Our associates will ensure the tool works properly before you leave the store. If you experience issues with the tool while completing your project, simply bring it back to the Tool Rental Center to get a replacement. If you purchase Damage Protection at the time of your rental, you are not responsible for repair costs for tools that break due to normal use.

Need it? Chances are, we've got it!
HOUST
Hardware & Rentals
homegrown since 1932
woodstock, new york

READ AND KEEP THIS FOR FUTURE REFERENCE

The Care and Operation of

YOUR NEW Milwaukee HEAVY-DUTY

HOLE HAWG

MODEL 1675-1
Two Speed

IMPORTANT

READ SAFETY INSTRUCTIONS

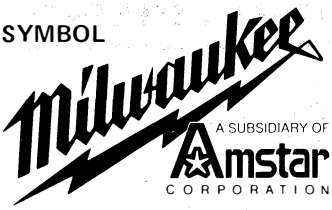
Milwaukee A SUBSIDIARY OF Amstar CORPORATION

Quality Products of

MILWAUKEE ELECTRIC TOOL CORP.

13135 W. 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.

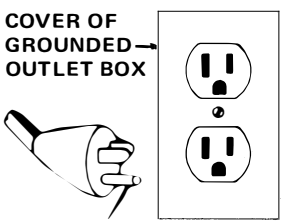


Fig. A

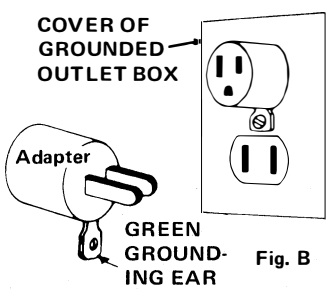


Fig. B

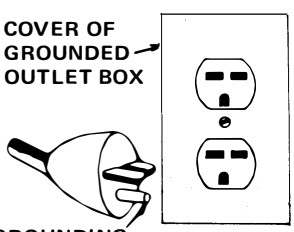


Fig. C

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	
50 Ft.	18	18	18	16	14	12	Not normally available as flexible extension cord.
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.

SPECIFICATIONS

Model No.	Shift	No Load RPM	Capacity		Volts	Amps
			In Steel	In Wood*		
1670-1	None	900	7/16"	2-9/16"	115 0 to 60 Cycles	7-1/2
1675-1	Low	300	1/2"	4-5/8"		
	High	1200	5/16"	1-3/8"		

*Selfeed Bits

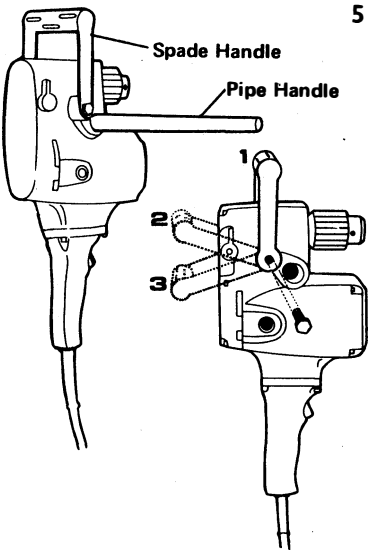
JACOBS CHUCK

This drill is furnished with a 1/2" Jacobs chuck. To insert bit, open jaws wide enough to allow bit to strike the bottom of chuck. Be sure shank of the bit and chuck jaws are clean. Dirt particles may cause bit to line up improperly. When using drill bits with flatted shanks, the flat surfaces of the bit shank must rest squarely on the chuck jaws to prevent slippage. Tighten chuck by hand to align bit before tightening with chuck key. Never use a wrench or means other than chuck key to tighten or loosen the chuck. Removing chuck from tool requires special tools. If the chuck must be removed, send complete tool to a Milwaukee Service Station.

Do not use bits larger than the rated capacity of drill. Gear damage or motor overload may result. For maximum drilling performance, be sure bits are properly sharpened before using.

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

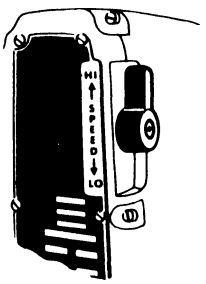
SPADE AND PIPE HANDLES



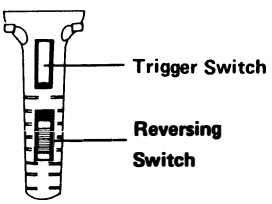
A three-position spade handle and an auxiliary pipe handle are furnished with Models 1670-1 and 1675-1 to provide safe control of tool at all times. The pipe handle may be used on either side of tool depending on application (see "Safety").

