

CHICAGO

Electric[®] Power Tools

PORTABLE BANDSAW

Variable Speed

Model 47840

ASSEMBLY AND OPERATING INSTRUCTIONS



This Portable Bandsaw goes where your regular Bandsaw won't!



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

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For technical questions and replacement parts, please call 1-800-444-3353

Cover Picture Revised 06/06

Specifications

Capacity	4-1/2" round, 4-1/2" x 4-1/2" Square
Motor	120 V / 60 Hz / 6 Amps / 700 Watts
Blade FPM	0 ~ 230
Blade TPI	14
Blade Dimensions	44.7" L x 1/2" W x 0.25" Thick
Features	3 Bearing Blade Guide, Trigger Lock

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.
6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
7. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically non-conductive clothes and non-skid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
8. **Use eye and ear protection.** Always wear ANSI-approved impact safety goggles. Wear a full face shield if you are producing metal filings or wood chips. Wear an ANSI-approved dust mask or respirator when working around metal, wood, and chemical dusts and mists.

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9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
11. **Disconnect power.** Unplug tool when not in use.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in. Do not carry any tool with your finger on the trigger, whether it is plugged in or not.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Take caution as some woods contain preservatives such as copper chromium arsenate (CCA) which can be toxic.** When cutting these materials extra care should be taken to avoid inhalation and minimize skin contact.
16. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; 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. Do not use the tool if any switch does not turn On and Off properly.
17. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
18. **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 this tool. Approved accessories are available from Harbor Freight Tools.
19. **Do not operate tool 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 operate the tool.
20. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. This tool requires use of an extension cord of **0 to 10 amps** capability (up to 50 feet), with wire size rated at **18 AWG**. Longer extension cords require larger size wire. If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by "WA" on the jacket).
21. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.

22. **Never leave the Bandsaw unattended while it is running.** Do not put the Bandsaw down until the blade comes to a complete stop.
23. **Cutting Material.** Make sure cutting material is securely fastened down before operating the Bandsaw. Work slowly and carefully when cutting corners, sharp edges, ragged welds, etc., to avoid snagging.

Caution: Cutting material and the motor housing can get very hot during operation.
Stop work until unit cools down to safe temperature.
Spray on a coolant or water onto the blade.

Note: Performance of this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

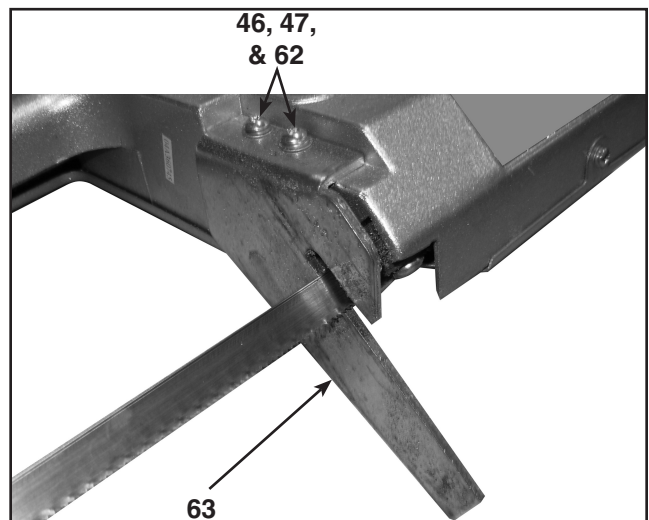
Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Unpacking

When unpacking, check to make sure all of the parts on the Parts List on Page 9 of this manual are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

Assembly

1. **WARNING! Always make sure that the unit is off and unplugged before assembly.**
2. The Guide Bar needs (63) to be assembled to the bandsaw for proper operation.
3. Remove the Screws (62) on the Frame (21), along with their Spring and Flat Washers (47, 46).
4. Install the Guide Bar around the blade as shown using the Screws (62), Spring Washers (47), and Flat Washers (46).



Operation

Warning: Never use a blade which is not in accordance with the sizes approved for this Bandsaw. If you are unsure of the blade, do not use it and contact a Harbor Freight technician at the number on the cover of this manual.

Select the proper blade according to the cutting material and the diameter of the workpiece.

This bandsaw comes with a 14 teeth-per-inch blade which is suitable for most applications (see below).

