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 (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.

22j

Bauer™

22202E-B

4 CUBIC FT.
CEMENT MIXER



NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

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

58991

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.

Copyright© 2022 by Harbor Freight Tools®. All rights reserved.
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.

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Table of Contents

Safety 2
Specifications 7
Setup 2
Operation 2
Maintenance 2
Parts List and Diagram 14
Warranty 16

WARNING SYMBOLS AND DEFINITIONS

⚠	This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
⚠ DANGER	Indicates a hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	Indicates a hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.
NOTICE CAUTION	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

WARNING Read all safety warnings and instructions. *Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.*
Save all warnings and instructions for future reference.

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.
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

1. This product is not a toy. Do not allow children to play with or near this item.
2. Use as intended only.
3. Inspect before every use; do not use if parts are loose or damaged.
4. Do not exceed listed weight capacity. **Be aware of dynamic loading!** Sudden load movement may briefly create excess load causing product failure.
5. DO NOT OVERLOAD MIXER. An overload can damage equipment.
6. DO NOT MOVE MIXER DURING OPERATION. The Mixer can tip over or motor could be damaged.
7. KEEP SAFE CLEARANCE AROUND MIXER. Keep all persons (except operator) at least six feet from Mixer during operation.
8. DON'T USE IN DANGEROUS ENVIRONMENT. Don't use power tools in damp or wet locations, or expose them to rain. Keep work area well lighted.
9. KEEP CHILDREN AWAY. All visitors should be kept safe distance from work area.
10. MAKE WORKSHOP KID PROOF with padlocks, master switches, or by removing starter keys.

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

11. DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was designed.
12. USE RIGHT TOOL. Don't force tool or attachment to do a job for which it was not designed.
13. USE PROPER EXTENSION CORD. Make sure your extension cord is in good condition. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage resulting in loss of power and overheating. Table A shows the correct size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the heavier the cord.
14. WEAR PROPER APPAREL. Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry which may get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
15. SECURE WORK. Use clamps or a vise to hold work when practical. It's safer than using your hand and it frees both hands to operate tool.
16. DON'T OVERREACH. Keep proper footing and balance at all times.
17. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
18. DISCONNECT TOOLS before servicing; when changing accessories, such as blades, bits, cutters, and the like.
19. REDUCE THE RISK OF UNINTENTIONAL STARTING. Make sure switch is in off position before plugging in.
20. NEVER STAND ON TOOL. Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
21. NEVER LEAVE TOOL RUNNING UNATTENDED. TURN POWER OFF. Don't leave tool until it comes to a complete stop.
22. Maintain product labels and nameplates. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.

Mixer Safety Warnings

1. **FOR CEMENT AND MORTAR ONLY. DO NOT USE WITH EPOXY 2-PART RESIN MIX.**
2. Do not attempt to move the Cement Mixer when it is full and/or in operation. It is unsafe to move the mixer while in this condition, and serious injury to personnel could occur.
3. When servicing use only identical replacement parts.
4. Only use safety equipment that has been approved by an appropriate standards agency. Unapproved safety equipment may not provide adequate protection. Eye protection must be ANSI-approved and breathing protection must be NIOSH-approved for the specific hazards in the work area.
5. Industrial applications must follow OSHA guidelines.
6. Maintain labels and nameplates on the tool. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
7. Avoid unintentional starting. Prepare to begin work before turning on the tool.
8. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
9. The warnings, precautions, 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.

Bauer™

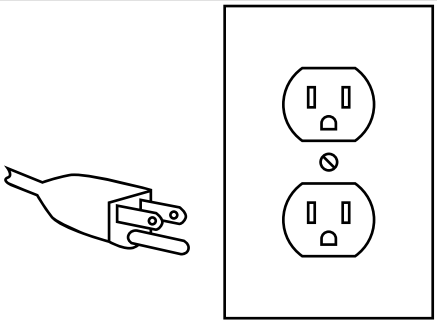
NOTICE
FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Grounding

⚠WARNING

TO PREVENT ELECTRIC SHOCK AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:
Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

