

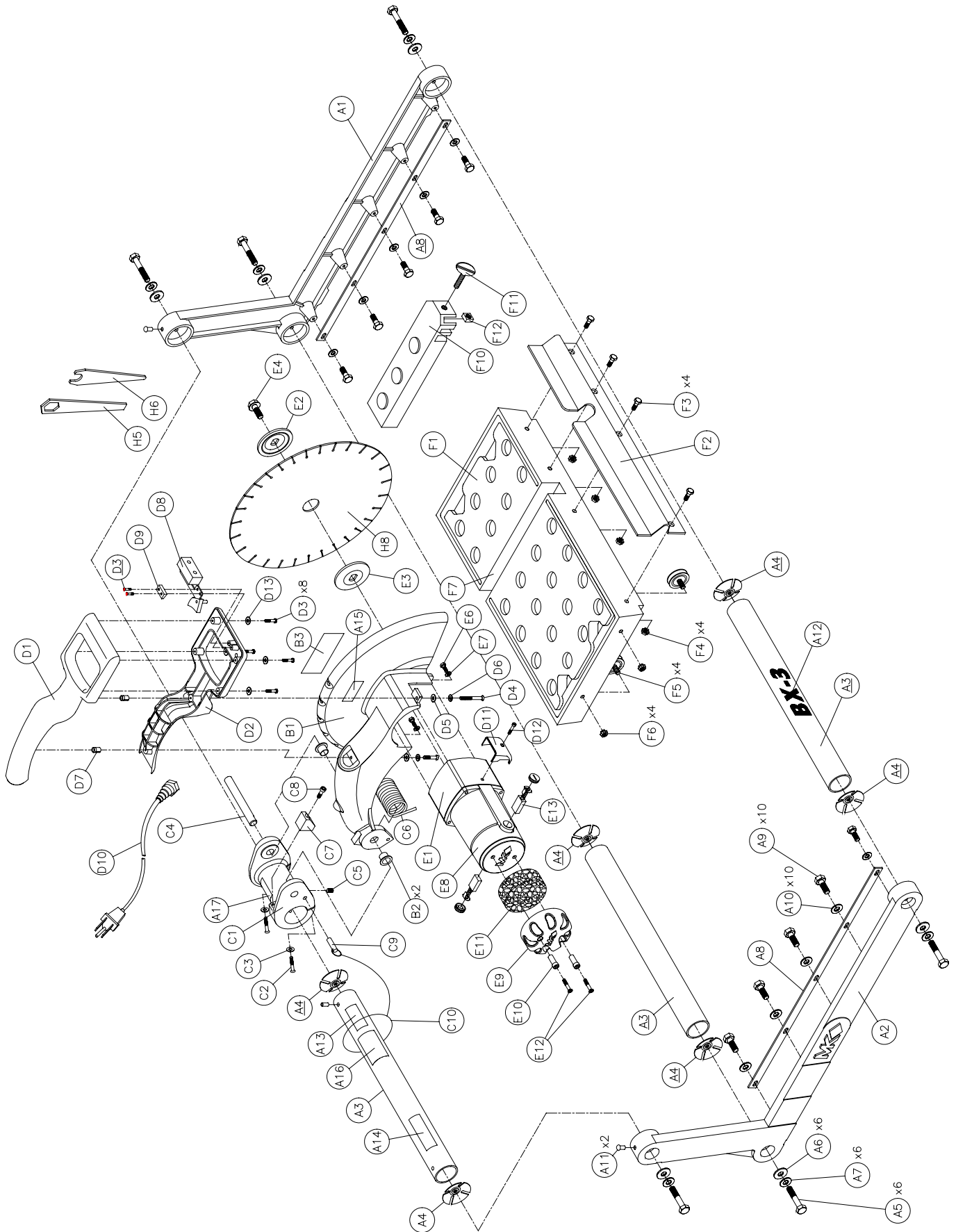
# **BX-3 MASONRY SAW**

## **OWNER'S MANUAL, PARTS LIST & OPERATING INSTRUCTIONS**



Revision 100	09.2011
Manual Part No. 158168	

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



**PARTS LIST:**

<b>Item</b>	<b>Description</b>	<b>Qty</b>	<b>MK p/n</b>
<b>A</b>	<b>Assembly, Frame, Right</b>	<b>1</b>	<b>n/a</b>
A1	Casting, Frame, Right	1	157367
A2	Casting, Frame, Left	1	157369
A3	Support, Horizontal Frame	3	157384
A4	Tube Connector, 1/4-20	6	157930
A5	Screw, 1/4-20 x 1 1/2 Hex Head Cap	6	151914
A6	Washer, 1/4 SAE Flat	6	151915
A7	Washer, 1/4 Split Lock	6	152591
A8	Strap, Table Guide Rail	2	157383
A9	Screw, 1/4-20 x 3/4, Hex Head Cap	10	152370
A10	Washer, 1/4 Split Lock	10	152591
A11	Drive Stud, Round Head Grooved #16 (1/4) x 1/2	2	158071
A12	Label, Adhesive "BX3"	1	157959
A13	Label, Safety Caution	1	155576
A14	Label, MK USA	1	154334
A15	Tag, Serial, Brick Saw	1	158096
A16	Label, Prop 65	1	154337
A17	Label, Warning, Extension Cord	1	155672
<b>B</b>	<b>Assembly, Arm, Motor Mount</b>	<b>1</b>	<b>n/a</b>
B1	Casting, Arm, Motor Mount	1	157599
B2	Bushing, Nylon Flange	2	157932
B3	Label, Adhesive "Brick Xtreme"	1	157958
<b>C</b>	<b>Assembly, Pivot Clamp</b>	<b>1</b>	<b>n/a</b>
C1	Casting, Pivot Clamp	1	157593
C2	Screw, 1/4-20 x 1 1/4 Socket Hd. Cap	2	154683
C3	Washer, 1/4 Split Lock	2	152591
C4	Pin, Pivot .625 x 5.6	1	157645
C5	Screw, Set 1/4-20 x 1/4 Cup Point	1	157528
C6	Spring, Torsion	1	157702
C7	Stop Block	1	158226
C8	Screw, 1/4-20 x 5/8, Socket Hd Cap	1	152587
C9	Pin, Detent w/ Pull Ring	1	157933
C10	Lanyard	1	158072
<b>D</b>	<b>Assembly, Handle &amp; Switch</b>	<b>1</b>	<b>n/a</b>
D1	Handle, Upper	1	157874
D2	Handle, Lower	1	157875
D3	Screw, M3.5 x 12mm	8	158156
D4	Screw, 1/4-20 x 3/4, Socket Hd. Cap	2	152587
D5	Washer, 1/4 SAE, Flat	2	151915
D6	Washer, 1/4 Split Lock	2	152591
D7	Insert, Expansion, 1/4-20 Standard	2	158147
D8	Switch, Trigger	1	157934
D9	Plate, Screw, Switch Mounting	1	157876
D10	Cord, AC Power 120V	1	157935
D11	Cover, Wire	1	157880
D12	Screw, # 6-32 x 1 1/4, Socket Flat Head	1	158160
D13	Washer, #6 Flat SAE	5	158231
