



14-GAUGE ELECTRIC SHEAR

OWNER'S MANUAL



WARNING:

Read carefully and understand all **ASSEMBLY AND OPERATION INSTRUCTIONS** before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item#: 46257

Thank you very much for choosing an IRONTON product! For future reference, please complete the owner's record below:

Model: _____ Purchase Date: _____

Save the receipt, warranty and these instructions. It is important that you read the entire manual to become familiar with this product before you begin using it.

This machine is designed for certain applications only. The distributor cannot be responsible for issues arising from modification. We strongly recommend this machine not be modified and/or used for any application other than that for which it was designed. If you have any questions relative to a particular application, DO NOT use the machine until you have first contacted the distributor to determine if it can or should be performed on the product.

For technical questions please call **1-800-222-5381**.

INTENDED USE

This electric shear is ideal for cutting various types of metal with smooth, accurate cuts and precise control over straight and curved cuts. Variable speed trigger and 360° swiveling head lets you easily adjust your cutting speed and direction.

SPECIFICATIONS

- Item#: ----- 46257
- Rated Power: ----- 120V~, 60Hz, 4.0A
- No-Load Speed: ----- 0-2500 RPM
- Cutting Capacity: ----- 14 Gauge Sheet Metal and 18 Gauge stainless sheet.

GENERAL SAFETY RULES



WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.



CAUTION: Do not allow persons to operate or assemble this saw until they have read this manual and have developed a thorough understanding of how the saw works.



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

SAVE THESE INSTRUCTIONS

WORK AREA SAFETY:

- **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 bystanders, children, and visitors away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- **Power tool plugs must match the outlet.** Never modify the plug in any way. Double insulated tools are equipped with a polarized plug (one blade is wider than the other). This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation eliminates the need for the three wire grounded power cord and grounded power supply system.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is grounded.
- **Do not abuse the cord.** Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged cords increase the risk of electric shock.
- **When operating a power tool outside, use an extension cord suitable for outdoor use.** These cords are rated for outdoor use and reduce the risk of electric shock.
- **Do not use AC only rated tools with a DC power supply.** While the tool may appear to work. The electrical components of the AC rated tool are likely to fail and create a hazard to the operator.

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.
- **Use safety equipment.** Always wear eye protection. Safety equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection for appropriate conditions will reduce personal injuries.
- **Dress properly.** Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts. Air vents may cover moving parts and should be avoided.
- **Avoid accidental starting.** Ensure the switch is in the off position before plugging in. Carrying power tool with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- **Remove any adjusting keys or wrenches before turning the power tool on.** A wrench or key that is left attached to a rotating part of the tool may result in personal injury.
- **Do not overreach.** Maintain proper footing and balance at all times. Loss of balance can cause an injury in an unexpected situation.
- **If devices are provided for connection of dust extraction and collection facilities,** ensure these are connected and properly used. Use of these devices can reduce dust related hazards.
- **Do not use an unstable support.** Stable footing on a solid surface enables better control of the tool in unexpected situations.
- **Keep tool handles dry, clean and free from oil and grease.** Slippery handles cannot safely control the tool.

TOOL USE AND CARE

- **Secure the work piece.** Use clamp or other practical way to hold the work piece to a stable platform. Holding the work piece by hand or against your body is unstable and may lead to loss of control.
- **Do not force the power tool.** The tool will perform the job better and safer at the feed rate for which it is designed. Forcing the tool could possibly damage the tool and may result in personal injury.
- **Use the correct power tool for the job.** Don't force the tool or attachment to do a job for which it is not 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 or replaced by an authorized service center.
- **Turn power tool off, and disconnect the plug** from the power source and/or battery pack from the power tool before making any adjustments, changing the accessories, or storing the tools. Such preventive safety measures reduce the risk of an accidental start up which may cause personal injury.
- **Store idle tool out of reach of children and other inexperienced persons.** It is dangerous in the hand of untrained users.
- **Maintain power tools with care.** Check for proper alignment and binding of moving parts, component breaks, and any other conditions that may affect the tool's operation. A guard or any other part that is damaged must be properly repaired or replaced by an authorized service center to avoid risk of personal injury.
- **Use recommended accessories.** Using accessories and attachments not recommended by the manufacturer or intended for use on this type tool may cause damage to the tool or result in personal injury to the user. Consult the operator's manual for recommended accessories.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Feed the work piece in the correct direction and speed.** Feed the work piece into a blade, cutter, or abrasive surface against the direction of the cutting tool's direction of rotation only. Incorrectly feeding the work piece in the same direction may cause the work piece to be thrown out at high speed.
- **Never leave the tool running unattended, turn the power off.** Do not leave the tool until it comes to a complete stop.
- **Never start the power tool when any rotating component is in contact with the work piece.**



