ASSEMBLY & OPERATING INSTRUCTIONS www.USAdustGuard.com

DUST EXTRACTION - FOR USE WITH A DUST EXTRACTOR (VACUUM). The 6" USA Dust Guard must be used with a dust extractor and an appropriate hose connection. Details as follows:

THREE (3) REQUIREMENT for a DUST EXTRACTOR (vacuum) to be COMPLIANT to the OSHA SILICA DUST REGULATION:

(#1) 25 CFM per 1" of diamond blade, (#2) Filter with a efficiency rating of 99% (it does not have to be HEPA), (#3) Self-Cleaning Filter Mechanism (auto or manual)



VISIBLE DUST: The amount of dust retained by the dust extractor vacuum is dependent on its filter. Even if your vacuum is compliant and OSHA sees "visible dust", you will get fined. Visible dust occurs if the vacuum is not large and/or powerful enough to handle the volume of dust being created, or, maintenance is not being performed on the filter (filters are clogged) and the vacuum is leaking dust.



Date: August 2019

FACT: Due to the volume of dry powder being created during concrete grinding or cutting, suction drop is 30% within 1 minute on a brand new filter if that filter is left openly exposed to incoming debris inside the collection canister - regardless of brand or manufacturer.

RECOMMENDATION: To prevent premature filter drop, increase production rates and keep the HEPA filter and the inside of the tank *clean*, use the <u>Air Pulse Collection Bag</u>. This bag is specifically designed for use with Reverse Pulse Self-Cleaning Filters in tank style dust extractors. For additional information on the bag and our dust extractors, please call USA Dust Guard (412 - 605 - 2992) or visit our web site: **USAdustGuard.com**

1. UNIVERSAL - FITS MOST BOSCH, DEWALT, MAKITA & METABO ANGLE GRINDERS including OLDER MODELS.

Our USA designed and manufactured dust guard is intended for use with 4.5", 5" and 6" angle grinders. Ensure the diameter of the blades or wheels that are being used is not larger than the maximum permitted tool diameter of the angle grinder. The blade must be matched to the angle grinder. The operating instructions of the angle grinder, cutting wheel and the vacuum must be observed.

The U6 dust guard is suitable for professional cutting without the use of water with the suitable blade. The user bears sole responsibility for any damage caused by improper use. Generally accepted accident prevention regulations and the enclosed safety information must be observed.

2. GENERAL SAFETY INSTRUCTIONS

For your own protection and reading the operating and safety instructions will reduce the risk of injury. Before using this dust guard completely read and understand the safety information and the instructions. Keep all enclosed documentation for future reference, and pass on the U6 dust guard only with this document

General Power Tool Safety Warnings WARNING – Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. **Save all warnings and instructions for future reference!** The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

2.1 Work area safety a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents. b) **Do not operate the power tool grinder 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. c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

2.2 Electrical safety a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earth grounded power tools. Unmodified plugs and matching outlets will reduce risk of electric shock. b) Avoid body contact with earth or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earth grounded. c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock. d) Do not abuse the cord and never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock. e) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock. f) If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

2.3 Personal safety a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury. b) Use personal protective equipment. Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries. c) Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch will cause an accident. d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury. e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations. f) Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves or long hair can be caught in moving parts. g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

2.4 Power tool use and care a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed. b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired. c) Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally. d) Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users. e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools. f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control. g) Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from those intended could result in a hazardous situation.

2.5 Service a) 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.

3. SPECIAL SAFETY INSTRUCTIONS.

These operating instructions are intended for persons with basic technical knowledge and experience of the operation of machines such as the one described herein. If you have no experience whatsoever with such power tools, we strongly recommend to seek the advice of an experienced person. Prior to use of the power tool, users must be provided with information, instructions and training. Use a suitable dust extractor that complies with all country-specific specifications.

3.1 Safety instructions for angle grinders The dust guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. Ensure that neither you or bystanders are positioned within the plane of the rotating diamond cut-off wheel. The guard helps to protect operator from broken wheel fragments and accidental contact with the diamond cutoff wheel.

Only use diamond cut-off wheels rated for your power tool. Just because the accessory can be attached to your power tool, it does not assure safe operation. When not in use, place power tool on a stable surface where it will not move inadvertently, roll or cause a tripping or falling hazard. Serious personal injury may result.