Grounded Tools: Tools with Three Prong Plugs



3-Prong Plug and Outlet

1. Tools marked with "Grounding Required" have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electric shock. **(See 3-Prong Plug and Outlet.)**
2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding system and must never be attached to an electrically "live" terminal. **(See 3-Prong Plug and Outlet.)**
3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. **(See 3-Prong Plug and Outlet.)**

Extension Cords

1. ***Grounded*** tools require a three wire extension cord. ***Double Insulated*** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. **(See Table A.)**
3. The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. **(See Table A.)**
4. When using more than one extension cord to make up the total length, make sure each cord contains at least the minimum wire size required. **(See Table A.)**
5. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. **(See Table A.)**
6. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
7. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
8. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

TABLE A: RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)

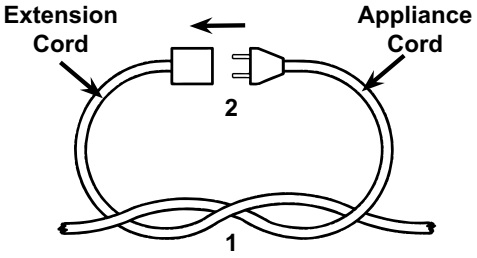
NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25´	50´	75´	100´	150´
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

*** Based on limiting the line voltage drop to five volts at 150% of the rated amperes.**

Connecting Cords

To reduce the risk of the cords pulling apart during operation, do one of the following:

a. Make a knot as shown below then connect the cords:



b. Or, use a plug-receptacle retaining strap or connector designed to hold extension cords to appliance cords.

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Vibration Safety

This tool vibrates during use. Repeated or long-term exposure to vibration may cause temporary or permanent physical injury, particularly to the hands, arms and shoulders. To reduce the risk of vibration-related injury:

1. Anyone using vibrating tools regularly or for an extended period should first be examined by a doctor and then have regular medical check-ups to ensure medical problems are not being caused or worsened from use. Pregnant women or people who have impaired blood circulation to the hand, past hand injuries, nervous system disorders, diabetes, or Raynaud's Disease should not use this tool. If you feel any medical or physical symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
2. Do not smoke during use. Nicotine reduces the blood supply to the hands and fingers, increasing the risk of vibration-related injury.
3. Wear suitable gloves to reduce the vibration effects on the user.
4. Use tools with the lowest vibration when there is a choice between different processes.
5. Include vibration-free periods each day of work.
6. To reduce vibration, maintain the tool as explained in this manual. If any abnormal vibration occurs, stop use immediately.

Overload Protection

If the Mixer is overloaded or the motor overheats, the circuit breaker will trip, shutting off the mixer automatically. Allow the motor to cool before resuming operation. Once the motor has cooled, press the rest button on the circuit breaker and turn the motor on to resume mixing.

Notice: Inspect the mixer and the mix frequently to ensure the mix does not harden or dry inside the drum or on any part of the mixer. Allowing mix to harden or dry could damage the mixer or cause a malfunction.

Notice: Use caution when using quick setting mixes. Do not allow mix to sit inactive for even a few minutes, this could allow the mix to set. Refer to material manufacturer's instructions for each mix.

Bauer™

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Specifications

Electrical Input	115 VAC / 60 Hz / 4.3 A
Motor No Load Speed	1680 RPM
Horsepower	0.5
Drum Speed	24.5 RPM
Drum Capacity	4 Cubic Feet
Drum Opening	15"

Bauer™

NOTICE
FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Setup - Before Use

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.