WARNING: USE OF THIS TOOL CAN GENERATE AND DISBURSE DUST OR OTHER AIRBORNE PARTICLES, INCLUDING WOOD DUST, CRYSTALLINE SILICA DUST AND ASBESTOS. Direct particles away from face and body. Always operate tool in a well-ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with the dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for dust exposure, and wash exposed areas with soap and water.

SERVICE

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- **Service your power tool periodically.** When cleaning a tool, be careful not to disassemble any portion of the tool since internal wires may be misplaced or pinched.



WARNING: Read and understand all warnings, cautions and operating instructions before using this equipment. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

EXTENSION CORDS

Double insulated tools can use either a two or three wire extension cord. As the distance from the power supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. Refer to the table shown below to determine the required minimum wire size.

The smaller the gauge number of the wire, the greater the capacity of the cord. For example: a 14-gauge cord can carry a higher current than a 16-gauge cord. When using more than one extension cord to make up the total length, be sure each cord contains at least the minimum wire size required. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum wire size.

Guidelines for Using Extension Cords

- If you are using an extension cord outdoors, be sure it is marked with the suffix “W-A” (“W” in Canada) to indicate that it is acceptable for outdoor use.
- Be sure your extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified person before using it.
- Protect your extension cords from sharp objects, excessive heat, and damp or wet areas.

Recommended Minimum Wire Gauge for Extension Cords (120 Volt)						
Nameplate Amperes (At Full Load)	Extension Cord Length					
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet	200 Feet
0–2.0	18	18	18	18	16	16
2.1–3.4	18	18	18	16	14	14
3.5–5.0	18	18	16	14	12	12
5.1–7.0	18	16	14	12	12	10
7.1–12.0	18	14	12	10	8	8
12.1–16.0	14	12	10	10	8	6
16.1–20.0	12	10	8	8	6	6

SPECIFIC SAFETY RULES FOR ELECTRIC SHEAR



WARNING: DO NOT LET COMFORT OR FAMILIARITY WITH PRODUCT (GAINED FROM REPEATED USE) REPLACE STRICT ADHERENCE TO PRODUCT SAFETY RULES. If you use this tool unsafe or incorrectly, you can suffer serious personal injury!



WARNING: Hold tool by insulated gripping surfaces when performing an operation where cutting tools may contact hidden wiring or its own cord. Contact with a “live” wire will make exposed metal parts of the tool “live” and shock the operator!

- **Always wear safety glasses or goggles.** Normal prescription eye or sun glasses are not safety glasses.
- **Hold the Tool by its insulated gripping surfaces** to avoid electrical shock from unseen “live” wires.
- **Always hold the tool firmly.** Do not leave the tool running unless hand held.
- **Check your work area for proper clearances before cutting.** This will avoid cutting into your workbench, the floor, etc.
- **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 symptoms related to vibration (such as tingling, numbness, and white or blue fingers), seek medical advice as soon as possible.
- **Do not use tool if switch does not turn it on or off.** Any tool which cannot be controlled by the switch is dangerous and must be repaired.
- **Wear cushioned protective gloves to minimize the vibration.** Excessive vibration may cause personal injury.
- **Use tools with the lowest vibration when there is a choice.**
- **Always be sure that the tool is switched off** and unplugged before adjusting, adding accessories, or checking a function on the tool.