Never lay the power tool down until the accessory has come to a complete stop. The spinning accessory may grab the surface and pull the power tool out of your control. **Do not run the power tool while carrying at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.

Do not operate the power tool near flammable materials. Sparks could ignite these materials. Position the cord clear of the spinning accessory. If you loose control, the cord may be cut or snagged and your arm may be pulled into the spinning wheel. Do not use accessories that require liquid coolants. Using water or other liquid coolants may result in electrocution or shock.

3.2 Kickback and Related Warnings

Kickback is the sudden response to a diamond cutoff wheel that is jammed or blocked while rotating.

Jamming causes the rotating accessory to stop abruptly, This, in turn, causes the uncontrolled power tool to be forced in the direction opposite to the accessory's rotation at the point of blocking. If a diamond cut-off wheel jams or blocks in the workpiece, the edge of the wheel entering into the workpiece can snag, thus causing either kickback or the wheel to break off. Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a) Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Hold the power tool as specified (see chapter 6.1) to ensure maximum control over kickback forces or torque reactions during run-up. The operator can control torque reactions or kickback forces, if proper precautions are taken. b) Never place your hand near the rotating accessory. Accessory may kickback over your hand.
- c) Do not position your body in line with the rotating accessory. Accessory may kickback over your hand. d) Use special care when working around corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback. e) Do not attach a saw chain, woodcarving blade, segmented diamond wheel with a peripheral gap greater than 10 mm or toothed blade. Such blades create frequent kickback and loss of control.
- f) Do not jam the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Overstressing the diamond cut-off wheel increases the loading and susceptibility to twisting or jamming of the wheel in the cut and the possibility of kickback or wheel breakage. g) If the diamond cut-off wheel gets jammed or you interrupt operation for any reason, switch off the power tool and hold the power tool still until the wheel comes to a complete stop. Never attempt to remove the diamond cut-off wheel from the cut while the wheel is in motion, otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel jamming.
- h) Do not restart the power tool while in the workpiece. Let the diamond cut-off wheel reach full speed and carefully reenter the cut. Otherwise the diamond cut-off wheel may bind, jump up or kick back. i) Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large work pieces tend to sag under their own weight. The workpiece must be supported on both sides of the diamond cut-off wheel near the line of cut and near the edge of the workpiece on both sides of the wheel. j) Use extra caution when making a "pocket cut" into existing walls or other blind areas. The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

CONTINUED NEXT PAGE —

Advantage Contractor Supply # 800 . 388 . 2232

3.3 Additional Safety Instructions Always wear protective goggles. Wear personal protective equipment. Use a full face shield, safety goggles dust mask, ear protectors, protective gloves, workshop apron, non-slip safety shoes. 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. Dust from material such as paint containing lead, some wood species, minerals and metal may be harmful. Contact with or inhalation of the dust may cause allergic reactions and/or respiratory diseases to the operator or bystanders. Certain kinds of dust are classified as carcinogenic, such as oak and beech dust, especially in conjunction with additives for wood conditioning (chromate, wood preservative). Material containing asbestos must only be treated by specialists.

Use a suitable dust extractor that complies with all country-specific specifications. The work place must be well ventilated. Always wear a respirator (NIOSH/OSHA approved). Follow national requirements for the materials you want to work with. Materials that generate dusts or vapors that may be harmful to health (e.g. asbestos) must not be processed.

Wear ear protectors when working for long periods of time. High noise levels over a prolonged period of time may affect your hearing. Keep the handles dry, clean and free of oil and grease. Greasy, oily handles can slip, leading to a loss of control. Wear working gloves. Safe guidance of the power tool is not possible with sweaty hands. Working gloves help avoid accidental sliding and thus prevent accidents. Never work on ladders or similar objects.

Ensure you stand in a safe position and keep your balance at all times. The workpiece must lay flat and be secured against slipping, e.g. using clamps. Large work pieces must be supported adequately.

Do not use any accessories that are not specifically designed and recommended by the tool manufacturer. Just because the accessory can be attached to your power tool, it does not assure safe operation. Accessories must be stored and handled with care in accordance with the manufacturer's instructions. The outside diameter and the thickness of your accessory must comply with the dimensions of your power tool. Incorrectly sized accessories cannot be adequately guarded or controlled. The operating instructions of the angle grinder used must be observed.

