

MK-SDG-7 OWNERS MANUAL, PARTS LIST & EXPLODED VIEW



| | |
|---------------------|---------|
| Revision 102 | 06.2011 |
| Manual Part# 168146 | |

Caution: Read all safety and operating instructions before using this equipment. This manual **MUST** accompany the equipment at all times.

INTRODUCTION

Congratulations on your purchase of a MK-SDG-7. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest construction power tools and diamond blades in the industry.

Operated correctly, your MK-SDG-7 should provide you with years of service. In order to help you, we have included this manual. This owners manual contains information necessary to operate and maintain your MK-SDG-7 safely and correctly. Please take the time to familiarize yourself with the MK-SDG-7 by reading and reviewing this manual.

Read and follow all safety, operating and maintenance instructions.

If you should have questions concerning your MK-SDG-7, please feel free to call our friendly customer service department at: 800 421-5830

Regards,

MK Diamond

NOTE THIS INFORMATION FOR FUTURE USE:

| | |
|------------------------|--|
| MODEL NUMBER: | |
| SERIAL NUMBER: | |
| PURCHASE PLACE: | |
| PURCHASE DATE: | |

NOTE: For your (1) one year warranty to be effective, complete the warranty card and mail it in as soon as possible.

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KEEP CHILDREN AWAY.

All visitors and children should be kept a safe distance from work area.

MAKE WORKSHOP KID PROOF.

Make the workshops kid proof by using padlocks, master switches or by removing starter keys.

DO NOT FORCE THE TOOL.

A power tool will do a job better and safer operating at the rate for which it was designed.

USE THE RIGHT TOOL.

Do not force a tool or an attachment, to do a job that it was not designed to do.

WEAR PROPER APPAREL.

Do not wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that may be caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.

DO NOT OVERREACH.

Keep proper footing and balance at all times by not overreaching.

MAINTAIN TOOLS WITH CARE.

Keep tools sharp and clean for the best and safest performance. Always follow maintenance instructions for lubricating and when changing accessories.

SHUTDOWN TOOL.

The unit should always be shutdown before servicing or when changing accessories such as blades, bits, cutters, and the like.

USE RECOMMENDED ACCESSORIES.

Consult the owner's manual for recommended accessories. Using improper accessories may increase the risk of personal or by-stander injury.

NEVER STAND ON THE TOOL.

Serious injury could occur if a power tool is tipped, or if a cutting tool is unintentionally contacted.

NEVER LEAVE TOOL RUNNING UNATTENDED – TURN POWER OFF.

Do not leave a tool until it comes to a complete stop. Always turn a power tool OFF when leaving the work area, or, when a cut is finished.

CHECK FOR DAMAGED PARTS.

Before using a power tool, check for damaged parts. A guard or any other part that is damaged should be carefully checked to determine it would operate properly and perform its intended function. Always check moving parts for proper alignment or binding. Check for broken parts, mountings and all other conditions that may affect the operation of the power tool. A guard or any damaged part should be properly repaired or replaced.

SILICA DUST WARNING

Grinding/cutting/drilling of masonry, concrete, metal and other materials with silica in their composition may give off dust or mists containing crystalline silica. Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Repeated and/or substantial inhalation of airborne crystalline silica can cause serious or fatal respiratory diseases, including silicosis. In addition, California and some other authorities have listed respirable crystalline silica as a substance known to cause cancer. When cutting such materials, always follow respiratory precautions.

Use appropriate NIOSH-approved respiratory protection where dust hazard may occur. Paper masks or surgical masks without a NIOSH approval number are not recommended because they do little to protect the worker. For more information about respirator programs, including what respirators have received NIOSH approval as safe and effective, please visit the NIOSH website at:

<http://www.cdc.gov/niosh/npptl/topics/respirators>

Observe OSHA regulations for respirator use (29 C.F.R. §1910.134 and §1503.1).

Visit <http://www.osha.gov> for more information.

CALIFORNIA PROPOSITION 65 MESSAGE

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contain 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
- Arsenic and chromium, from chemically treated lumber

For further information, consult the following sources:

<http://www.osha.gov/SLTC/silicacrystalline/index.html>

http://www.oehha.org/prop65/out_of_date/6022kLstA.html

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.

RULES FOR SAFE OPERATION



DANGER

Failure to follow instructions in this manual may lead to serious injury. This equipment is to be operated by trained and qualified personnel only. The following safety guidelines should always be used when operating the MK-SDG-7.