<b>E</b>	<b>Assembly, Motor</b>	<b>1</b>	<b>n/a</b>
E1	Motor, AC 115 Volt / 15 Amp, 3500 RPM	1	157801-R
E2	Flange, Outer	1	158105

<b>Item</b>	<b>Description</b>	<b>Qty</b>	<b>MK p/n</b>
E3	Flange, Inner	1	158106
E4	Screw, M10 – 1.5 x 20mm Hex Flange	1	158107
E6	Screw, M6-1 x 20mm Hex Head Cap	4	158158
E7	Washer, M6 Split Lock	4	158159
E8	Cap, Motor	1	157877
E9	Cap, Motor Filter	1	157878
E10	Spacer Pin, Cap Screw	2	157879
E11	Filter Element	1	157729
E12	Screw, #6 x 1 ½, Combo Head Pan, Tapping	2	158157
<b>F</b>	<b>Assembly, Table</b>	<b>1</b>	<b>133082</b>
F1	Casting, Table	1	158144
F2	Stop, Rule	1	134387
F3	Screw, ¼-20 x ¾ Hex Head Cap	4	152370
F4	Nut, ¼-20, Hex w/ External Tooth Washer	4	153941
F5	Wheel, Roller	4	133090
F6	Nut, 5/16-18, Hex w/ External Tooth Washer	4	151051
F7	Wood Strip, Table Insert	1	156427
F8	Screw, #8 x 1 Pan Head Phil.	2	151047
F10	Casting, Squaring Arm	1	231276
F11	Screw, 5/16-18 x 1 ½, Thumb	1	151155
F12	Nut, 5/16-18 Square	1	151156
<b>H</b>	<b>Assembly, Accessory Pack</b>	<b>1</b>	<b>n/a</b>
H5	Wrench, Blade Nut	1	158109
H6	Wrench, Shaft	1	158110
H7	Extra Filter Element	1	157729
H8	Blade, MK-BX10, Dry Cutting 14", Segmented	1	157957
H8-A	Blade, MK-BX30, Dry Cutting 14", Segmented Block	1	157944
	Owner's Manual	1	158168

### THEORY OF DIAMOND BLADES:

Diamond blades do not really cut; they grind the material through friction. Diamond crystals, often visible at the leading edge and sides of the rim/segment, remove material by scratching out particles of hard, dense materials, or by knocking out larger particles of loosely bonded abrasive material. This process eventually cracks or fractures the diamond particle, breaking it down into smaller pieces. As a result, a diamond blade for cutting soft, abrasive material must have a hard metal matrix composition to resist this erosion long enough for the exposed diamonds to be properly utilized. Conversely, a blade for cutting a hard, non-abrasive material must have a soft bond to ensure that it will erode and expose the diamonds embedded in the matrix. These simple principles are the foundation of “controlled bond erosion”.



