

Carby Sub

READ AND KEEP THIS FOR FUTURE REFERENCE

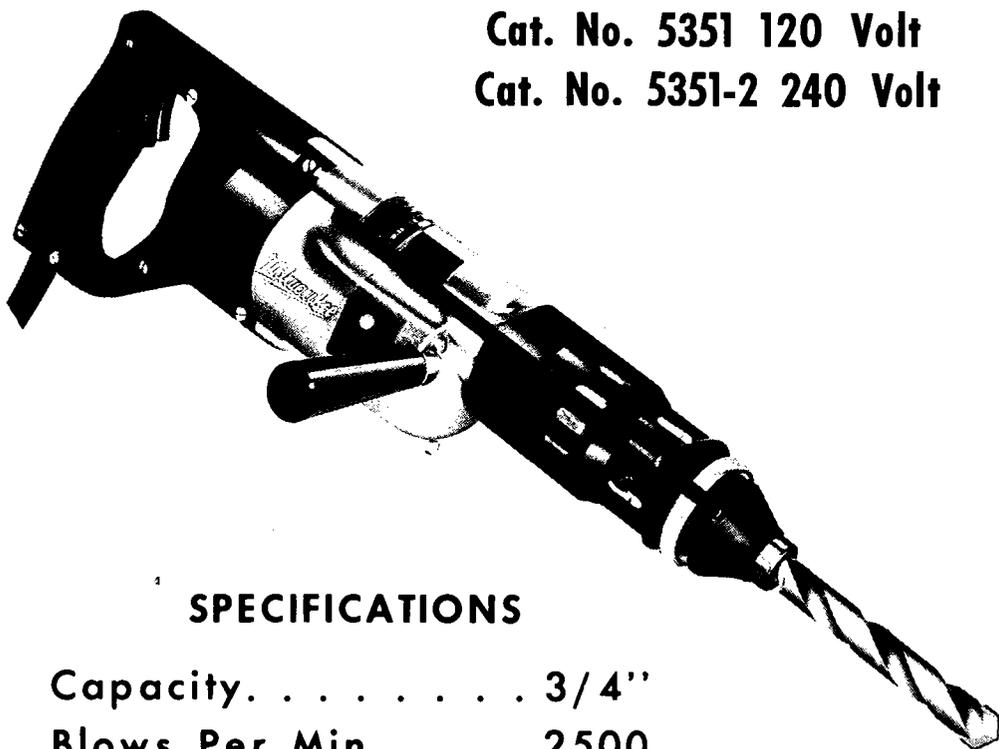
The Care and Operation of

Your New



HEAVY-DUTY ROTARY HAMMER

Cat. No. 5351 120 Volt
Cat. No. 5351-2 240 Volt



SPECIFICATIONS

Capacity 3/4"
Blows Per Min 2500
RPM 1000



IMPORTANT-Before placing tool in operation, record the following information from name plate.

Model Number _____ Serial Number _____ Date of Purchase _____



MILWAUKEE ELECTRIC TOOL CORPORATION
13135 West Lisbon Road • Brookfield, Wisconsin 53005

THIS SYMBOL



IS YOUR ASSURANCE –

1. That every tool manufactured by MILWAUKEE is produced in accordance with applicable Standards for Safety of Underwriters' Laboratories and American National Standards (ANSI).
2. That compliance with applicable safety standards is assured by independent inspection and testing conducted by Underwriters' Laboratories (UL).
3. That every motorized tool manufactured by MILWAUKEE is fully inspected.
4. That every tool has with it adequate instructions and a list of safety rules for the protection of the user.

SAFETY INSTRUCTIONS FOR ALL POWER TOOLS

1. **KNOW YOUR POWER TOOL.** Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
2. **GROUND ALL TOOLS—UNLESS DOUBLE-INSULATED.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If adapter is used to accommodate two-pronged receptacle, the adapter wire must be attached to a known ground. Never remove third prong.
3. **KEEP GUARDS IN PLACE** and in working order.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **AVOID DANGEROUS ENVIRONMENT.** Don't expose power tools to rain or use in damp, wet, or gaseous or explosive locations. Keep work area well lit.
6. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
7. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place—out of reach of children.
8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
9. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy-duty tool.
10. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
11. **USE SAFETY GLASSES** with most tools. Also face or dust mask if cutting operation is dusty.
12. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
13. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
14. **DON'T OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean at all times for best and safest performance. Follow instructions for lubricating and changing accessories. **CAUTION:** Do not use carbon tetrachloride.
16. **DISCONNECT TOOLS.** When not in use, before servicing; when changing accessories such as blades, bits, cutters, etc.

