

CHICAGO
Electric[®]Power Tools
INDUSTRIAL ROTARY HAMMER
with 1/2" Shank

Model 02957

ASSEMBLY AND OPERATING INSTRUCTIONS



Distributed Exclusively by Harbor Freight Tools[®].

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For technical questions, please call 1-800-444-3353.

REV 03e, 03k

PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	110 Volt AC / 60 Hz / 550 Watts / 0 to 900 RPM
Drill/Hammer Modes	Drill Only Drill/Hammer Hammer Only
Product Uses	Concrete, Masonry, Light/Medium Gauge Metal And Wood
Handle	Adjusts 360 Degrees
Features	Power Switch Lock, Adjustable Speed Dial, ½" Quick Change Chuck
Accessories	Drill Chuck, Chuck Adapter, And Chuck Key (1 ea.). Chisels (2) – ½" Shank Masonry Bits (3) – ½" Shank, ¾" Bit Diameter Motor Brushes (2) Depth Gauge Rod (1)
Weight	9.0 Pounds

SAVE THIS MANUAL

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

GENERAL SAFETY WARNINGS AND PRECAUTIONS

1. **KEEP WORK AREA CLEAN AND DRY.** Cluttered, damp, or wet work areas invite injuries.
2. **KEEP CHILDREN AWAY FROM WORK AREA.** Do not allow children to handle this product.
3. **STORE IDLE EQUIPMENT.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.
4. **DO NOT USE THIS PRODUCT IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgement or

reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.

5. **USE EYE, BREATHING, HEARING PROTECTION.** Wear ANSI approved safety impact eye goggles and an ANSI approved full face shield when using this product. Use an ANSI approved dust mask or respirator if the operation produces excessive dust. Also, wear ANSI approved hearing protection. ANSI approved safety impact eye goggles, full face shield, dust masks, respirator, and hearing protectors are available from Harbor Freight Tools.
6. **DRESS SAFELY.** Do not wear loose clothing or jewelry, as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows.
7. **DO NOT OVERREACH.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etcetera.
8. **INDUSTRIAL APPLICATIONS MUST FOLLOW OSHA REQUIREMENTS.**
9. **STAY ALERT.** Watch what you are doing at all times. Use common sense. Do not use this product when you are tired or distracted from the job at hand.
10. **CHECK FOR DAMAGED PARTS.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace or repair damaged or worn parts immediately.
11. **REPLACEMENT PARTS AND ACCESSORIES:** When servicing, use only identical replacement parts. Only use accessories intended for use with this product. Approved accessories are available from Harbor Freight Tools.
12. **MAINTAIN THIS PRODUCT WITH CARE.** Keep this product clean, dry, and keep all cutting bits and chisels sharp for better and safer performance.
13. **MAINTENANCE:** For your safety, service and maintenance should be performed regularly by a qualified technician.
14. **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. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.
15. **WARNING:** 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.

SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS

1. **MAINTAIN A SAFE WORKING ENVIRONMENT.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use a power tool in areas near flammable chemicals, dusts, and vapors. Do not use this product in a damp or wet location.
2. **IF AN EXTENSION CORD (not included) IS USED, MAKE SURE TO USE ONLY UL APPROVED CORDS HAVING THE CORRECT GAUGE AND LENGTH. (See Figure B.)**

REQUIRED MINIMUM EXTENSION CORD GAUGE – 110 VOLT					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	0 - 25 Feet	25 - 50 Feet	50 - 100 Feet	100 – 150 Feet	150–200 Feet
0 - 5	16	16	16	12	12
5.1 - 8	16	16	14	10	-
8.1 - 12	14	14	12	-	-
12.1 - 15	12	12	10	-	-
15.1 - 20	10	10	10	-	-