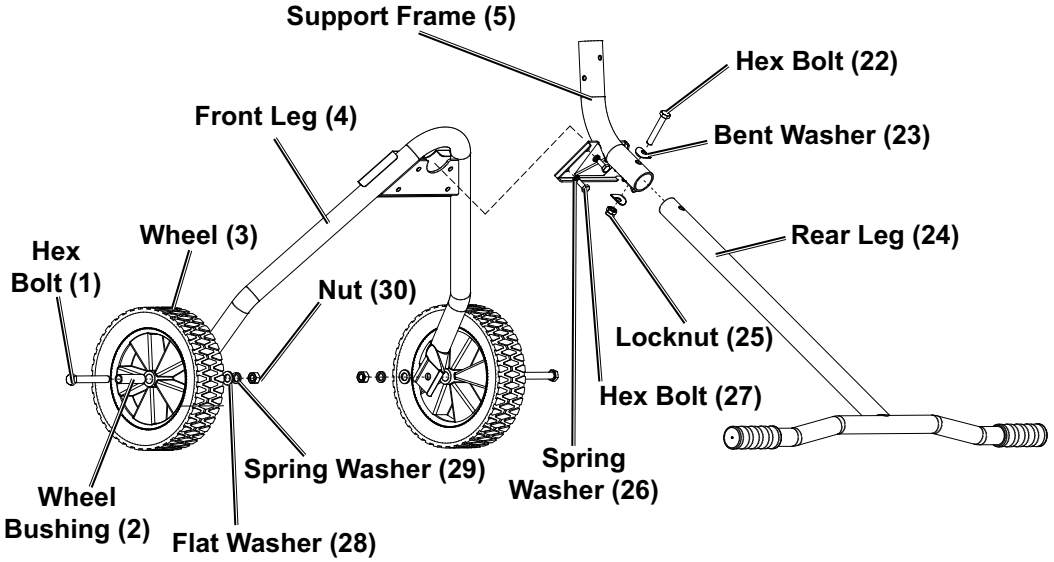
⚠WARNING

TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION:
Turn the Power Switch of the tool off before performing any procedure in this section.

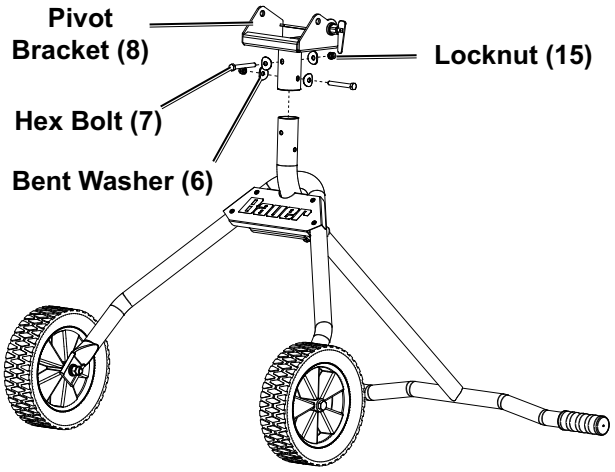
Note: For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

Assembly/Mounting

1. Line up the bolt holes in the Wheel (3) and the Front Leg (4), slide Hex Bolt (1) through the Wheel Bushing (2), Wheel, and Front Leg.
2. Slide a Flat Washer (28), and Spring Washer (29) onto the threaded end of the Bolt and secure tightly with Nut (30).
   Repeat with other Wheel.
3. Slide the Support Frame (5) onto the Rear Leg (24). Line up the bolt holes, slide Hex Bolt (22) through Bent Washer (23), then through the bolt holes.
4. Slide an Bent Washer onto the threaded end of the Bolt and secure tightly with Locknut (25). Repeat with remaining bolt.
5. Line up the mounting plate bolt holes on the Front Leg Assembly to the Rear Leg Assembly, slide Hex Bolt (27) through Spring Washer (26), screw into Front Leg mounting plate and secure tightly.



6. Slide Pivot Bracket (8) onto the Leg Assembly and line up the bolt holes.
7. Slide Hex Bolt (7) through Bent Washer (6) and bolt holes, slide Bent Washer onto threaded bolt end and secure with Locknut (15). Repeat with remaining bolt.