17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
18. **AVOID ACCIDENTAL STARTING.** Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugged in.
19. **WEAR EAR PROTECTORS** when using for extended periods.
20. **ACCESSORIES.** The use of any accessories other than those listed or recommended for this particular tool may be hazardous.
21. **KEEP HANDS AWAY FROM CUTTING EDGES AND ALL MOVING PARTS.**
22. **USE INSULATED SURFACES.** A double insulated or grounded tool may be made live if the blade or bit comes in contact with live wiring in a wall, floor, ceiling, etc. Always check the work area for live wires and hold the tool by the insulated surfaces when making "blind" or plunge cuts.
23. **GRINDING WHEELS.** Use only grinding wheels with "Safe Speed" at least as high as "No Load RPM" marked on the name plate.

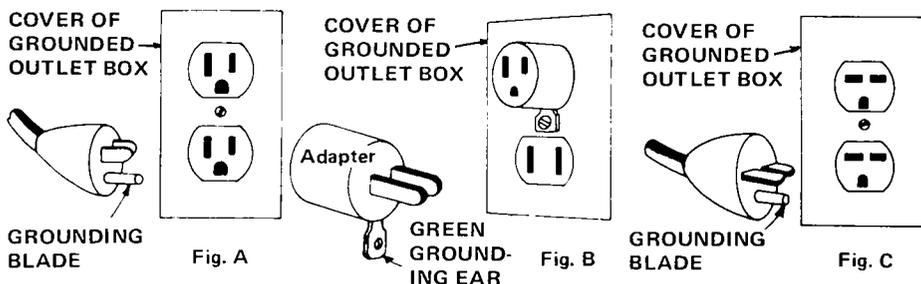
GROUNDING INSTRUCTIONS

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three-prong grounding-type plug to fit the proper grounding-type receptacle. The green conductor in the cord is the grounding wire. Never connect the green wire to a live terminal. If your unit is for use on less than 150 volts, it has a plug that looks like Fig. "A". If it is for use on 150 to 250 volts, it has a plug that looks like Fig. "C".

NOTE

The use of 3-prong adapters in Canada is prohibited by the Canadian Electrical Code.

An adapter, Fig. "B" is available for connecting Fig. "A" plugs to two-prong receptacles. The green grounding ear extending from the adapter must be connected to a permanent ground such as to properly grounded outlet box. No adapter is available for Fig. "C" plugs.



NOTE: RECEPTACLE MUST BE GROUNDED FOR SAFE USE OF ADAPTER; IF IN DOUBT CALL A QUALIFIED ELECTRICIAN AND HAVE THE RECEPTACLE CHECKED FOR GROUND.

EXTENSION CORDS

Use only three-wire extension cords which have three-prong grounding-type plugs and three-pole receptacles which accept the tool's plug. Replace or repair damaged cords.

EXTENSION CORD CHART

When an extension cord is used, it should also be a 3 wire cord to permit proper grounding of the tool. As the distance from the supply outlet increases, heavier gauge extensions are required. The use of extension cords of inadequate size wire causes a serious drop in voltage, loss of power and possible motor damage. This table is based on limiting line voltage drop to 5 volts at 150% of rated amperes.

Ampere rating (on Nameplate)	0- 2.00	2.10- 3.4	3.5- 5.00	5.10- 7.0	7.10- 12.0	12.1- 16.0	
Ext. Cable Length	Wire Size						
25 Ft.	18	18	18	18	16	14	Not normally available as flexible extension cord.
50 Ft.	18	18	18	16	14	12	
75 Ft.	18	18	16	14	12	10	
100 Ft.	18	16	14	12	10	8	
150 Ft.	16	14	12	12	8	8	
200 Ft.	16	14	12	10	8	6	
300 Ft.	14	12	10	8	6	4	
400 Ft.	12	10	8	6	4	4	
500 Ft.	12	10	8	6	4	2	
600 Ft.	10	8	6	4	2	2	
800 Ft.	10	8	6	4	2	1	
1000 Ft.	8	6	4	2	1	0	

IF USING EXTENSION CORD OUT OF DOORS, BE SURE IT IS RATED FOR OUTDOOR USE.