FIGURE B

3. **WHEN USING A HAND-HELD POWER TOOL, ALWAYS MAINTAIN A FIRM GRIP ON THE TOOL WITH BOTH HANDS.**
4. **SECURE THE WORKPIECE.** Whenever possible, secure the workpiece with a vise or clamps (not included).
5. **PRIOR TO STARTING THE INDUSTRIAL ROTARY HAMMER, MAKE SURE TO REMOVE THE CHUCK KEY (part #75) FROM THE TOOL.**
6. **AVOID UNINTENTIONAL STARTING.** Make sure you are prepared to begin work before turning on the Industrial Rotary Hammer.
7. **DO NOT FORCE THE INDUSTRIAL ROTARY HAMMER.** This tool will do the work better and safer at the speed and capacity for which it was designed. Do not force the drill bit or chisel into the workpiece. Apply moderate pressure, allowing the drill bit or chisel to cut without being forced.
8. **THE INDUSTRIAL ROTARY HAMMER HAS A VARIABLE SPEED (FROM 0 TO 900 RPM) FEATURE.** When drilling softer materials or small holes, use a faster speed. When drilling harder materials or larger holes, use a slower speed.
9. **NEVER LEAVE A POWER TOOL UNATTENDED WHEN IT IS PLUGGED IN TO AN ELECTRICAL OUTLET.** Turn off the tool, and unplug it from its electrical outlet before leaving.
10. **ALWAYS UNPLUG A POWER TOOL FROM ITS ELECTRICAL SUPPLY SOURCE BEFORE PERFORMING ANY INSPECTION, MAINTENANCE, OR CLEANING PROCEDURES.**
11. **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities, contain chemicals known (to the State of California) to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are: lead from lead-based paints, crystalline silica from bricks and cement or other masonry products, arsenic and chromium from chemically treated lumber. Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.
(California Health & Safety Code 25249.5, et seq.)
12. **WARNING:** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

VIBRATION HAZARD

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.

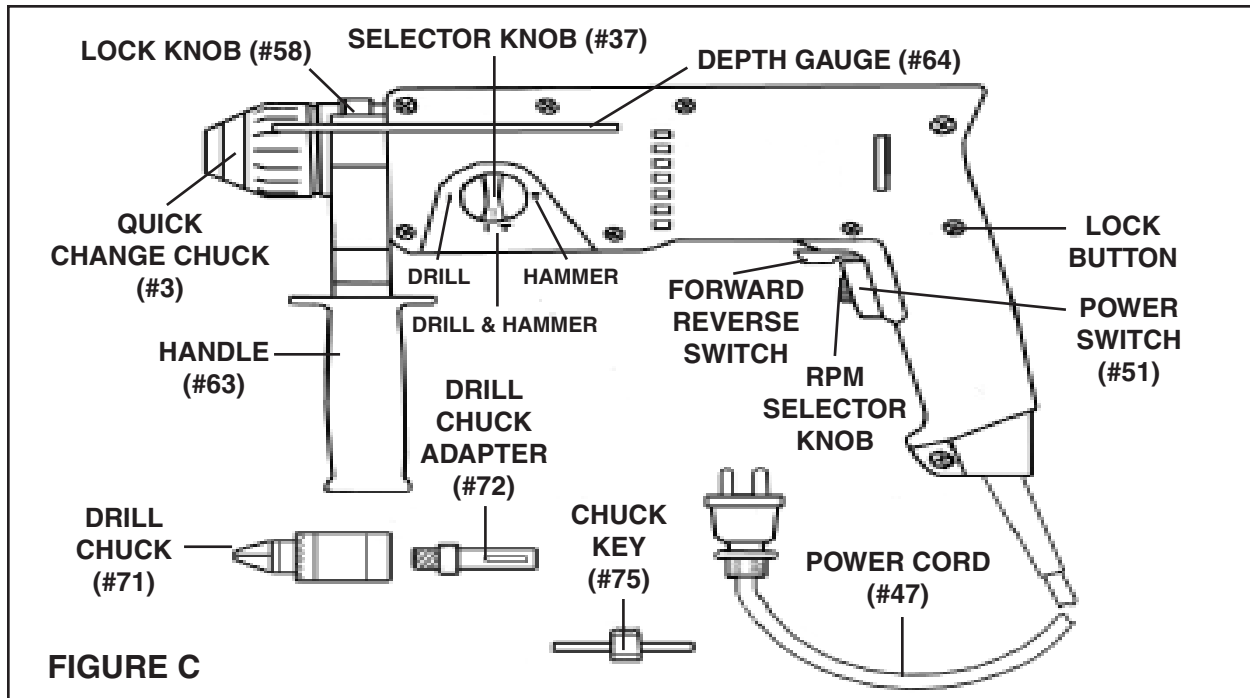
UNPACKING

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

PRODUCT FEATURES

NOTE: For additional information regarding parts listed below refer to the **Assembly Diagram on page 10.**