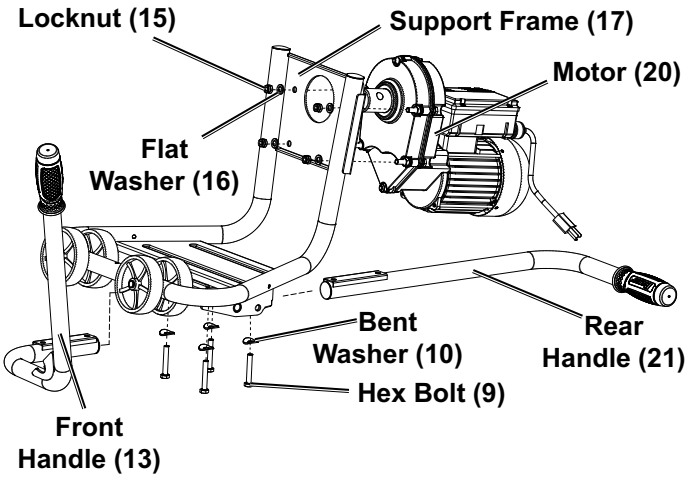


NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

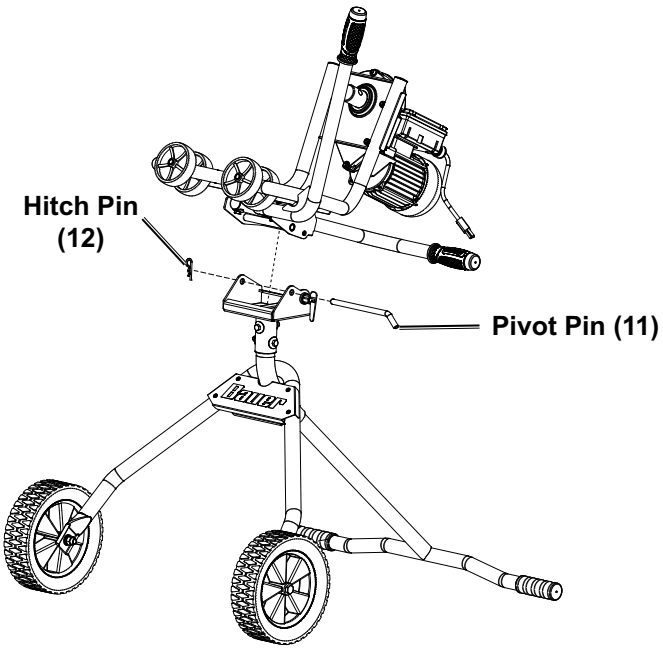
8. Attach Motor (20) to Support Frame (17) by sliding Motor Shaft and threads through the mounting holes, slide Flat Washer (16) over threads and secure tightly with Locknut (15). Repeat for each mounting bolt.

9. Line up bolt holes of Front Handle (13) and Support Frame, slide Bolts (9) through Bent Washers (10), thread into Support Frame and secure tightly.
   Repeat for Rear Handle (21).



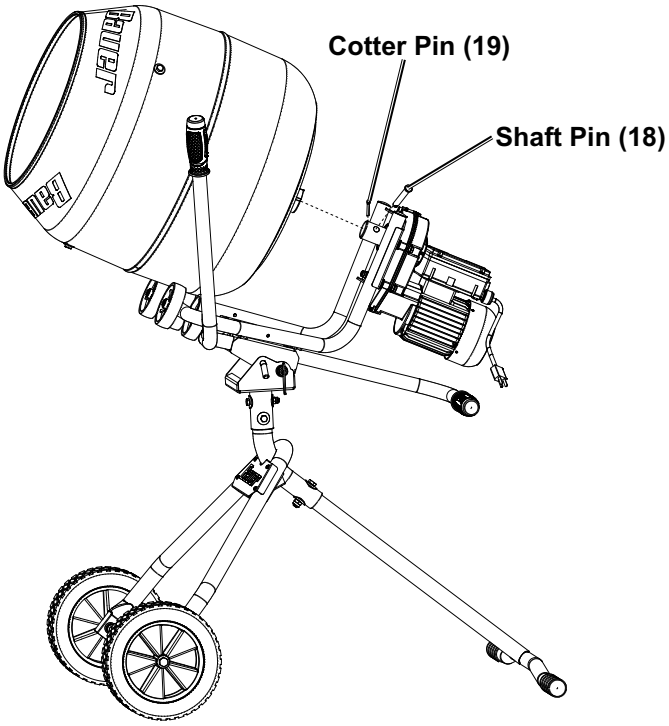
10. Set support frame on base and line up pin holes.

11. Slide Pivot Pin (11) through pin holes and slide Hitch Pin (12) into open end of Pivot Pin to secure in place.



12. Slide Drum (14) onto the Motor Shaft and line up pin holes between Motor Shaft and Drum Shaft.

13. Slide Shaft Pin (18) through pin holes and slide Cotter Pin (19) though open end of Shaft Pin to secure. Bend Cotter Pin to hold in place.