The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool. Accessories running faster than their rated speed can break and fly off. Furthermore, only use diamond cut-off wheels rated for use on the power tool based on the tool's rpm. Use a diamond cut-off wheel that is suitable and certified for the material being processed.

If a segmented diamond cut-off wheel is used, it must have a negative cutting angle and the slots between the segmented material must not be larger than 10 mm. Make sure the direction of rotation is correct. The direction of rotation is marked by arrows on the diamond cut-off wheel and dust guard. The arrows must point in the same direction. Ensure that the diamond cut-off wheel is fitted correctly and securely on the power tool. Damaged. eccentric or vibrating tools must not be used. The diamond cut-off wheel must not be overheated. Overheating can result in material failure and lead to serious injury.

Do not use damaged accessories. Before use, always check the accessories for chips and cracks. If a power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute. Damaged accessories will normally break apart during this test time. Stop immediately if significant vibrations occur or if other defects are noted. If such a situation occurs, check the machine to determine the cause.

Never place your hand near the rotating accessories. Never touch the dust guard housing or the protective, retractable Corner Cover (see photo, right - 'unsnapped' picture, closes left) while the accessory is rotating. Keep all body parts well away from the accessory while the machine is running. Pay close attention to all dust guards. One moment's carelessness can result in serious injuries. The protective, retractable Corner Cover must only be unsnapped when working on inside corners. During all other work, the protective Corner Cover must cover the diamond cut-off wheel as shown in the photo (right, 'snapped' picture - far right).

When cutting, always cut into the material being cut (cutting right to left). Otherwise there is the danger of the angle grinder kicking back uncontrolledly from the cut.

Guide the machine evenly at a speed suitable for the material being processed. Do not tilt, apply excessive force or sway from side to side. Do not execute abrupt or uncontrolled movements which could result in accidents. Do not switch on the machine if tool parts or guard devices are missing or defective. Never use an incomplete machine, or one on which an unauthorized modification has been made. Ensure that the point where you wish to work is free of power cables, gas lines or water pipes (e.g. by using a metal detector). Make sure that no other objects can come into contact with the accessory.

Cutting accessory contacting a "live" wire may make exposed metal parts of the power tool "live" and could give the operator an electric shock. Keep children and other persons well away from the power tool when in use. If you are distracted, you could lose control over the power tool. Keep bystanders a safe distance away from the work area. Anyone entering the work area must wear personal protective equipment. Fragments of work pieces or a broken accessory may be ejected and cause injury even beyond the immediate area of operation. Pull the plug out of the plug socket

Before use, always check that the dust guard is fitted correctly and securely on the angle grinder. Caution: Parts of the diamond cut-off wheel can break and fly off. A damaged or cracked dust guard must be replaced. Never operate a machine with a defective dust guard. Do not switch on the machine if tool parts or guard devices are missing or defective.

The guard U6 is intended for use with angle grinder with a diameter of 4-1/2", 5" or 6". Ensure that the diameter of the accessory wheel used is not larger than the maximum permitted tool diameter of the angle grinder. The diamond cut-off wheel used must be matched to the angle grinder. The operating instructions of the angle grinder of the diamond cut-off wheel and the dust extractor must be observed.

CONTINUED NEXT PAGE —

before any adjustments, conversions or servicing are performed.



Advantage Contractor Supply # 800 . 388 . 2232

4. ASSEMBLY - Preparation of Angle Grinder, Guard Installation.

If the angle grinder has a lever it has to be removed from its pivot pin as follows:

- Disconnect the electric plug from electrical power.
- Unscrew the fastening screw of the lever.
- Remove the screw and lever.

With the lever removed proceed as follows (ref. photos, right):

- 1. Dewalt select the 'medium width' collar bushing and place it onto the grinder's bore
- 2. Metabo select the 'thin' collar bushing and place it onto the grinder's bore
- 3. Makita select the 'widest width' collar bushing and place it onto the grinder's bore
- 4. Bosch does not require a collar bushing.
- 5. Place the guard over the grinder's bore and/or collar bushing and adjust the guard to the desire working position as per the photo (right.)
- 6. Using a 3/16" hex wrench, insert the included screw into the collar and tighten the collar securely to the bore of the angle grinder.
- 7. Make sure the guard is seated securely on the grinder, you should not be able to turn the guard.



Included Components



Collar bushing - installed on bore of grinder.