GENERAL SAFETY



- **DO NOT** operate or service this equipment before reading this entire manual.
- This equipment should not be operated by persons under 18 years of age.
- **NEVER** operate this equipment when not feeling well due to fatigue, illness or taking medicine.
- **NEVER** operate this equipment under the influence of drugs or alcohol.
- Whenever necessary, replace nameplate, operation and safety decals when they become difficult to read.
- **ALWAYS** store equipment properly when it is not being used. Equipment should be stored in a clean, dry location out of the reach of children.



- **NEVER** leave the machine unattended. Turn off electric motor when unattended.



CAUTION Caution must be observed while servicing the machine. Rotating parts can cause injury if contacted.



- **NEVER** operate the machine in an explosive atmosphere.

ELECTRICAL REQUIREMENTS AND GROUNDING INSTRUCTIONS

In case of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.



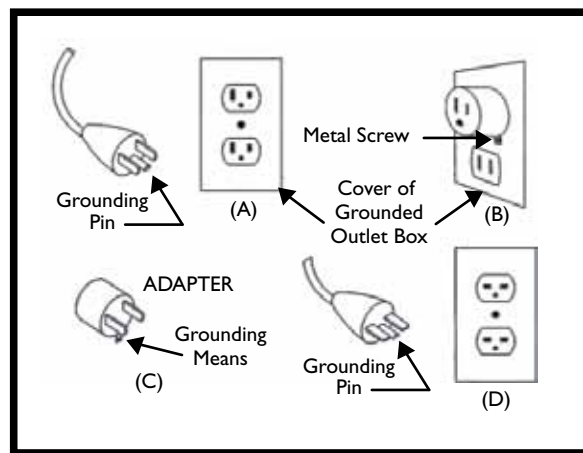
WARNING In order to prevent potential electrical shock and injury, the following electrical safety precautions and symbols should be followed at all times!

- Do not modify the plug provided – if it will not fit the outlet; have the proper outlet installed by a qualified electrician
- Improper connections of the equipment-grounding conductor can result in a risk of electric shock. The equipment grounding conductor is the insulated conductor that has an outer surface that is green, with or without yellow stripes. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal
- Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded
- Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug
- Repair or replace a damaged or worn cord immediately

WARNING

This tool is intended for use on a circuit that has an outlet that looks like the one shown in Sketch A. The tool has a grounding plug that looks like the plug illustrated in Sketch A. A temporary adapter, which looks like the adapter illustrated in sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B, if a properly grounded outlet is not available. The temporary adapter should be used only until a properly grounded outlet can be installed by a qualified electrician. The green-colored rigid ear, lug, and the like, extending from the adapter, must be connected to a permanent ground such as a properly grounded outlet box.

NOTE: Use of a temporary adapter is not permitted in Canada.



Circuit and Adapter Information

 **WARNING**

To reduce the risk of electrocution, keep all connections dry and off the ground. A Ground Fault Circuit Interrupter (GFCI) should be provided on the circuit(s) or outlet(s) to be used for this machine. Receptacles are available having built-in GFCI protections and may be used for this measure of safety. When using an extension cord, the GFCI should be installed closest to the power source, followed by the extension cord and lastly, the machine.

 **DANGER** Do Not use in wet conditions

 **WARNING**

Use only extensions cords that are intended for outdoor use. These extension cords are identified by a marking "Acceptable for use with outdoor appliances; store indoors while not in use." Use only extension cords having an electrical rating not less than the rating of the product. Do not use damaged extension cords. Examine extension cords before using and replace if damaged. Do not abuse extension cords and do not yank on any cord to disconnect. Keep cords away from heat and sharp edges. Always disconnect the extension cord from the receptacle before disconnection the product from the extension cord.

 **WARNING**

To reduce the risk of electrocution, keep all connections dry and off the ground. Do not touch the plug with wet hands.

 **WARNING**

Use of undersize extension cords result in low voltage to the motor that can result in motor burnout and premature failure. MK Diamond warns that equipment returned to us showing signs of being run in a low voltage condition, through the use of undersized extension cords will be repaired or replaced totally at the customers expense. There will be no warranty claim.