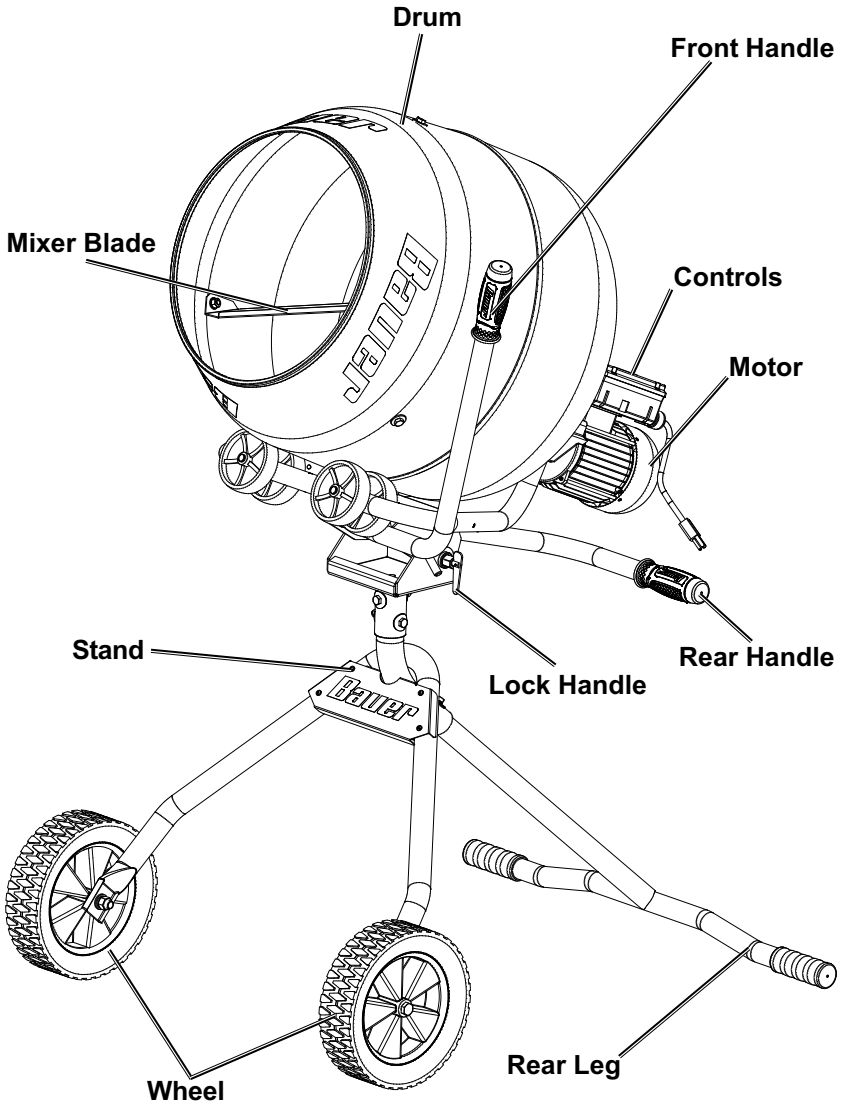
NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Operating 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.

Functions



NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

General Operating Instructions

WARNING! TO PREVENT SERIOUS INJURY: Do not operate the Mixer on slopes or uneven surfaces with an incline greater than 5º. Ensure the Mixer is stable before and after starting the Motor.

WARNING! TO PREVENT SERIOUS INJURY: Do not attempt to move the Mixer when it is full and/or in operation. Block the wheels with wheel chocks (not included).

WARNING! TO PREVENT SERIOUS INJURY: Keep clear of rollers and other pinch points when running the Mixer, pivoting, or changing the angle of the Drum.

1. Place the Cement Mixer on a solid, even surface.
2. Connect the Power Cord to an electric outlet (or properly rated grounded three prong extension cord).

Note: Turn the Motor on before filling the Drum, this will protect the Motor and evenly mix materials.

3. Press the green “ON” (I) Button, the drum will spin.

Note: Inspect the mix frequently to ensure it does not harden or dry. Allowing mix to harden or dry could damage the mixer or cause a malfunction.