1. **CAUTION:** Always make sure the Power Switch (part #51) of the Industrial Rotary Hammer is in its “**OFF**” position and the tool is unplugged from its electrical outlet prior to making any adjustments to the tool.
2. Prior to using the Industrial Rotary Hammer, it is recommended that you study and familiarize yourself with the main features of the tool. **(See Figure C, next page.)**
3. **Quick Change Chuck (part #3):** Accepts up to 1/2” Shank Masonry Bits and Chisels. To load the SDS chuck, pull the black collar rearward and insert the chisel shank. (Chisels will lock in either of two positions, 180 degrees apart). While holding the collar back, rotate the chisel until it drops into the spline guide then push the chuck forward. Check that the chisel will not come out. Back and forth movement within the chuck is normal. **(See Figure C, and Assy. Diagram.)**
4. **Drill Chuck (part #71):** Accepts up to 1/2” Shank Masonry Bits and Chisels. To attach the Drill Chuck to the Industrial Rotary Hammer, insert the shank of the Drill Chuck Adapter (part #72) into the Quick Change Chuck (part #3) and lock the Drill Chuck Adapter in place (See Step #3 above). Screw the Drill Chuck *counterclockwise* firmly onto the Drill Chuck Adapter. Then insert the desired size Masonry Bit into the Drill Chuck, and lock the Bit in place with the Chuck Key (part #75). **(See Figure C.)**
5. **Depth Gauge (part #64):** Adjustable to allow for drilling/hammering the same depth in two or more workpieces. To adjust, loosen the Lock Knob (part #58). Slide the Depth Gauge forward or backward until the Gauge indicates the desired depth. Then, retighten the Lock Knob to secure the Depth Gauge in place. **(See Figure C.)**
6. **Handle (part #63):** For ease of operation, the Handle is adjustable to the right or left 360 degrees. To adjust the Handle on the Industrial Rotary Hammer, loosen the Handle by turning it *counterclockwise*. Move the Handle right or left to the desired position. Then, turn the Handle *clockwise* to lock it in place. **(See Figure C.)**



7. **Selector Knob (part #37):** Adjustable to allow for *drilling only*, *drilling and hammering*, or *hammering only*. For drilling only, turn the Selector Knob to the **left**. For drilling and hammering, turn the Selector Knob **downward**. For hammering only, turn the Selector Knob to the **right**. **(See Figure C.)** **Note:** Only turn the Selector Knob while the motor is coasting to a stop (still in motion, but not under power). Pull on the Power Switch briefly to put the motor in motion and turn the Selector Knob while the motor is coasting to a stop.
8. **Power Switch (part #51):** The Power Switch may be operated manually by simply squeezing the Switch to turn on the Industrial Rotary Hammer and releasing pressure on the Switch to turn off the Industrial Rotary Hammer. The Industrial Rotary Hammer also may be automatically locked in an “ON” mode by squeezing the Power Switch, pressing the **Lock Button**, then releasing pressure on the Power Switch. To turn off the Industrial Rotary Hammer when it is in its automatic “ON” mode, squeeze the Power Switch once then immediately release pressure on the Switch. The Power Switch also features an **RPM Selector Knob** that allows you to adjust the speed at which the Industrial Rotary Hammer runs (from 0 to 900 RPM). To increase the speed of the Industrial Rotary Hammer, turn the RPM Selector Knob *clockwise*. To decrease the speed, turn the RPM Selector Knob *counterclockwise*. Also featured on the Power Switch is a **Forward/Reverse Switch** that allows you to change the rotational direction of the Industrial Rotary Hammer. For a clockwise rotation, turn the Forward/Reverse Switch to the *right*. For a counterclockwise rotation, turn the Switch to the *left*. **(See Figure C.)**

9. **Power Cord (part #47):** The Power Cord must **only** be plugged into a 110 Volt AC electrical outlet, using a 3-Prong Adapter Plug (not included). For further information about the Power Cord refer to Steps #2 and #3 in the section “**Specific Product Warnings and Precautions**”. Also, refer to **Figure A, and Figure B.**