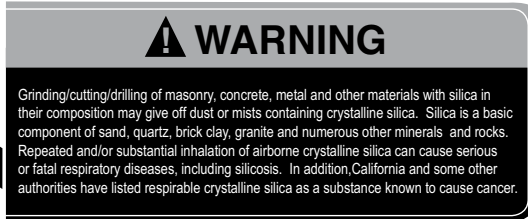
To choose the proper extension cord,

- Locate the length of extension cord needed in table provided.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length of extension cord. For example, a fifty foot extension cord would require an AWG size of 14 for a 120V volt circuit.

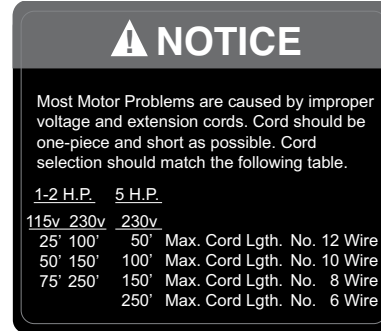
| EXTENSION CORD MINIMUM GAGE FOR LENGTH | | | | |
|--|------------------------------|---------------|----------------|----------------|
| VOLTS | TOTAL LENGTH OF CORD IN FEET | | | |
| | 25 ft. AWG | 50 ft. AWG | 100 ft. AWG | 150 ft. AWG |
| 120V | N/A | 14 | 12 | N/A |

OPERATION & SAFETY DECALS

The MK-SDG-7 is equipped with a number of safety decals provided for operator safety and maintenance information. Should any of these decals become unreadable, replacements can be obtained by calling (800) 421-5830.



Decal A



Decal B



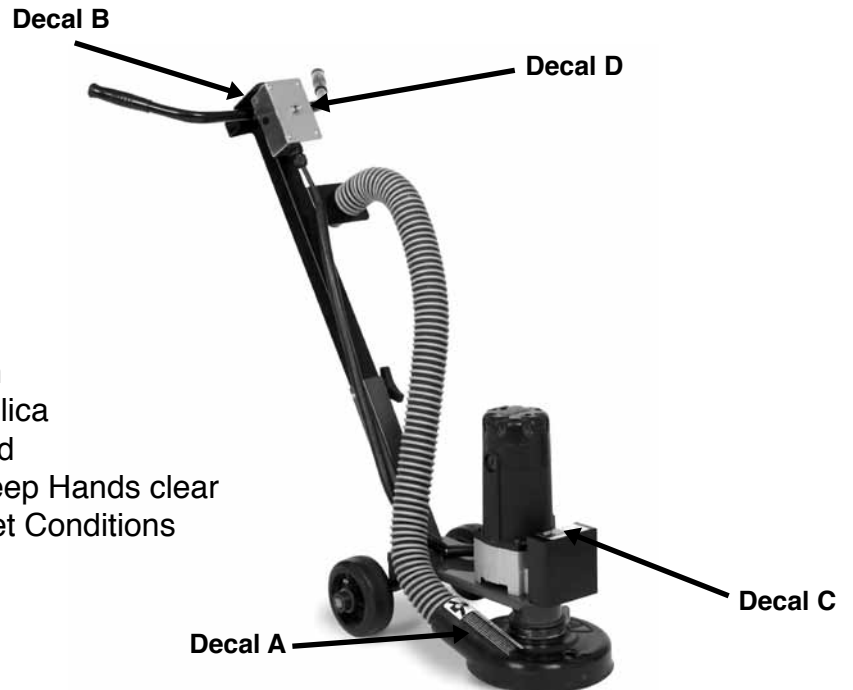
Decal C



Decal D

MK-SDG-7 Safety Decal Sheet, Part No. 168145

SAFETY DECAL LOCATIONS



| Decal | Location | Description |
|-------|----------------|----------------------------|
| A | IXL Shroud | Warning - Silica |
| B | Starter Switch | Notice - Cord |
| C | Weight | Caution - Keep Hands clear |
| D | Starter Switch | Danger - Wet Conditions |

MK-SDG-7 Safety Decal Locations

FEATURES

- 120V/15 Amp motor, disc RPM of 3,500
- Constructed with sturdy heavy gauge steel
- MK-IXL vacuum shroud for dust control
- Shroud accommodates diamond cup wheels up to 7" in diameter
- Attaches to traditional shop vacuum, reducing risk of respiratory problems
- Lightweight portable size for use in small areas
- Adjustable handlebar for operator comfort
- Removable handlebars make it easy to store and to transport
- Easy to maneuver by one person
- Levels uneven surfaces and quickly removes epoxies and thin coatings