4. Add material to the Drum. Typical maximum quantities include: 2 80lb bags of cement mix and up to 2 gallons of water. Refer to material manufacturer’s instructions.
5. Once materials are mixed, release Lock Handle and use the Front Handle to tilt Drum opening downward and dump materials where needed. The materials are dumped while the Drum is rotating.

Note: The drum can be pivoted 360° in either direction.

6. Loosen the Bolt on the back of the Pivot Bracket to pivot the drum. Tighten Bolt when finished.

CAUTION! Never leave the Cement Mixer running while unattended. Do not turn Mixer off while full of cement.

7. When finished, press the red “OFF” (O) Button, the Drum will stop. Disconnect the Power Cord.
8. Tilt the Drum angle as far down as possible to drain all fluids from Drum.
9. Clean, then store out of children’s reach.

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Maintenance and Servicing

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

⚠WARNING **TO PREVENT SERIOUS INJURY FROM ACCIDENTAL OPERATION: Turn the Power Switch of the tool to its "OFF" position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.**

TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:
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 tool. Check for:
   - Loose hardware
   - Misalignment or binding of moving parts
   - Cracked or broken parts
   - Damaged electrical wiring
   - Damaged or cracked belts
   - Any other condition that may affect its safe operation.
2. **AFTER USE,** immediately wash out all debris from the inside and outside of the Cement Mixer. Scrub the inside of the Drum with a stiff, long handled bristle brush for best results. Wipe external surfaces of the tool with clean cloth.
3. DO NOT apply water in or around the Motor.
4. **PERIODICALLY** recheck all fasteners and other connections for tightness.
5. **⚠WARNING! TO PREVENT SERIOUS INJURY: If the supply cord of this power tool is damaged, it must be replaced only by a qualified service technician.**

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Troubleshooting

Problem	Possible Causes	Likely Solutions
Tool will not start.	1. Cord not connected. 2. No power at outlet. 3. Internal damage or wear.	1. Check that cord is plugged in. 2. Check power at outlet. If outlet is unpowered, turn off tool and check circuit breaker. If breaker is tripped, make sure circuit has the correct capacity for the tool and circuit has no other loads. 3. Have technician service tool.
Tool operates slowly.	Extension cord too long or wire size too small.	Eliminate use of extension cord. If an extension cord is needed, use shorter/heavier gauge cord. See *Extension Cords* in *GROUNDING* section.
Excessive noise or rattling.	Internal damage or wear.	Have technician service tool.
Overheating/ Overloading.	1. Running at 100% load for extended time. 2. Blocked motor housing vents. 3. Motor being strained by long or small diameter extension cord.	1. Allow for lighter no-load intervals. 2. Wear ANSI-approved safety goggles and NIOSH-approved dust mask/respirator while blowing dust out of motor using compressed air. 3. Eliminate use of extension cord. If an extension cord is needed, use one with the proper diameter for its length and load. See *Extension Cords* in *GROUNDING* section.

Follow all safety precautions whenever diagnosing or servicing the tool.
Disconnect power supply before service.