WARNING: Read and understand all warnings, cautions and operating instructions before using this equipment. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

KNOWING YOUR ELECTRIC SHEAR (FIG 1)

1. Trigger Switch
2. Belt Clip
3. Lock-On Button
4. Cutting Head

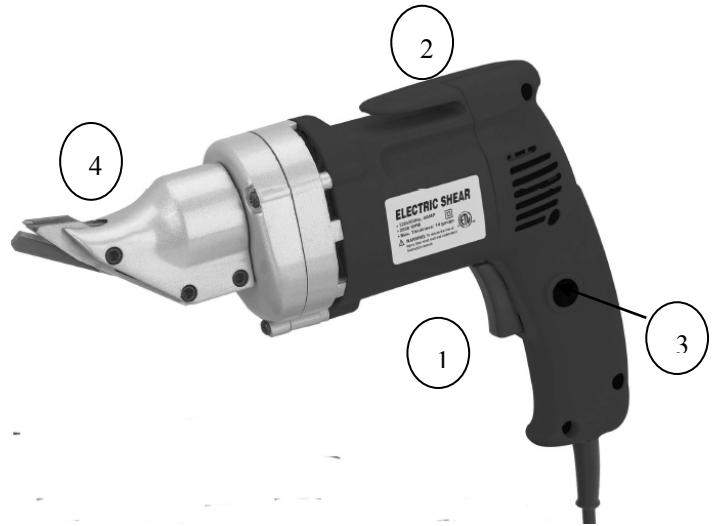


FIG 1

UNPACKING AND CONTENTS

IMPORTANT: Due to modern mass production techniques, it is unlikely the tool is faulty or that a part is missing. If you find anything wrong, do not operate the tool until the parts have been replaced or the fault has been rectified. Failure to do so could result in serious personal injury.

CONTENTS IN PACKAGE

<u>Description</u>	<u>Qty</u>
Electric Shear	1
Allen Key	1
Operator's Manual	1

ASSEMBLY AND ADJUSTMENTS



WARNING: Always be sure that the tool is switched off and unplugged before adjusting, installing accessories, or checking a function of the tool.

SWIVELING CUTTER HEAD (FIG 2)

1. Put on heavy-duty work gloves and ANSI-approved safety goggles to avoid injury.
2. Loosen the three hex head bolts using the hex wrench provided with this tool. See FIG 2.
3. Firmly grip the cutter head and twist it to the desired position. Tighten the three hex bolts to keep the Cutter Head in that position.

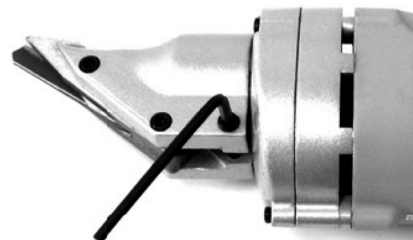


FIG 2

OPERATION



WARNING: To reduce the risk of serious personal injury, read and follow all important safety warning and instructions before using this tool.



WARNING: Always be sure the tool is disconnected from the power source before making any adjustments or setting up prior to cutting. Failure to disconnect or unplug the tool may cause accidental starting, resulting in serious personal injury.

NOTE: Always check that the power supply corresponds to the voltage on the ratings plate.

1. Squeeze the Trigger Switch to activate the Shear. Release Trigger to turn off the Shear.
2. For continuous operation, press the Lock-on button on the side of the handle. The Lock-on button will deactivate once the Trigger is released.
3. If shear becomes jammed during cutting, release Trigger and unplug tool immediately.
4. Use the Belt Clip to hang the Shear from the work belt.
5. To prevent accidents, turn off the tool and disconnect its power supply after use. Clean, then store the tool indoors out of children's reach.

APPLICATIONS

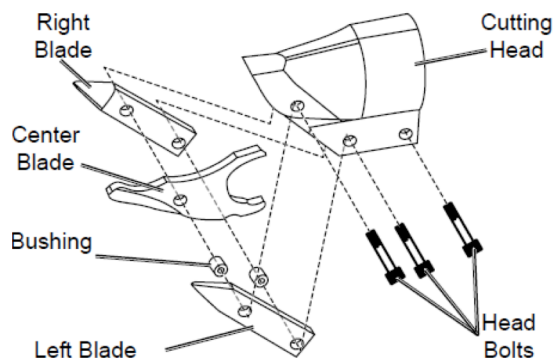
NOTE: Always check that the power supply corresponds to the voltage on the ratings plate.