PRODUCT SPECIFICATIONS

Perfect for small jobs, the MK SDG-7 is designed to grind concrete surfaces to a smooth finish. Durably built with heavy gauge steel it is still lightweight and portable and the removable handle bar makes it easy to transport. The dust control system is ready to hook-up to any vacuum system for dustless grinding. Comes with the MK IXL dust shroud and a 7" cup wheel.

| Model | MK-SDG-7 |
|----------------|---------------------|
| Disc RPM | 3500 |
| Disc Capacity | 7" (178 mm) |
| LxWxH (inches) | 34.6" x 17.5" x 32" |
| LxWxH (mm) | 879 x 445 x 813 |
| Weight | 44 lbs. (18.6 kg) |
| Part # | 166859 |



DANGER Do Not Use in Wet Conditions

ASSEMBLY

Place the handle bar assembly into the base and screw the tri knob in to hold it in place



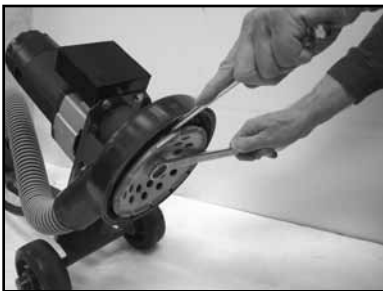
Attach the vacuum hose from a vacuum to the vacuum outlet port



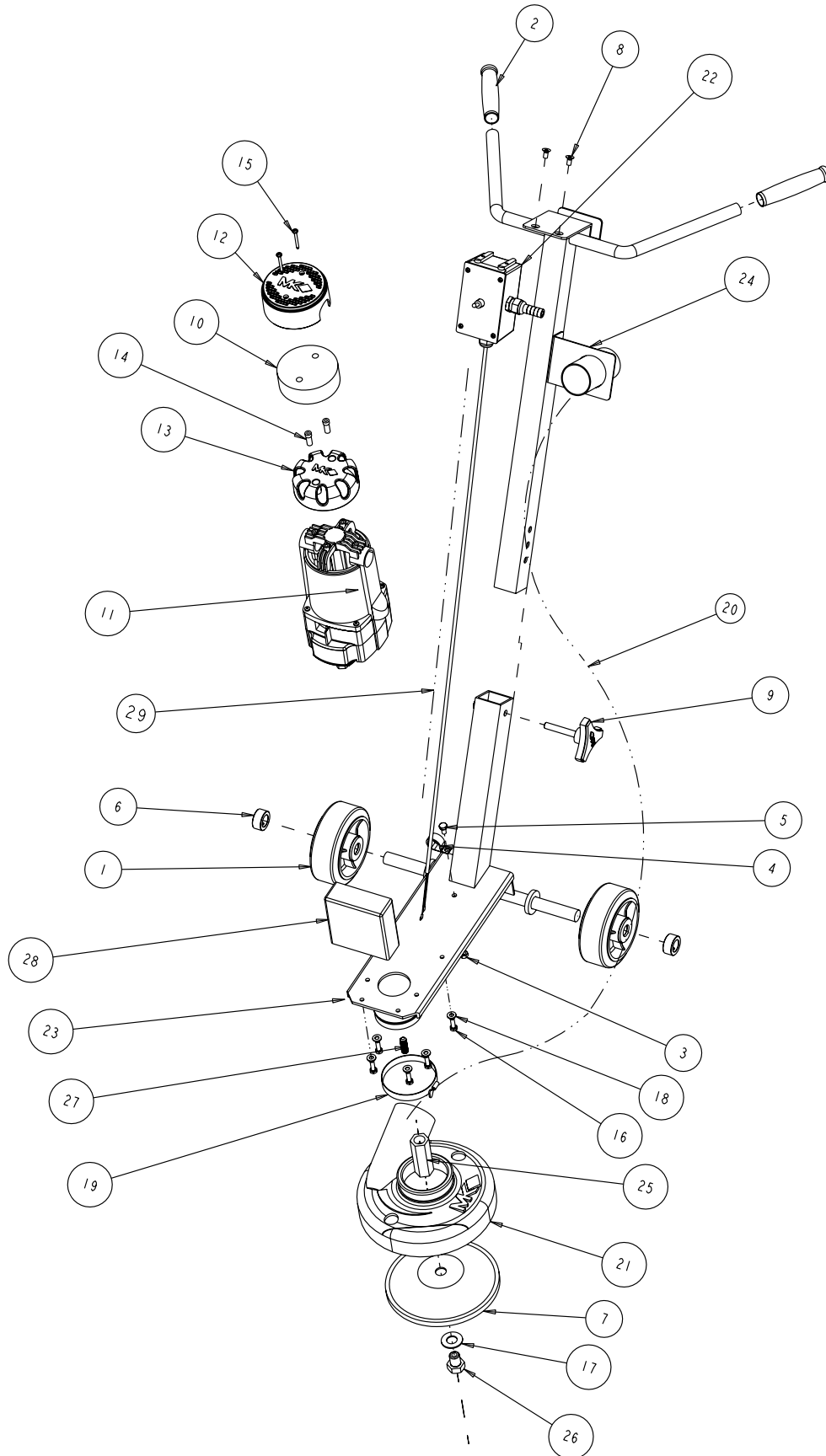
Plug in grinder and flip the power switch. Its ready to grind



