# <u>Polymak</u>

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# Polymak CIRCULAR SAW

PM7CS-HD

INSTRUCTION MANUAL



 $Read\ and\ follow\ all\ safety\ precautions\ in\ instruction\ manual.$ 

# Power Tool Safety Rules

# ! WARNING

**Read and understand all instructions.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

### SAVE THESE INSTRUCTIONS

## **Work Area**

**Keep your work area clean and well lit.**Cluttered benches and dark areas invite accidents.

Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.

Keep by-standers, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

### **Electrical Safety**

Before plugging in the tool, be certain the outlet voltage supplied is within the voltage marked on the nameplate. Do not use "AC only" rated tools with a DC power supply.

Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded. If operating the power tool in damp locations is unavoidable, a Ground Fault Circuit Interrupter must be used to supply the power to your tool. Electrician's rubber gloves and footwear will further enhance your personal safety.

**Don't expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.

**Do not abuse the cord.** Never use the cord to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

When operating a power tool outside, use an outdoor extension cord marked "W-A" or "W." These cords are rated for outdoor use and reduce the risk of electric shock.

#### **Personal Safety**

Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.

Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Keep handles dry, clean and free from oil and grease.

**Avoid accidental starting. Be sure switch is "OFF" before plugging in.** Carrying tools with your finger on the switch or plugging in tools that have the switch "ON" invites accidents.

Remove adjusting keys or wrenches before turning the tool "ON". A wrench or

a key that is left attached to a rotating part of the tool may result in personal injury. **Do not overreach. Keep proper footing and balance at all times.** Proper footing and balance enables better control of the tool in unexpected situations.

**Use safety equipment. Always wear eye protection.** Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

#### Tool Use and Care

Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

**Do not force tool. Use the correct tool for your application.** The correct tool will do the job better and safer at the rate for which it is designed.

**Do not use tool if switch does not turn it "ON" or "OFF".** Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

**Store idle tools out of reach of children and other untrained persons.** Tools are dangerous in the hands of untrained users.

**Maintain tools with care. Keep cutting tools sharp and clean.** Properly maintained tools, with sharp cutting edges are less likely to bind and are easier to control. Any alteration or modification is a misuse and may result in a dangerous condition.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the operation. If damaged, have the toolserviced before using. Many accidents are caused by poorly maintained tools. Develop a periodic maintenance schedule for your tool.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool, may become hazardous when used on another tool.

#### Service

**Tool service must be performed only by qualified repair personnel.** Service or maintenance performed by unqualified personnel could result in a risk of injury. For example: internal wires may be misplaced or pinched, safety guard return springs may be improperly mounted.

When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance Instructions may create a risk of electric shock or injury. Certain cleaning agents such as gasoline, carbon tetrachloride. ammonia, etc. may damage plastic parts.

# Safety Rules for Circular Saw

**DANGER** Keep hands away from cutting area and blade. Keep your second hand on auxiliary handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade. Hold the saw firmly to prevent loss of control. Figures in this manual illustrate typical hand support of the saw. NEVER place your hand

behind the saw blade since kickback could cause the saw to jump backwards over your hand.

Keep your body positioned to either side of the saw blade, but not in line with the saw blade. KICKBACK could cause the saw to jump backwards.

**Do not reach underneath the work.** The guard cannot protect you from the blade below the work. Do not attempt to remove cut material when blade is moving.

Check lower guard for proper closing before each use. Do not operate saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard only with the Lower Guard Lift Lever and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.

Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a buildup of debris. Disconnect the plug from power source. Periodically remove the blade, clean the upper, lower guards and the hub area with kerosene and wipe it dry, or blow it clean with compressed air.

Lower guard should be retracted manually only for special cuts such as "Pocket Cuts" and "Compound Cuts". Raise lower guard by Lower Guard Lift Lever. As soon as blade enters the material, lower guard must be released. For all other sawing, the lower guard should operate automatically.

Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

**NEVER hold piece being cut in your hands or across your leg.** It is important to support the work properly to minimize body exposure, cccccxblade binding, or loss of control.

Hold tool by the insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or it own cord. Contact with a "live" wire will also make exposed metal parts of the tool "live" and shock the operator.

When ripping always use a rip fence or straight edge guide. This improves accuracy of cut and reduces the chance for blade binding.

Always use blades with correct size and shape (diamond vs. round) arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control and will not allow proper vari-torque engagement.

**Never use damaged or incorrect blade washers or bolts.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of

operation. The blade washers and the bolt on your saw have been designed to work as a "VARI-TORQUE CLUTCH". Understand the operation and settings of the VARI-TORQUE CLUTCH, because the proper setting of the CLUTCH, combined with firm handling of the saw will allow you to control KICKBACK.

Do not run the saw while carrying it at your side. Lower guard may be opened by a contact with your clothing. Accidental contact with the spinning saw blade could result in serious personal injury.

Depending upon use, the switch may not last the life of the saw. If the switch should fail in the "OFF" position, the saw may not start. If it should fail while the saw is running, the saw may not shut off. If either occurs, unplug the saw immediately and do not use until repaired.

This circular saw should not be mounted to a table and converted to a table saw. Circular saws are not designed or intended to be used as table saws.

**Use proper riving knife.** The right riving knife should be thick than the body of blade and be thin than the teeth of blade.

**Adjust the riving knife follow these instructions.** Incorrect gap, location and adjustment would cause the riving knife could not prevent the kickback.

Always using riving knife when operation, unless in the process of Pocket Cutting. Riving knife would effect the pocket cutting, and should be reinstalled after pocket cutting.

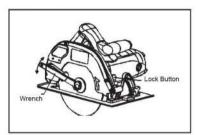
**Riving knife should be plugged in the workpiece.** Riving knife could not make any function unless it being plugged in the workpiece.

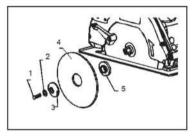
**Never start the saw when riving knife bended.** Any small interfere may effect the speed of lower guard closing freely.

Maintain a firm grip with both hands on the saw and position your body and arm to allow you to resist KICKBACK forces.

When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or KICKBACK may occur. Investigate and take corrective action to eliminate the cause of blade binding. Wet lumber, green lumber or pressure treated lumber require special attention during cutting operation to prevent KICKBACK. Avoid cutting nails. Inspect for and remove all nails from lumber before cutting.

Blade depth and bevel adjusting locking knobs must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and KICKBACK. Using the saw with an excessive depth of cut setting increases loading on the unit and susceptibility to twisting of the blade in the kerf. It also increases the surface area of the blade available for pinching under conditions of kerf close down. Use extra caution when making a "Pocket Cut" into existing walls or other blind areas. The protruding blade may cut objects that can cause KICKBACK.





- 1. Blade Stud
- 2, Washer
- 3, Out Flange
- 4, Blade
- 5, Inner Flange

# Assembly

# ATTACHING THE BLADE

! WARNING Disconnect the plug from the power source before making any assembly, adjustments or changing accessories. Such preventive safety measures reduce the risk of starting the tool accidentally.

1. Press the lock button and turn wrench until lock

button engages. Saw shaft is now locked. Continue to depress button, turn wrench counter-clockwise and remove BLADE STUD and OUTER FLANGE.

- Retract the lower guard all the way up into the upper guard. While retracting the lower guard, check operation and condition of the LOWER GUARD SPRING.
- 3. Make sure the saw teeth and arrow on the blade point in the same direction as the arrow on the lower guard.
- 4. Slide blade through slot in the foot and mount it against the INNER FLANGE on the shaft. Be sure the large diameter of the INNER and OUTER FLANGE lay flush against the blade.

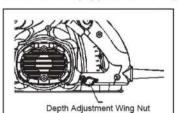
5. Reinstall OUTER FLANGE. First tighten BLADE STUD finger tight, then TIGHTEN BLADE STUD WITH THE WRENCH PROVIDED.