#### Types of Cutting:

There are two basic types of cutting-Dry or Wet. The choice of which type of blade to use depends on:

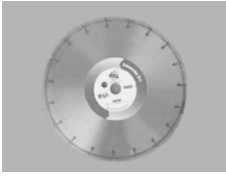
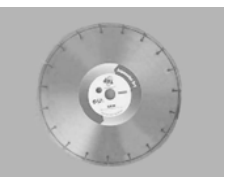
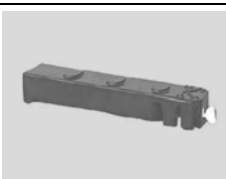


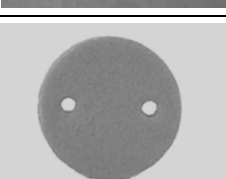

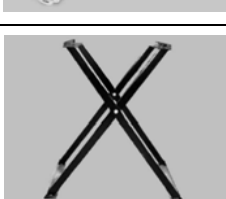
- The requirements of the job
- The machine/tool utilizing the diamond blade
- The preference of the operator

In the case of DRY cutting, the overwhelming popularity and quantity of hand-held saws and the flexible nature of MK Diamond blades to professionally handle most ceramic, masonry, stone and concrete materials, make the DRY cutting blade a very attractive tool. When using a DRY blade, the user must be aware of distinct operating practices to ensure optimum performance. DRY cutting blades require sufficient airflow about the blade to prevent overheating of the steel core. This is best accomplished by shallow, intermittent cuts of the material with periods of “free-spinning” (for several seconds) between each cut, to maximize the cooling process.

For WET cutting applications, MK has the exact blade to compliment both the material to be cut and the wet cutting machine to be used. During cutting operations, liberal amounts of water act as a coolant to support the cutting effectiveness and longevity of the WET blade. Additionally, using water adds to the overall safety of cutting operations by keeping the dust signature down.

Know All You Can About the Material You Wish to Cut

**ACCESSORIES AND REPLACEMENT PARTS:**

ITEM	NUMBER	DESCRIPTION	
1.	157957	MK-BX10, Dry Cutting 14" Segmented Blade	
2.	157944	MK-BX30, Dry Cutting 14" Segmented Block Blade	
3.	231276	Adjustable Cutting Guide*	
4.	133090	Roller Wheel*	
5.	156427	Protective Wooden Strip*	
6.	157729	Motor Air Filter*	
7.	152610	Ground Fault Circuit Interrupter	
8.	157981	BX-3 Stand (Stand contains Owners Manual)	

*\*Included at time of shipping*

## ORDERING INFORMATION

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

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

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

**NOTE:** There is a \$25.00 minimum order when ordering direct from MK Diamond. A \$5.00 charge will be added to orders having a net billing value under \$50.00. All purchases must be made using VISA, MasterCard or American Express.

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

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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 saw
- Have the Serial Number of the saw
- Have the location of where the saw was purchased
- Have the date when the saw 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

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- Remove the Cutting Head and Support Angle Assembly
- Dry the saw before shipping
- When packing, include the following: Saw, Diamond Blade, Blade Guard and Support Angle Assembly and Adjustable Cutting Guide (Other Accessories are not required)
- 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 moving

## AUTHORIZED SERVICE CENTERS

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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](http://www.mkdiamond.com). For technical questions, call – 800 474-5594.

**CONTACT:**

Please contact MK Diamond Products, Inc. Customer Service Department with any questions you might have regarding distributors, parts or service.

Telephone: **(800) 421-5830**

Fax: **(310) 539-5158**

E-mail: **Customer\_Service@MKDiamond.com**

Customer Service Hours: **Monday through Friday, 6AM-4PM PST**

**MK Diamond Products, Inc.  
1315 Storm Parkway  
Torrance, CA 90501**

**MK DIAMOND PRODUCTS, INC. LIMITED WARRANTY**

MK DIAMOND PRODUCTS, INC. will guarantee every machine they build, to be free from defects in material and workmanship for (1) one year from date of purchase. The obligation of MK DIAMOND PRODUCTS, INC. under this warranty is limited to the repair or replacement of any parts which, under normal use, prove to be defective in material or workmanship. The parts involved or the unit in question should be returned to MK DIAMOND PRODUCTS, INC. or to a point designated by us, transportation prepaid.

This warranty does not obligate us to bear the cost of labor or transportation charges in connection with replacement or repair of defective parts. Likewise, it shall NOT apply to any unit which has been subjected to misuse, neglect or accident. This warranty does NOT apply to any machine which has been repaired or altered outside our factory.

This warranty does NOT obligate MK DIAMOND PRODUCTS, INC., with respect to items not of our manufacture, such as engines, motors, hydraulics, etc., which are subject to their own guarantees and warranties.

We shall in no event be liable for consequential damages or contingent liabilities arising out of failure of any equipment or parts to operate properly.

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MK Diamond may have patents, patent applications, trade marks, copyrights of other intellectual property right covering this product in this document.

This manual MUST accompany the equipment at all times. This manual is considered a permanent part of the equipment and should remain with the unit if resold.

The information and specifications included in this publication were in effect at the time of approval for printing.



**MK-101 Pro 24 Tile Saw**  
**OWNERS MANUAL & OPERATING INSTRUCTION**  
**DOCUMENT NO. 158808**



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