Check the shroud and cup wheel are free of obstruction

INSTALLING/REPLACING CUP WHEEL









Use a 15/16 wrench on the cup wheel bolt, and a 1" wrench on the hex shaft. Place the 1" wrench between the cup wheel and the dust shroud, as shown, until the wrench (open end) goes over the hex shaft. Hold the shaft in place and use the 15/16 wrench to break the bolt free. Once it is broken free you can turn the bolt by hand until it comes off with the cup wheel. Replace with new cup wheel and tighten bolt. Use wrenches to make sure the bolt is tight, before grinding.



| ITEM | DESCRIPTION | QTY | PART # |
|------|---------------------------------------|-----|-----------|
| 1 | WHEEL, FRONT 5" X 2" W CONCSAW | 2 | 138537 |
| 2 | GRIP, HANDLE, 3/4 X 4-3/4 | 2 | 139949 |
| 3 | NUT, 1/4 - 20 HEX | 1 | 151893 |
| 4 | CLAMP, 3/4 CUSHION LOOP | 1 | 152594 |
| 5 | SCREW, 1/4 -20 X 1/2 HEX HEAD | 1 | 152608 |
| 6 | COLLAR, SET, 3/4" | 2 | 153814 |
| 7 | MK-304CGI 7" CUP WHEEL | 1 | 155446 |
| 8 | SCREW, FLAT HEAD, 1/4 - 20 X 1/2 PHIL | 2 | 155812 |
| 9 | KNOB, TRI | 1 | 156770-04 |
| 10 | FILTER, MOTOR | 1 | 157729 |
| 11 | MTR, 115V, 15A, AC | 1 | 157801-C |
| 12 | CAP, MOTOR | 1 | 157877 |
| 13 | SPACER, NYLON | 1 | 157878 |
| 14 | SPACE, CAP SCREW | 2 | 157879 |
| 15 | SCREW, #8 X 1-1/2 FLAT HD PHIL | 2 | 158157 |
| 16 | SCREW, HEX HEAD CAP, M6 X 1 X 20MM | 6 | 158158 |
| 17 | WASHER, FLAT, 5/8 SAE | 1 | 158350 |
| 18 | WASHER, FLAT M6 | 6 | 160215 |
| 19 | CLAMP-DUST SHROUD | 1 | 166407 |
| 20 | VACUUM HOSE 2" X 37" LG. | 1 | 166536 |
| 21 | DUST SHROUD ASSEMBLY | 1 | 166649 |
| 22 | SWITCH ASSEMBLY | 1 | 166858 |
| 23 | BASE WELDMENT | 1 | 166860 |
| 24 | HANDLE BAR WELDMENT | 1 | 166861 |
| 25 | SHAFT ADAPTOR | 1 | 166863 |
| 26 | SCREW, HHCS 5/8 - 11 X 3/4 | 1 | 167177 |
| 27 | SCREW, SET M10 X 1.5 X 30MM | 1 | 167179 |
| 28 | WEIGHT, GRINDER | 1 | 167434 |
| 29 | SPLIT LOOM 5/8" | 1 | 167662 |