1. Secure the workpiece.
2. Place the side blades on the edge of top side of the workpiece.
3. Pull the Trigger Switch and guide into work.
 - Hold the shear so the main body is parallel to the workpiece.
 - Blades are to be at right angles to work.
 - Engage blades at the edge of material.
 - Apply sufficient forward pressure to begin cutting. Too much tilt in operation will stop the cut.
 - Do not force.
4. For cutting in a perimeter of workpiece, drill a starting hole and follow instruction above.
5. If there is a problem in the operation. Stop using the tool. Check for the following: Proper lubrication, thickness of the material and sharpness of the blades.

MAINTENANCE

BLADE MAINTENANCE (FIG 3)

1. Unplug the tool.
2. Using the Hex Tool, remove the three Head Bolts.
3. Cutting Head Bolts Left Blade Right Blade Center Blade Bushing. The three Blades and the two Bushings will be loose.



4. Clean, replace or sharpen the blades as required. Replace blades as a set only.
5. Reassemble by repositioning the blades and bushings as illustrated. Replace the Head Bolts and tighten them securely.
6. Test the product to be sure that it is working properly.
7. The Left and Right Blades are slotted. They can be adjusted to change the direction of the curl of waste material. To adjust:
 - a) Unplug the tool.
 - b) Loosen all three Head Bolts.
 - c) Make a slight adjustment to the Left or Right Blade as needed.
 - d) Tighten the Head Bolts.
 - e) Test the direction of the waste curl and repeat the steps above as needed.

NOTE If the Head Bolts are over-tightened, then the Center Blade will not move freely enough, causing premature wear, or possibly preventing the tool from operating. If the Head Bolts are not tight enough, the tool will not make a smooth cut in the material

CLEANING

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.



WARNING: Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc., come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic, which may result in serious personal injury.

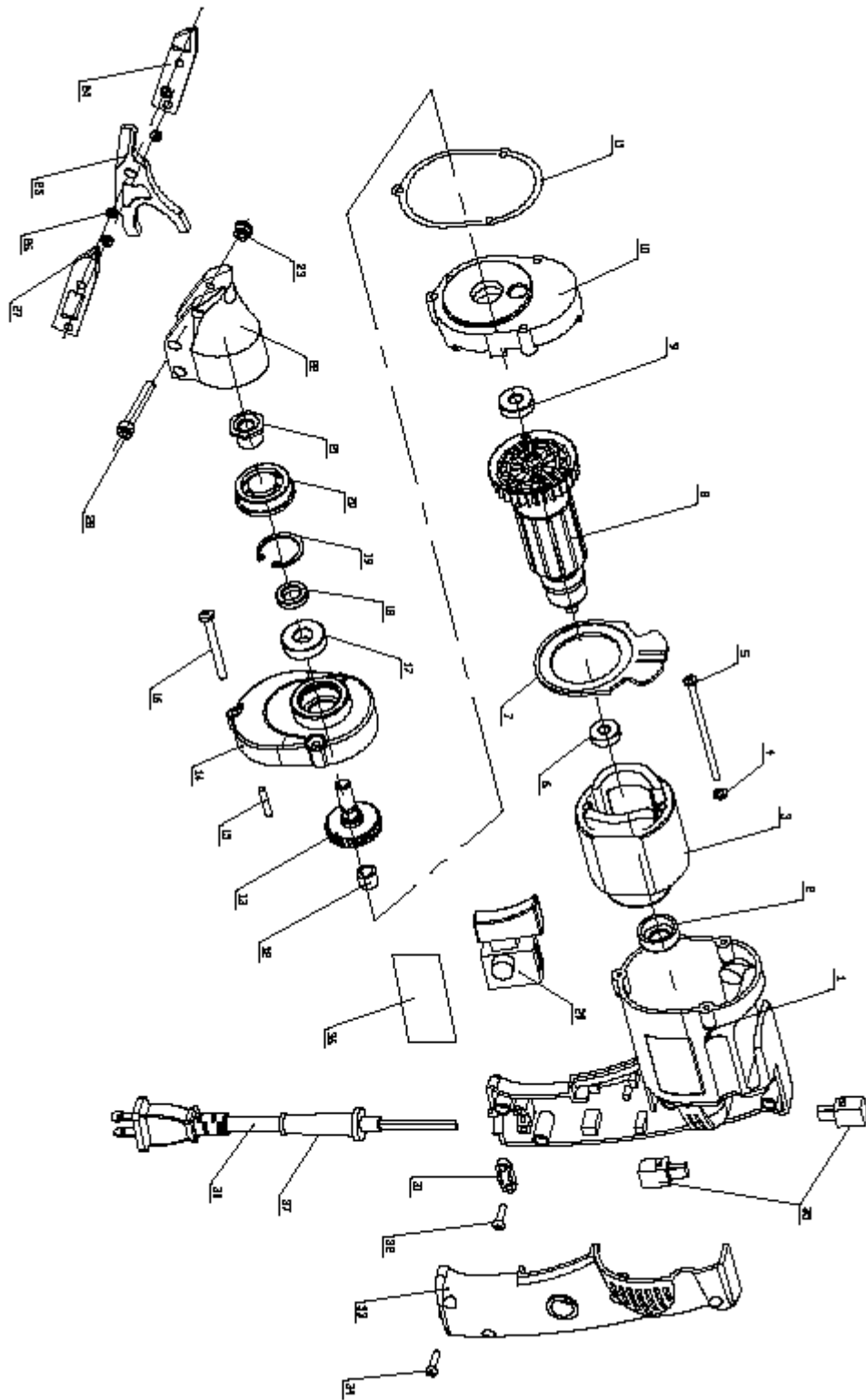
Electric tools used on fiberglass material, wallboard, spackling compounds, or plaster are subject to accelerated wear and possible premature failure because the fiberglass chips and grindings are highly abrasive to bearings, brushes, commutators, etc. Consequently, we do not recommend using this tool for extended work on these types of materials. However, if you do work with any of these materials, it is extremely important to clean the tool using compressed air.