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Parts List and Diagram

Parts List

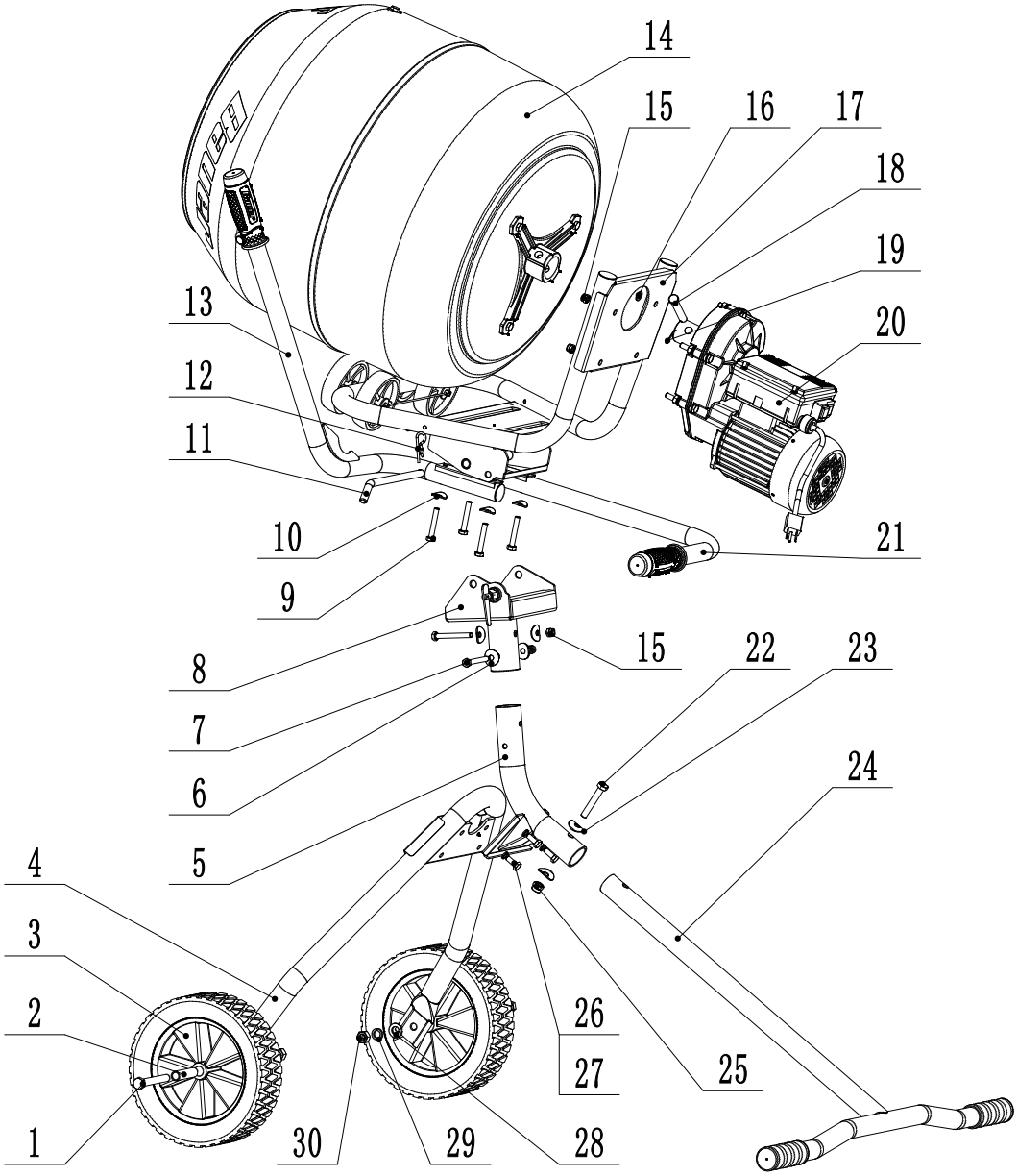
Part	Description	Qty
1	Hex Bolt M12x90	2
2	Wheel Bushing	2
3	Wheel	2
4	Front Leg	1
5	Support Frame	1
6	Bent Washer R20xM8	4
7	Hex Bolt M8x65	2
8	Pivot Bracket	1
9	Hex Bolt M8x50	4
10	Bent Washer R14xM8	4
11	Pivot Pin	1
12	Hitch Pin Ø2	1
13	Front Handle	1
14	Drum	1
15	Lock Nut M8	6

Part	Description	Qty
16	Flat Washer M8	4
17	Support Frame	1
18	Shaft Pin Ø12.5	1
19	Cotter Pin Ø5x20	1
20	Motor	1
21	Rear Handle	1
22	Hex Bolt M10x60	1
23	Bent Washer	2
24	Rear Leg	1
25	Locknut M10	1
26	Spring Washer M8	4
27	Hex Bolt M8x20	4
28	Flat Washer M12	2
29	Spring Washer M12	2
30	Nut M12	2

NOTICE

FOR CEMENT AND MORTAR ONLY.
Do not use with Epoxy 2-part resin mix.

Assembly Diagram



Record 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 193175454003 when ordering parts.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS DOCUMENT 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.

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.

Bauer™

26677 Agoura Road • Calabasas, CA 91302 • 1-888-866-5797