OPERATING INSTRUCTIONS

1. Adjust the Selector Knob (part #37) to either the Drill only, Hammer only, or Drill/Hammer mode. Adjust the RPM Selector Knob on the Power Switch (part #51) to the desired speed. If drilling/hammering overhead, attach the Dust Cup (part #74) to the *front* portion of the tool’s Housing (parts #40, #53).
2. Whenever possible, secure the workpiece in place, using a vise or clamps (not included).
3. Mark the center of the hole to be drilled/hammered with a center punch to give the Bit/Chisel (parts #66 thru #70) a start and to prevent it from “walking”. Also, lubricate the Bit with cutting oil when drilling iron or steel. Use a coolant when drilling nonferrous metals such as copper, brass, or aluminum.
4. Plug the Power Cord (part #47) into the nearest 110 Volt AC electrical outlet.
5. Make sure to hold the Industrial Rotary Hammer firmly with both hands while turning it **ON**, as torque from the Motor will cause the tool to twist.
6. Drill/hammer only as deep as necessary. Do not drill/hammer deeper than necessary into walls or other areas where you cannot identify any possible hazards behind the drilling/hammering surface.
7. To reduce jamming as the Bit/Chisel (parts #66 thru #70) breaks through the workpiece, decrease the drilling pressure when the point of the Bit/Chisel breaks through the workpiece. When you have drilled/hammered the hole, remove the Bit/Chisel (parts #66 thru #70) from the hole while the Industrial Rotary Hammer is still running. This prevents the Bit/Chisel from getting caught in the hole and causing damage.
8. Release the Power Switch (part #51) to stop the Industrial Rotary Hammer. Then, unplug the Power Cord (part #47) from its electrical outlet.

INSPECTION, MAINTENANCE, AND CLEANING

1. **CAUTION: Always unplug the Industrial Rotary Hammer from its 110 volt electrical outlet before performing any inspection, maintenance, or cleaning.**
2. **BEFORE EACH USE**, inspect the general condition of the Industrial Rotary Hammer. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, cracked or broken Masonry Bits and Chisels, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
3. **DAILY:** With a soft brush, cloth, or vacuum, remove all debris from the Industrial Rotary Hammer.