OPERATION

This MILWAUKEE Rotary Hammer has a 3/4" capacity and is designed for use with "A" taper percussion carbide-tip hammer bits. Bits are inserted directly into the Taper Chuck in the nose of the tool and can be removed by inserting and tapping the Drift Key No. 48-86-0050 in the Drift Key Slot.

A selector lever is provided on the side of the tool to permit drilling action only or a combination drilling-hammering action. Drilling Action Only can be obtained by turning the lever until the arrow points to the handle of the tool. Rotation With Hammering is accomplished by turning the lever until the arrow points to the nose of the tool. However, when the lever is in this position, pressure must be applied on the bit to engage the clutch and initiate hammering action. Without pressure, only rotation will result. Exert firm downward pressure to hold the tool in place and to prevent the bit from wandering. Insufficient pressure will cause the tool to rebound and diminish the striking force of the bit during hammering operations.

The Dust Shield, No. 49-62-0080, should be used at all times. This will prevent dust from entering the nose of the tool and contaminating grease. When drilling with carbide-tip bits, do not use water to settle dust or attempt drilling through steel reinforcing rods. These conditions will permanently damage the bit. An auxiliary Side Handle, No. 43-62-0410, is furnished with the hammer and may be used on either side depending upon the application. Always use side handle to maintain maximum control of hammer.

USE ONLY IDENTICAL REPLACEMENT PARTS

Parts List Available on Request

When ordering, include Catalog Number and Serial No. of Tool.

Write: MILWAUKEE ELECTRIC TOOL CORP. SERVICE DEPT.
13135 W. Lisbon Rd. Brookfield, WI. 53005

DRILLING ACTION ONLY – WITHOUT HAMMERING

Industrial chucks with thread size 1/2"-20 may be adapted to this tool. Insert chuck adapter, No. 48-03-3590, directly into taper chuck in nose of tool and screw industrial chuck to adapter. This adapter is available as an accessory. Rotate side knob with arrow pointing toward handle for rotation only. Never use hammering action with industrial chucks because chuck will not withstand extreme hammer blows and will be permanently damaged.

1/2" CHUCK
Catalog No. 48-66-1280



CHUCK
ADAPTER

Catalog No. 48-03-3590

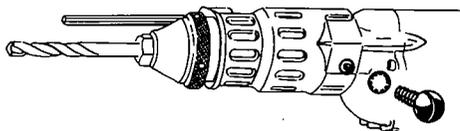
If chuck adapter slips when drilling, turn selector knob back to Hammering with Drilling action and place the bit on a block of wood. Operating the Rotary Hammer briefly in this position will secure the Adapter and prevent further slippage.

MAINTENANCE

All servicing other than recommended in this instruction manual must be done by an Authorized MILWAUKEE Service Station.

LUBRICATING HAMMER MECHANISM

Regular and proper lubrication is the most important single factor in determining the useful life of your MILWAUKEE Heavy-Duty Rotary Hammer. It has been lubricated at the factory and under normal use, this lubrication will last several months. Tools used on continuous heavy-duty production jobs require lubrication more often. Tools which have been out of use for prolonged periods of time should be relubricated before being put back in service. Use only MILWAUKEE Hammer Mechanism Grease – 3 oz. tube, Cat. No. 49-08-0150.



Remove slotted head machine screw.

Squeeze Hammer Mechanism Grease (49-08-0150) into opening and replace slotted head screw.

Do Not Overgrease. The 3 oz. tube provided contains a sufficient quantity of lubricant for approximately 8 greasings.

LUBRICATION

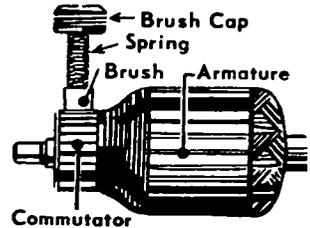
All MILWAUKEE Rotary Hammers are lubricated at the factory and require additional lubrication only at intervals of 6 months to 1 year depending upon the amount of use. When further lubrication is necessary, care should be taken to prevent the armature from coming loose when the gear case is removed. To remove gear case, remove the screws from the front of the case. Holding the tool on the diaphragm, lightly tap the gear case to loosen it. If the gear case will not completely dislodge, set the complete tool on a workbench and use two screwdrivers opposite each other to gently pry it off. If the diaphragm pulls free of the motor housing, the armature may be pulled out of the back bearing, possibly permitting the brushes to slip off the commutator. Should this occur, return the entire tool to the nearest Authorized MILWAUKEE Service Station for reassembly. Return all parts.