MAKE SURE THE DIAMOND BLADE FITS - Included 'Inside Blade Nut'

Depending on the diamond blade and angle grinder, some blades may require the use of the included inside blade nut - specifically some models of Bosch and Dewalt.

MAXIMUM DUST CONTROL — RIGHT-TO-LEFT CUTTING TECHNIQUE

- 1. Attach a vacuum cleaner to the barrel of the dust guard
- 2. With the spindle of the angle grinder facing upwards:
 - a. hold the body of the angle with your right hand
 - b. the barrel of the dust guard is to be held with your left hand.
- 3. Position the assembly to the material to be cut
- 4. Turn on both the vacuum cleaner and angle grinder
- 5. Holding the angle grinder and dust guard as described in #2 above, position the barrel end of the dust guard at a 45° angle to the material to be cut and ease the diamond blade into the material
- 6. Continue to 'sink' the diamond blade into the material to the necessary depth
- 7. To obtain maximum dust control, keep the 'barrel' end of the dust guard within 1/4" of the work surface
- 8. Proceed to cut into the material by going to your left
- 9. Observe your progress by looking through the opening on the dust guard. In this way you can see the work service as the diamond cuts.
- IMPORTANT: Continue cutting right-to left. Do not attempt to go right, doing so will cause the dust NOT to go into the barrel of the guard.

INSIDE WALL CORNERS — PROPER & SAFE CUTTING TECHNIQUE

- 1. Ensure the grinder is off and the blade has come to a complete stop.
- 2. Grasp the corner door and unsnap it from the housing by rotating or retracting it towards the barrel of the dust guard.
- 3. Re-position hands on the assembly (left hand holds the dust guard's barrel, right hand holds the body of the grinder)
- 4. Turn the angle grinder on. Allow the tool to reach full speed before touching the tool or blade to the work surface.
- 5. With the blade at a 45° angle to the work surface, begin to guide the blade / grinder / guard assembly slowly from right to left, allowing the front edge of the diamond blade seat itself completely into the cut
- 6. As you approach the wall's inside corner, keep the guard tight again the wall and turn the assembly 90° so the front edge of the guard cuts the adjacent wall and the side edge of the guard is now cutting the inside corner
- Let the diamond blade penetrate the work surface until the desired depth-of-cut is reached
- 8. Proceed to cut, right-to-left, moving out of the inside corner
- 9. Carefully remove the assembly from the wall and turn-off the angle grinder
- When the blade has stopped spinning, re-snap the corner cover to its housing and procedure to cut right-to-left as per the above directions.

LIMITED WARRANTY / LIABILITY. Distributed by Advantage Contractor Supply. Made In USA. Seller warrants it has title to the product delivered and may properly sell the same to Buyer and that such Product will conform for use as intended and as described more fully in these attached Operating and Safety Instructions and Warnings for use of the Product. SELLER MAKES NO OTHER WARRANTY OR REPRESENTATION, EXPRESSED OR IMPLIED, CONCERNING THE PRODUCT OR ITS MERCHANTABILITY, FITNESS THEREOF FOR ANY PURPOSE, OR ITS NON-INFRINGEMENTS. Seller shall not be liable for special, indirect, consequential or punitive damages of any kind under this Agreement or otherwise, whether or not caused by its negligence, and assumes no risk whatsoever as to the result of the use of Product either singly or in combination with other material. Buyer represents that it is familiar with the characteristics of Product and assumes all responsibility and liability for and will indemnify and hold Seller harmless from any and all loss or injury to persons or property arising out of handling, use or possession of Product delivered to it. IN THE EVENT THAT THIS DISCLAIMER OF LIABILITY IS HELD BY A COURT OF COMPETENT JURISDICTION NOT TO APPLY TO BUYER, SELLER'S MAXIMUM LIABILITY TO BUYER ON ANY CLAIM IN ANY WAY CONNECTED WITH THE SALE OR USE OF ANY OF THE PRODUCTS, WHETHER LIABILITY ARISES IN CONTRACT, FROM BREACH OF WARRANTY, IN TORT OR OTHERWISE, SHALL BE LIMITED TO THE PRODUCT'S INVOICE PRICE.

CLAIMS. Any claims by Buyer must be received by Seller in writing within 20 days of the date of delivery or non-delivery. Failure to deliver notice of claim to Seller within such 20 day period will constitute a waiver Buyer of all claims in respect of such delivery or non-delivery.





grinder.