14 TPI - Soft/ Thick Material(aluminum, lead, rubber-like material, wood)

Other applications for 24 teeth-per-inch blades (not included) are shown below:

24 TPI - Hard/Thin Material (cast iron, soft steel, hard steel)

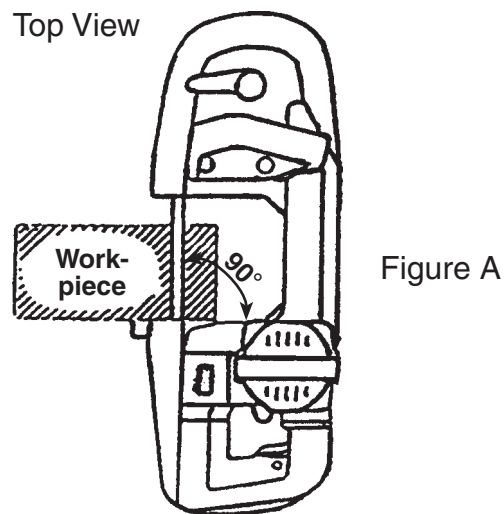
Switch Operation

Warning: Before plugging in the Bandsaw make sure the trigger switch on the inside upper portion of the U-shaped handle returns to it's original position after being depressed. Test it by depressing it with your index finger and letting go. It should spring back into position if it is in working order.

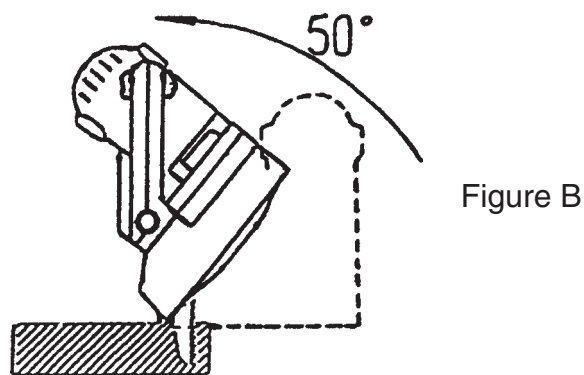
1. When the trigger is pulled, the saw motor will switch on.
2. When the trigger is released, the motor stops.
3. Adjacent to the trigger is the lock button. This enables you to lock on the motor without continually depressing the trigger. To activate the lock switch, turn on the motor as explained in Step 1. While continuing to depress the trigger, engage the lock button with your other hand. Release the trigger and the motor will stay locked on. To disengage the lock button, pull the trigger again.

How to Cut

1. Secure your work piece to a workbench or other solid surface.
2. Make sure the cord is out of the way.
3. Set the Guide Bar (63) against the work piece.
4. Turn on the Bandsaw and allow it to come up to full speed before starting the cut.
5. Tilt the unit so that the blade is vertical as shown in Figure B. Cut objects from the flattest side, where the most teeth of the bandsaw will contact the workpiece at the beginning of the cut.



6. When the motor turns on, the blade will begin turning in a counterclockwise direction and begin cutting.



7. Do not apply force to the tool by exerting too much hand pressure or leaning into it. The weight of the tool itself creates enough force to make a clean cut. Be patient. Forcing or leaning on the tool may twist or break the blade, damaging the saw and possibly causing injury.
8. As you reach the end of your workpiece, finish off the cut by slightly raising the unit slowly, bringing the blade up.

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How to Install a Saw Blade

Warning: Make sure the trigger is unlocked and unplug the tool before installing and removing a saw blade.

1. Thoroughly clean off the saw blade with a clean, dry cloth.
2. Turn the **Tension Handle (24)** until it feels loose (loose position).
3. As shown on Figure C, turn over the unit and begin to install the blade as shown in #1 on Figure C. Note: The blade teeth must be pointing downward.
4. Set the blade onto one blade guide over one side of both **Ring Gears (41c, 41d)**.
5. Insert the other side of the blade onto the other blade guide until it reaches the bearing that supports the back of the blade.
6. Hold the blade on the guides and push in as shown on numbers 2 & 3 of Figure C. Make sure the blade evenly fits around the wheels.
7. Turn the **Tension Handle (24)** until the blade is taut and the handle "Tight".
8. Plug in the tool and put on your ear/eye protection, and turn on the tool. Inspect the blade and make sure it runs steady and evenly around the wheels, and that the teeth are pointed in the correct direction.