Repack 2/3 full with MILWAUKEE Type "A" grease. 1/2 lb. Can, Cat. No. 49-08-0500. 1 lb. Can, Cat. No. 49-08-0800.

BRUSHES AND COMMUTATOR

To inspect brushes, pull plug and unscrew brush retainer caps located on the motor housing. Pull out retainer springs and brushes when worn down to 3/16". Always replace both brushes at the same time.

When inspecting brushes, also check the commutator for wear. If worn badly send the complete tool to an Authorized MILWAUKEE Service Station for undercutting of commutator.



TOOTH ANCHOR CHUCKS

Chucks for self-drilling anchors are available in 1/4" and 3/8" bolt sizes. Anchor Chuck Adapter, Cat. No. 48-03-3615 and Tool Retaining Spring, Cat. No. 49-68-0075 are required to convert the chuck assembly for self-drilling anchors. Unscrew "A" taper adapter with anchor chuck adapter. Place tooth anchor in chuck adapter and insert ends of tool retaining spring in holes provided in knurled nut at front of tool. Snap loop of spring over shank of tooth anchor chuck to hold it in place. Place anchor in chuck and set rotary hammer for hammering with rotation. Because of the special anchor chuck adapter, the tool will provide only a hammering action. Manually rotate chuck in half circle with chuck side handle while hammering. For maximum holding force final setting of anchors should be done with a hand hammer and setting tool.

TOOTH ANCHOR CHUCK ASSEMBLIES

BOLT SIZE	CHUCK ASSEMBLY
1/4"	Cat. No. 48-66-6720
3/8"	Cat. No. 48-66-6730

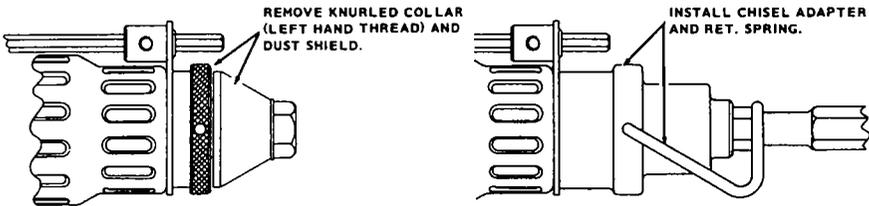
The MILWAUKEE Electric Tool Corporation assumes no responsibility for any damage or accidents resulting from the use, misapplication, or nonadherence to safety precautionary measures.

CHISELS

Chisel Adapter, No. 48-03-3620 and Retaining Spring, No. 49-68-0075, are required to permit using Chisel, No. 48-62-0300, with this Hammer. When the adapter is used, only hammering action will result.

To assemble, remove dust shield and knurled collar (left hand thread) from front of tool. Replace with left hand thread chisel adapter.

Insert ends of retaining spring in two holes provided in chisel adapter. Place chisel in adapter and snap loop of retaining spring over shank of chisel.



ACCESSORIES

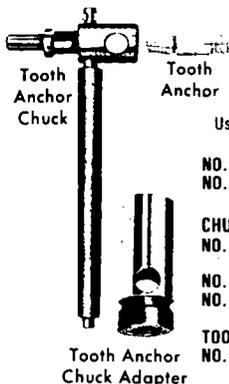


FAST SPIRAL "A" TAPER PERCUSSION CARBIDE-TIP BITS

BIT DIA. (IN.)	CATALOG NUMBER	OVERALL LENGTH (IN.)	MAX. DRILLING DEPTH (IN.)
3/16	48-20-3181	4	2
1/4	48-20-3251	4	2
1/4	48-20-3253	6	4
5/16	48-20-3311	4-1/2	2-1/2
5/16	48-20-3313	6	4
3/8	48-20-3383	4-1/2	2-1/2
3/8	48-20-3384	9	7
3/8	48-20-3385	12	10
7/16	48-20-3441	4-1/2	2-1/2
1/2	48-20-3503	9	7
1/2	48-20-3504	4-1/2	2-1/2
1/2	48-20-3505	12	10
9/16	48-20-3561	5	3
9/16	48-20-3562	9	7
5/8	48-20-3623	5	3
5/8	48-20-3624	9	7
5/8	48-20-3625	12	10
11/16	48-20-3691	5	3
3/4	48-20-3791	5-1/2	3-1/2
3/4	48-20-3796	9	7
7/8	48-20-3861	5	3

