carefully without a load by raising it and lowering it fully, checking for proper operation, BEFORE RETURNING THE LIFT TO OPERATION.

DO NOT USE A DAMAGED OR MALFUNCTIONING LIFT!

| POSSIBLE SYMPTOMS | | | | | | | | |
|--|-------------------------------------|-----------------------------------|---|--|---------------------------------------|-------------------------------|---|--|
| Lift will not lift at its weight capacity | Lift Arm lowers under load | Pump stroke feels spongy | Lift Arm will not lift all the way | Pedal moves up when Lift is under load | Fluid leaking from fill plug | Lift Arm will not lower | PROBABLE SOLUTION (Make certain that the Lift is not supporting a load while attempting a solution.) | |
| x | x | | | | | | Check that Release Pedal is not stuck and raises completely. | |
| x | 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. | |
| x | | x | х | | | | Ram may be low on fluid. Check the fluid level and refill if needed. Ram may require bleeding - see facing page. | |
| | | | | | x | | Unit may have too much hydraulic fluid inside. Check fluid level and adjust if needed. | |
| | | | | | | X | Check that the two Safety Lock Levers are in the horizontal, unlocked position to disengage locking mechanism. | |

Parts List and Diagram

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, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

| Part | Description | Qty |
|------|-------------------|-------------|
| 1 | Base End Cap | 4 |
| 2 | Base | 1 |
| 2 | Bolt | 2 |
| 4 | Wheel | 2 2 2 |
| 5 | Nut | 2 |
| 6 | Ram | 1 |
| 7 | Foot Pedal Bolt | 1 |
| 8 | Lock Washer | 1 |
| 9 | Foot Pedal | 1 |
| 10 | Rubber Pedal | 1 |
| 11 | Bolt | 2 |
| 12 | Nut | 2 |
| 13 | Lock Washer | 3 |
| 14 | Washer | 10 |
| 15 | Lower Ram Pin | 1 |
| 16 | R Clip | 13 |
| 17 | Lift Arm Pin | 1 |
| 18 | Pin | 2 |
| 19 | Safety Lock Lever | 2 |

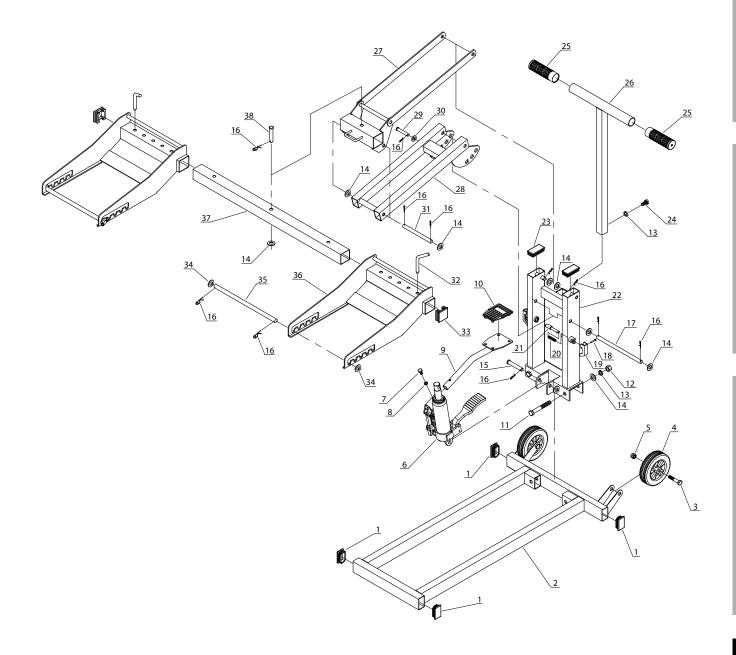
| Part | Description | Qty |
|------|------------------------|-----|
| 20 | Spring | 2 |
| 21 | Lock Pin | 2 |
| 22 | Shaft | 1 |
| 23 | Shaft End Cap | 2 |
| 24 | Handle Bolt | 1 |
| 25 | Handle Grip | 2 |
| 26 | Handle | 1 |
| 27 | Upper Lift Arm | 1 |
| 28 | Lift Arm Assembly | 1 |
| 29 | Upper Ram Pin | 1 |
| 30 | Washer | 1 |
| 31 | Upper Lift Arm Pin | 1 |
| 32 | Width Pin | 2 |
| 33 | Extension Beam End Cap | 2 |
| 34 | Washer | 4 |
| 35 | Wheel Bracket Rod | 2 |
| 36 | Wheel Bracket | 2 |
| 37 | Extension Beam | 1 |
| 38 | Extension Beam Pin | 1 |

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.

PITTSBURGH[®]AUTOMOTIVE</sup>



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.



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