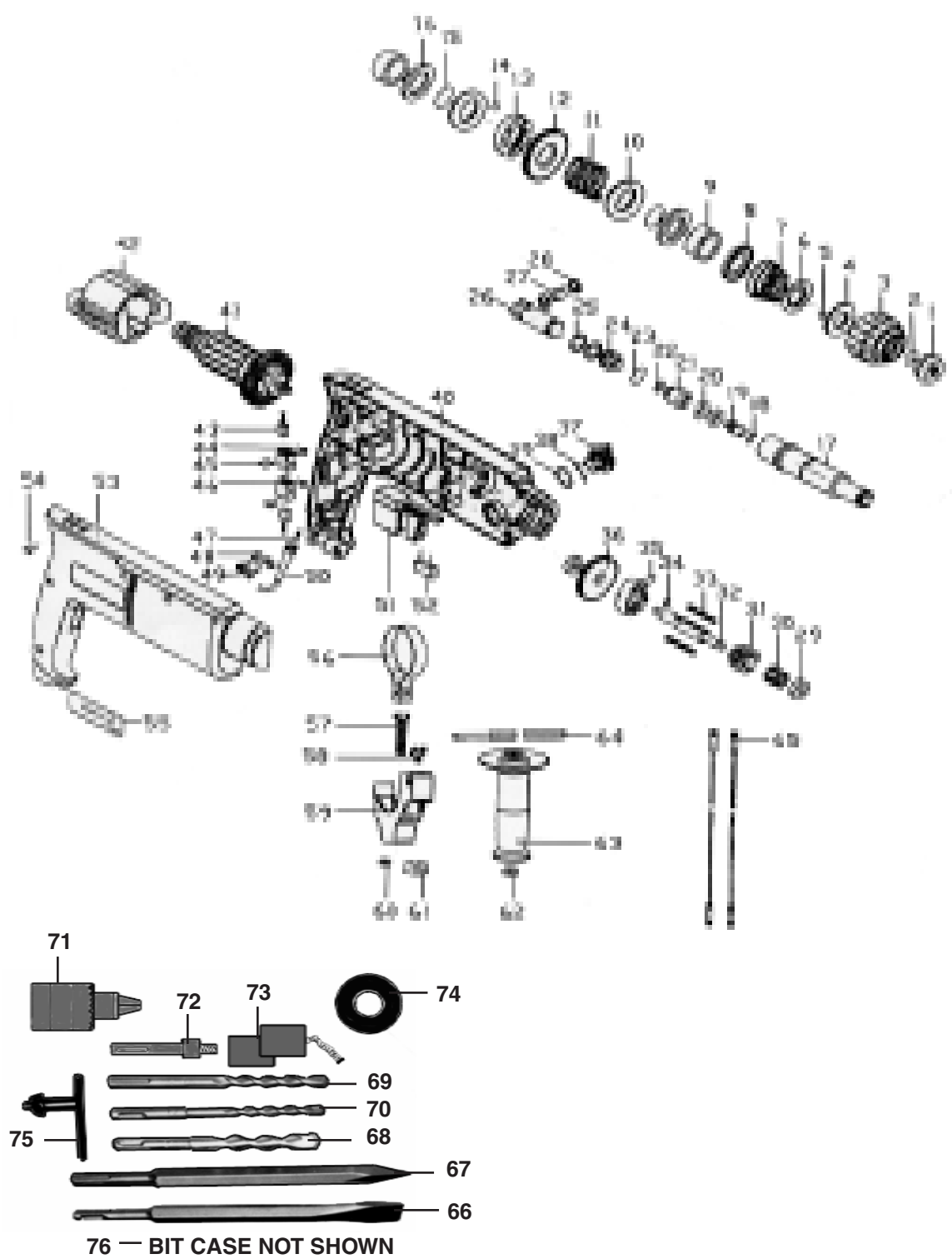
PLEASE READ THE FOLLOWING CAREFULLY

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.	Part#	Description	Qty.
1	Cap	1	39	O-Ring	1
2	Retaining Ring	1	40	Left Housing	1
3	Outer Chuck	1	41	Armature Assembly	1
4	Flat Washer	1	42	Stator Assembly	1
5	Ball Bearing	1	43	Brush	2
6	Carcase	1	44	Inductor	2
7	Spring	1	45	Brush Holder Cap	2
8	Oil Seal	1	46	Brush Holder	2
9	Needle Bearing	2	47	Power Cord	1
10	Plate Washer	2	48	Strain Relief	1
11	Spring	1	49	Pan Head Screw	2
12	Gear	1	50	Cord Guard	1
13	Clutch	1	51	Power Switch	1
14	Ball Bearing	3	52	Noise Suppressor	1
15	Retaining Ring	2	53	Right Housing	1
16	Needle Bearing	2	54	Pan Head Screw	11
17	Tool Holder	1	55	Name Plate	2
18	O-Ring	1	56	Grip Holder	1
19	Impact Bolt	1	57	Screw	1
20	O-Ring	2	58	Lock Knob	1
21	Restrictive Ring	1	59	Lock Case	1
22	O-Ring	1	60	Hex Nut	1
23	Retaining Ring	1	61	Case Nut	1
24	Striker	1	62	Hex Nut	1
25	O-Ring	2	63	Handle	1
26	Piston	1	64	Depth Gauge	1
27	Pin	1	65	Connector	2
28	Flat Washer	2	66	Flat Chisel	1
29	Bearing	2	67	Square Point Chisel	1
30	Gear	1	68	9/16" (#14) Masonry Bit	1
31	Change Ring	1	69	3/8" (#10) Masonry Bit	1
32	Shaft	1	70	5/16" (#8) Masonry Bit	1
33	Flat Key	2	71	Drill Chuck	1
34	Pin	1	72	Drill Chuck Adapter	1
35	Special Bearing	1	73	Motor Brush	2
36	Gear	1	74	Dust Cup	1
37	Selector Knob	1	75	Chuck Key	1
38	Wave Washer	1	76	Bit Case (not shown)	1

ASSEMBLY DIAGRAM



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

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