"A" TAPER PERCUSSION CARBIDE-TIP BITS

BIT DIA. (IN.)	CATALOG NUMBER	OVERALL LENGTH (IN.)	MAX. DRILLING DEPTH (IN.)
3/16	48-20-3180	4	2
1/4	48-20-3250	4	2
1/4	48-20-3252	6	4
5/16	48-20-3310	4-1/2	2-1/2
5/16	48-20-3312	6	4
3/8	48-20-3380	4-1/2	2-1/2
3/8	48-20-3381	9	7
3/8	48-20-3382	12	10
7/16	48-20-3440	4-1/2	2-1/2
15/32	48-20-3470	4-1/2	2-1/2
1/2	48-20-3499	9	7
1/2	48-20-3500	4-1/2	2-1/2
1/2	48-20-3501	12	10
9/16	48-20-3559	5	3
9/16	48-20-3560	9	7
5/8	48-20-3619	5	3
5/8	48-20-3620	9	7
5/8	48-20-3621	12	10
11/16	48-20-3690	5	3
3/4	48-20-3790	5-1/2	3-1/2
3/4	48-20-3795	9	7
7/8	48-20-3860	5	3



TOOTH ANCHOR CHUCKS AND ADAPTER

Use with hammering action only - Manual rotation

NO. 48-66-6720 For $\frac{1}{4}$ "- $\frac{3}{16}$ " Anchor / $\frac{7}{16}$ " Bolt Size
 NO. 48-66-6730 $\frac{3}{8}$ " O.D. / $\frac{9}{16}$ "

CHUCK ADAPTER for tooth anchor chucks
 NO. 48-03-3615

NO. 48-86-0100 DRIFT PIN
 NO. 49-68-0075 RETAINING SPRING

TOOTH ANCHOR CHUCK KIT
 NO. 49-22-2050 Includes all items listed above.



"A" TAPER ADAPTER



DUST SHIELD

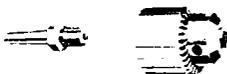


RETAINING SPRING

MISCELLANEOUS ACCESSORIES

- 48-03-3610 • "A" Taper Bit Adapter
- 48-86-0050 • Drift Key for above
- 49-96-0080 • Socket Wrench for Depth Gauge
- 49-62-0080 • Dust Shield
- 49-08-0150 • 3 oz. Lubricant for Mechanism
- 48-55-0570 • Steel Carrying Case
- 49-68-0075 • Retaining Spring
- 49-08-0500 • 1/2 Lb. Can "A" Grease For Gears
- 49-08-0800 • 1 Lb. Can "A" Grease For Gears

•Same as furnished with tool.



1/2" INDUSTRIAL CHUCK AND ADAPTER (Use with rotation only.)

NO. 48-03-3590 CHUCK ADAPTER "A" taper shank.
 1/2"-20 threaded end.

NO. 48-66-1280 1/2" CHUCK
 Chuck Key NO. 48-66-3280 included.



3/4 x 4-1/2 x 7

CHISEL AND CHISEL ADAPTER (Use with hammering action only.)

NO. 48-03-3620 CHISEL ADAPTER Fastens to nose of tool.
 NO. 48-62-0300 CHISEL Use retaining spring NO. 49-68-0075.



LIMITED WARRANTY

Every MILWAUKEE Tool is thoroughly inspected and tested before leaving the factory. Should any trouble develop, return the complete tool prepaid to the Factory, Branch of nearest Authorized MILWAUKEE Service Station. If inspection shows the trouble is caused by defective workmanship or material, all repairs will be made without charge and the tool will be returned, transportation prepaid.

This warranty does not apply where: (1) repairs or attempted repairs have been made by persons other than Factory, Branch or Authorized Service Station personnel; (2) repairs are required because of normal wear; (3) the tool has been abused or involved in an accident; (4) misuse is evident such as caused by overloading the tool beyond its rated capacity; (5) the tool has been used after partial failure or (6) the tool has been used with an improper accessory. No other warranty written or verbal, is authorized.

MILWAUKEE ELECTRIC TOOL CORPORATION

13135 W. LISBON ROAD

BROOKFIELD, WISCONSIN 53005

58-12-0743 278

Litho in U.S.A.