To change the spade handle to any of the three positions shown, completely remove hex head screws which secure handle and move it to the desired position. To mount handle in position number 3, it is necessary to reverse the mounting holes by turning the handle around.

SHIFTING SPEEDS (Model 1675-1)



A gear shift lever is provided on the right side of gear case to permit changing the speed from 300 rpm to 1200 rpm to suit specific drilling applications. For smooth, easy shifting, always turn off switch and shift while tool is coasting to a stop. Never shift the drill at full speed, when under load or when stopped.



REVERSING (Models 1670-1 and 1675-1)

A reversing switch is located beneath the trigger switch for fast removal of bits from holes. Permit motor to come to a complete stop before reversing. Reversing with gears in motion may cause serious damage. When backing Selfeed bits from partially drilled holes, a flick of the trigger switch will free the threaded pilot screw. When thread is loose, lift bit from hole with motor stopped. (See "Safety" for proper bracing procedure.)

CAUTION: Applications which could cause this tool to be driven at speeds more than 25% in excess of its rated speed are potentially dangerous and constitute misuse. This includes the use of voltage boosters. When coupling this tool to a potential driving source an over-riding clutch should be used to allow for disengagement. The Milwaukee Electric Tool Corporation assumes no responsibility for damage or accidents resulting from the use of this tool, its misapplication, or nonadherence to safety precautionary measures.

DRILLING PROCEDURE

Before drilling, clamp material down securely. A poorly secured piece of material may result in personal injury or inaccurate drilling. When drilling in light gauge metal or wood, back up the material with a wooden block to prevent damage to the work.

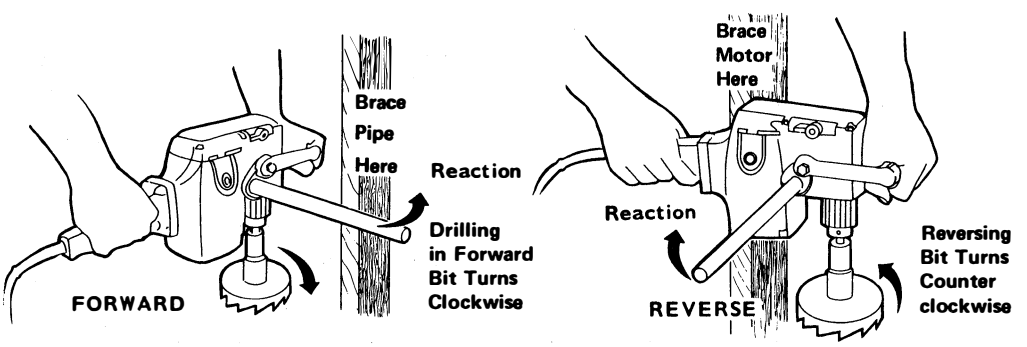
Mark the center of the hole to be drilled with a center punch to give the bit a start and to prevent it from "walking". Lubricate drill bit with cutting oil when drilling iron or steel. Use a coolant when drilling non-ferrous metals such as copper, brass or aluminum.

When using selfeed bits, auger bits or large twist bits, always brace drill as shown below. (See Safety.) To start selfeed bits, run threaded feed screw into work by flicking trigger switch, permitting the bit to coast until teeth contact work surface. Properly align bit before proceeding. This will reduce cocking and jamming when starting. To reduce jamming on breakthrough, decrease drilling pressure when feed screw point breaks thru work. Proceed with steady, even pressure.

SAFETY

CAUTION: This is a powerful tool. High torque is developed and it is important that the tool be securely held and properly braced.

The pipe handle should be used as a brace to maintain safe control of the drill. When drilling action is forward (clockwise), the drill should be braced to prevent a counterclockwise reacton if the bit should bind. When reversing, brace the drill to counterclockwise reaction if the bit should bind. When reversing, brace the drill to prevent a clockwise reaction. (See below.) Do not use trigger switch lock button in situations where the bit may bind, making it necessary to stop the drill suddenly. If a selfeed bit must be removed from a partially drilled hole, be sure drill is properly braced before reversing. (See below.)



The Milwaukee Electric Tool Corporation assumes no responsibility for damage or accidents resulting from the use or misapplication of this tool, the use of improper accessories, or the failure to adhere to safety precautionary measures.