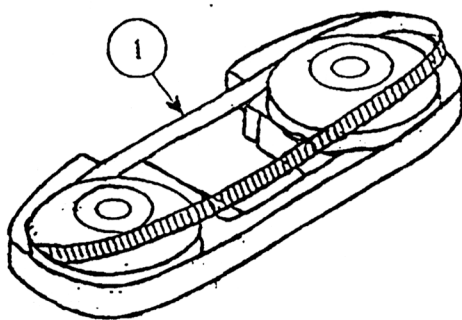
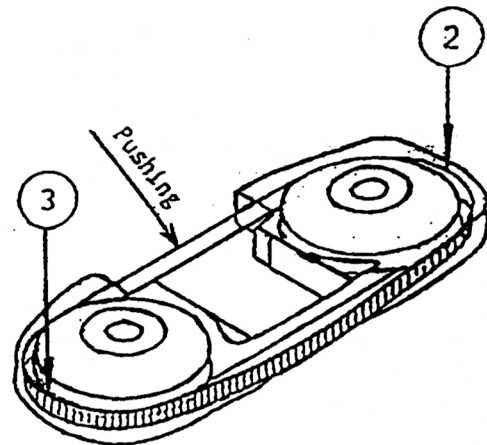


Figure C



Removing a Saw Blade

1. Thoroughly clean off the saw blade with a clean, dry cloth.
2. Turn the **Tension Handle (24)** until it feels loose (loose position).
3. Turn the unit over and hold the blade on the guides and push in as shown on numbers 2 & 3 of Figure C. Work the blade off of the wheels.

Maintenance

When servicing, use only identical replacement parts from Harbor Freight Tools. Failure to use identical replacement parts will void the warranty.

1. Always keep the motor housing clear of any debris.
2. Wipe the tool clean regularly with a clean cloth or dry brush. Never use solvents or harsh cleaners.
3. Keep the saw blade clean by regularly removing any oil or debris.
4. Inspect the power cord before each use. If any damage exists, have it replaced by a qualified technician.
5. If you see any sign of saw blade slippage, make sure blade tension is correct.
6. No motor lubrication is required. Under normal operating conditions, the bearings are sufficiently lubricated for the life of the machine.
7. When not using the tool for long periods of time, remove the saw blade.

Cleaning or replacing the **Carbon Brushes (4)**.

1. Unscrew the **Brush Cap (5)**.
2. Carefully slide out the **Carbon Brushes (4)**. Do not force or bend the spring attached to the brushes.
3. Examine the springs for dirt or wear. To remove dirt, lightly rub with a common pencil eraser. If the springs are very dirty, stretched, or worn at all, replace them with new ones.
4. When replacing the **Carbon Brushes (4)**, slide them back in slowly, being careful not to bend them or catch them on the side of the cylinder. Carefully screw on the **Brush Cap (5)**.

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR 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.