Do not use wrenches with longer handles, since it may lead to over tightening of the blade stud.

Operating Instructions

# DEPTH ADJUSTMENT

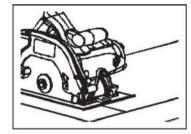
Your saw is equipped with a depth detent system that will stop the foot at lumber

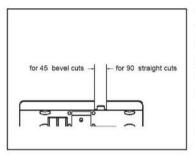


depths. Disconnect plug from power source. Loosen the depth adjustment Wing Nut. Hold the foot down with one hand and raise or lower saw by the handle.

# **BEVEL ADJUSTMENT**

Your saw is equipped with a bevel detent system that will stop the foot at from 0° to 45° angles.





Disconnect plug from power source. The foot can be adjusted up to 45° by loosening the bevel adjustment Wing Nut. Align to desired angle on calibrated quadrant. Then tighten bevel adjustment Wing Nut.

Because of the increased amount of blade engagement in the work and decreased

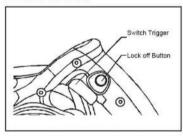
stability of the foot, blade binding may occur. Keep the saw steady and the foot firmly on the workpiece.

### LINE GUIDE

For a straight 90° cut, use right side of notch in the foot. For 45° bevel cuts, use the left side. The cutting guide notch will give an approximate line of cut. Make sample cuts in scrap lumber to verify actual line of cut. This will be helpful because of the number of different blade types and thicknesses available. To ensure minimum splintering on the good side of the material to be cut, face the good side down.

# ! WARNING SWITCH

When starting the tool, hold it with both hands. The torque from the motor can cause the tool to twist.



To turn tool "ON", Depress Lock OFF button, then squeeze the trigger switch.

To turn the tool "OFF", release the trigger switch, which is spring loaded and will return to the off position automatically.

Your saw should be running at full speed BEFORE starting the cut, and turned off only AFTER completing the cut. To increase switch life, do not

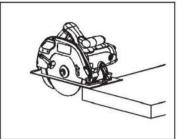
turn switch on and off while cutting.

## GENERAL CUTS

Always hold the saw handle with one hand and the auxiliary handle or housing with the other.

# ! WARNING

Always be sure either hand does not interfere with the free movement of the lower guard.



Maintain a firm grip and operate the switch with a decisive action. Never force the saw. Use light and continuous pressure.

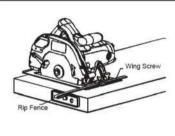
# ! WARNING

After completing a cut and the trigger has been released, be aware of the necessary time it takes for the blade to come to a complete stop during coast down. Do not allow the saw to brush against your leg or side, since the lower guard is

retractable, it could catch on your clothing and expose the blade. Be aware of the necessary blade exposures that exist in both the upper and lower guard areas.

When cutting is interrupted, to resume cutting: squeeze the trigger and allow the blade to reach full speed, re-enter the cut slowly and resume cutting.





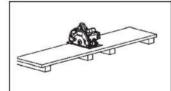
The combination blade provided with your saw is for both cross cuts and rip cuts. Ripping is cutting lengthwise with the grain of the wood. Rip cuts are easy to do with a rip fence. Rip Fence is available as an accessory. To attach fence, insert fence through slots in foot to desired width as shown.

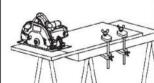
#### CUTTING LARGE SHEETS

Large sheets and long boards sag or bend, depending on support. If you attempt to cut without leveling and properly supporting the piece, the blade will tend to bind, causing KICKBACK and extra load on the motor.

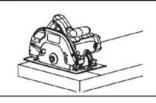
Support the panel or board close to the cut, Be sure to set the depth of the cut so that you cut through the sheet or board only and not the table or work bench. The two-by-fours used to raise and support the work should be positioned so that the broadest sides support the work and rest on the table or bench.