ACCESSORIES

Recommended 7" Cup Wheels For A Variety Of Applications

| Single Row Grinding Cup Wheels | Double Row Grinding Cup Wheels |
|--|--|
|  <p>MK-304CG-1</p> <ul style="list-style-type: none"> • 12 segment cup wheel • 6mm diamond depth height • 600-800 sq. ft. area • For concrete deburring & rough surface grinding <p>Part# 155446</p> |  <p>MK-304SG-2</p> <ul style="list-style-type: none"> • 24 segment cup wheel • 6mm diamond depth height • 800-1200 sq. ft. area • For concrete deburring & rough surface grinding <p>Part# 155447</p> |
| Turbo Cup Wheels | PCD Cup Wheels |
|  <p>MK-504CG-1</p> <ul style="list-style-type: none"> • 12 segment cup wheel • 6mm diamond depth height • 1800-2400 sq. ft. area • For fast surface grinding <p>Part# 158734</p> |  <p>MK-604CG-1</p> <ul style="list-style-type: none"> • 12 segment cup wheel • 800-1000 sq. ft. area • For epoxy/paint removal <p>Part# 162789</p> |
|  <p>MK-504SG-2</p> <ul style="list-style-type: none"> • 24 segment cup wheel • 6mm diamond depth height • 2400-3000 sq. ft. area • For fast surface grinding <p>Part# 158736</p> |  <p>MK-604SG-2</p> <ul style="list-style-type: none"> • 18 segment cup wheel • 1400-1800 sq. ft. area • For epoxy/paint removal <p>Part# 162792</p> |
| T-Segment Cup Wheel | Bi-Turbo Cup Wheel |
|  <p>T-Segment</p> <ul style="list-style-type: none"> • 14 segment cup wheel • 6mm diamond depth height • 1800-2400 sq. ft. area • For smooth surface grinding <p>Part# 166380</p> |  <p>MK-704SG-2</p> <ul style="list-style-type: none"> • 18 segment cup wheel • 6mm diamond depth height • 5000-8000 sq. ft. area • For high efficiency surface grinding <p>Part# 167115</p> |

**7" 5-PACK Bulk SAWTEC-ZEK Abrasive Grinding Disks**

Grinding Disks for removing mastic, epoxy and urethane coatings. Five disk, bulk packs. 7/8" Arbor

Four grits are offered for different coating removal applications:

- 8 Grit Rough, aggressive removal of heavy coatings *Part # 167836*
- 16 Grit Heavy-duty removal of mastic, epoxy and urethane coatings *Part # 167837*
- 24 Grit Light scuffing and cleaning with minimal removal *Part # 167838*
- 36 Grit Light scuffing and cleaning with minimal removal *Part # 167839*
- **Single Disc Grinder Adapter *Part # 169216* is required for Zek Disc**



Part# 166964

MK-IXL HINGED SHROUD

- Use for grinding against walls and edges

ORDERING INFORMATION

You may order MK Diamond products through your local MK Diamond distributor or, you may order direct from MK Diamond.

NOTE: There is a \$25.00 minimum order when ordering direct from MK Diamond. All purchases must be made using VISA, MasterCard or American Express.

When ordering direct from MK Diamond, please have the following information ready before calling:

- The Model Number of the unit
- The Serial Number of the unit
- Where the unit was purchased and when
- The Part Number for the part(s) being ordered
- The Part Description for the part(s) being ordered

All parts may be ordered by calling toll free to – 800 421-5830 or 310 539-5221 and asking for Customer Service. For technical questions, call – 800 474-5594.

RETURN MATERIALS POLICY

To expedite the service relative to the return of a product purchased through MK Diamond, please observe the following:

NOTE: When returning all items, they must have been purchased within the previous twelve (12) months.

- Have the Model Number of the unit
- Have the Serial Number of the unit
- Have the location of where the unit was purchased
- Have the date when the unit was purchased
- Contact Customer Service for approval to return the item(s)
- Obtain a Returned Goods Number (RGA) authorizing the return
- Follow the packaging instructions in the following section
- Ensure your item(s) are prepaid to the destination

For returned items, call toll free to – 800 421-5830 or 310 539-5221 and ask for Customer Service. For technical questions, call – 800 474-5594 or 310 257-2845.

PACKAGING INSTRUCTIONS

- Dry the unit before shipping
- Package the unit in its original container or one of comparable size (do not ship the unit partially exposed)
- Ensure all parts are secured in the packaging to prevent movement.

AUTHORIZED SERVICE CENTERS

For quicker repair time, you may contact MK Diamond Customer Service, toll free, at 800 421-5830 or 310 539-5221 for the Authorized Service Center closest to you or visit our web site at www.mkdiamond.com. For technical questions, call – 800 474-5594.

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