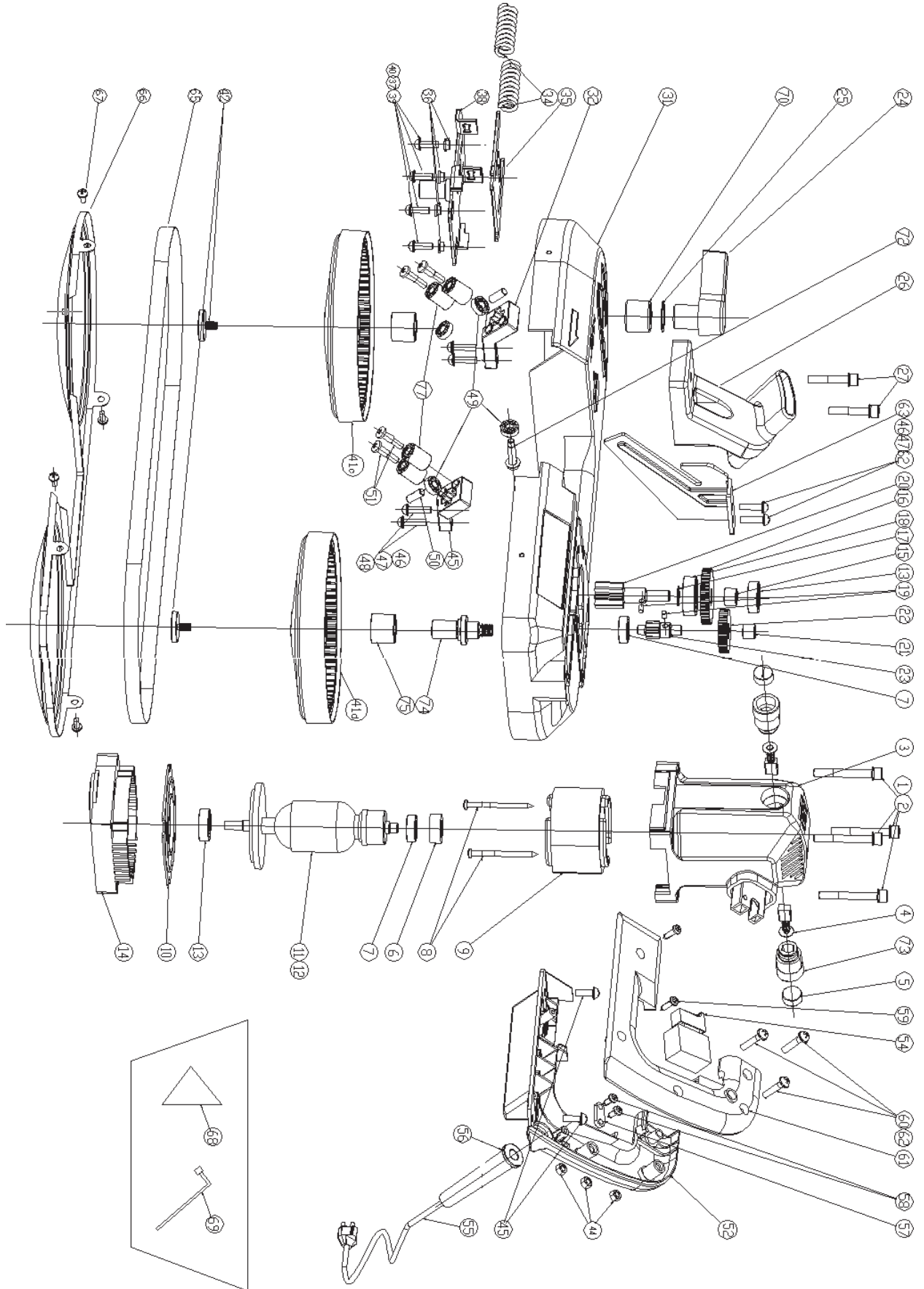
NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Parts List

Part	Description	Qty.	Part	Description	Qty.
1	Allen Head Bolt M6 x 60	4	39	Pan Head Screw M5 x 20	2
2	Flat Washer Ø6	6	40	Pan Head Screw M5 x 15	1
3	Motor Housing	1	41c	Rubber Ring Gear, Drive	1
4	Carbon Brush	2	41d	Rubber Ring Gear, Motor	1
5	Brush Cap	2	42	Screw	2
6	Rubber Bearing Holder	1	45	Right Blade Guide	1
7	Ball Bearing 80018	2	46	Flat Washer Ø5	6
8	Pan Head Screw M5 x 50	2	47	Spring Washer	6
9	Field Assembly	1	48	Phillips Screw M5 x 35	4
10	Baffle	1	49	Bearing 100698	3
11	Armature	1	50	Pin Shaft	1
12	Fan	1	51	Screw	4
13	Ball Bearing 80029	2	52	Lower Handle Housing	1
14	Front Bracket	1	54	Switch	1
15	Bushing	1	55	Cord & Plug	1
16	Gear 74	1	56	Cord Guard	1
17	Stop Ring Ø12	1	57	Fixing Plate	1
18	Ball Bearing 80201	1	58	Screw M4 x 18	2
19	Pin Ø4 x 6	2	59	Screw M4 x 12	2
20	Gear Shaft 75	1	60	Screw M4 x 25	3
21	Needle Bearing	1	61	Upper Handle Housing	1
22	Gear Shaft 72	1	62	Screw M5 x 30	2
23	Gear Shaft 73	1	63	Guide Bar	1
24	Tension Handle	1	65	Blade 1140 x 13 x 0.5	1
25	Flat Washer Ø20.5 x 0.5	1	66	Cover	1
26	Grip Handle	1	67	Screw M4 x 10	4
27	Allen Head Bolt M6 x 40	2	68	Square	1
31	Frame	1	69	Hex Key 6mm	1
32	Left Blade Guide	1	70	Bushing	1
34	Spring	2	72	Cross Pan Head Screw	1
35	Yoke	1	73	Brush Holder	2
36	Collar	3	74	Embedding Assembly	1
37	Flat Head Screw M5 x 15	2	75	Bushing	1
38	Spring Fitting Plate	1	77	Bearing Assembly	4

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Assembly Diagram



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Electric[®]Power Tools

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 ninety 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, 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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