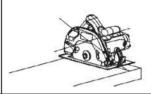
Do not support the work with the narrow sides as this is an unsteady arrangement. If the sheet or board to be cut is too large for a table or work bench, use the supporting two-by-fours on the floor and secure.











# ! WARNING

#### Service

Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious hazard. We recommend that all tool service be performed by a Factory Authorized Service Station.

#### Carbon Brushes

The brushes and commutator in your tool have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every 50 hours of operation the brushes be examined. Only genuine replacement brushes specially designed for your tool should be used.

#### Bearings

After about 50 hours of operation, or at every second brush change, the bearings should be replaced at Factory Authorized Service Station. Bearings which become noisy (due to heavy load) should be replaced at once to avoid overheating or motor failure.

# ! WARNING

# Cleaning

To avoid accidents always disconnect the tool from the power supply before cleaning or performing any maintenance. The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air. Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.

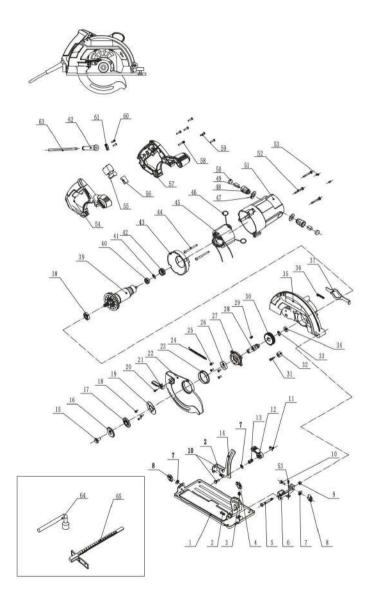
# ! CAUTION

Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

# **TECHNICAL DATA**

Model No.	PM7CS-SD	
Rated power input: :	1900W	
Rated voltage:	220V	
No load speed:	5000r/min	
Disc diameter:	185mm	
Double insulation:		

# PM7CS-HD Exploding View



# PM7CS-HD Spare part list

No	Description	QTY	No	Description	Qty
1	Base Plate	1	34	Bearing 607 Z	1
2	Rivet	2	35	Gear box	1
3	Spring	1	36	Brake Spring	1
4	Wing Screw M6*12	1	37	Brake	1
5	Round Screw 6*12	1	38	Bearing 6001 RS	1
6	Swinging strut	1	39	Armature	1
7	Spacer 16*6.5*1.5	3	40	Bearing 608	1
8	Wing Screw M6	2	41	Spacer	1
9	Hexagon Scrwe M6	1	42	Bearing sleeve	1
10	Screw M6*25	1	43	Windshield	1
11	Open Spring 9	1	44	Screw M4*60	2
12	Adjustment Wrench	1	45	Stator	1
13	Screw M6*17	1	46	Tension Spring	2
14	Strut	1	47	Brush Holder	2
15	Hexagon Screw M8*16	1	48	Carbon Brush	2
16	Upper flange	1	49	Insulated Space	2
17	Lower flange	1	50	Brush Cover	2
18	Screw m4*10	3	51	Housing Body	1
19	Gland	1	52	Screw M5*40	3
20	Screw M4*10	1	53	Hex-socket Screw M5*8	3
21	Cover Wrench	1	54	Right handle	1
22	Knife Cover	1	55	Switch FA5-12/2B	1
23	Front cover plastic set	1	56	Capacitance	2
24	Cover Spring	1	57	Left Handle	1
25	Screw M5*12	4	58	Screw M4*20	1
26	Bearing 6002RS	1	59	Screw M4*16	6
27	Front cover	1	60	Screw ST4*14	2
28	Output shaft	1	61	Pressure Plate	1
29	Woodruff Key 4*13	1	62	9523 Cable cover	1
30	Gear	1	63	Cable	1
31	Screw M5*20	1	64	Socket	1
32	Rubber Column	1	65	Guide Rule	1
33	Bearing Windshield	1			

9 10