LUBRICATION

Tool should be lubricated every 60 days to 6 months as needed.

To lubricate, remove shear head from power unit. Put a few drops of heavy oil on bearing assembly. Also grease or oil the outside surface of the bearing ring.

DIAGRAM AND PARTS LIST



PARTS LIST

Part #	Description	Qty	Part #	Description	Qty
1	Tool Housing	1	20	Cutting Head Front Bearing	1
2	Rear Motor Bushing	1	21	Cutting Head Front Bushing	1
3	Motor Armature	1	22	Cutting Head	1
4	Washers	2	23	Cap Screws and Nuts	3
5	Motor Mounting Bolts	2	24	Right Fixed Blade	1
6	Mid Motor Bushing	1	25	Movable Blade	1
7	Motor Seal	1	26	Bushings	2
8	Motor Winding	1	27	Left Fixed Blade	1
9	Front Winding	1	28	Socket Head Cap Screw	1
10	Housing Front Piece	1	29	Power Switch	1
11	Shear Head Seal	1	30	Power Cord	1
12	Cutting Head Rear Bushing	1	31	Cord Retainer	1
13	Cutting Head Gear	1	32	Cord Fixing Screws	2
14	Cutting Head Gear Housing	1	33	Left Tool Handle Casing	1
15	Dowel	1	34	Handle Fixing Screws	3
16	Cutting Head Bolts	3	35	Electrical Brushes	2
17	Cutting Head Rear Bearing	1	36	Label	1
18	Cutting Head Rear Bushing	1	37	Rubber Sheath	1
19	Cutting Head Seal	1			

For replacement parts and technical questions, please call **1-800-222-5381**.

TWO-YEAR WARRANTY

This product is warranted free from defects in material and workmanship for 2 years after date of purchase. This limited warranty does not cover normal wear and tear or damage from neglect or accident. The original purchaser is covered by this warranty and it is not transferable. Prior to returning your tool to store location of purchase, please call our Toll-Free Help Line for possible solutions.

THIS PRODUCT IS NOT WARRANTED IF USED FOR INDUSTRIAL OR COMMERCIAL PURPOSES.

ACCESSORIES INCLUDED IN THIS KIT ARE NOT COVERED BY THE 2 YEAR WARRANTY.



WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains 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 and other masonry products, and
- 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.



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