MODEL DDM-CORE DRILL OWNER'S MANUAL PARTS LIST & OPERATING INSTRUCTIONS



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#### CAUTION

READ SAFETY AND GENERAL INSTRUCTIONS CAREFULLY BEFORE USING SAW FOR THE FIRST TIME.

PLEASE RECORD THE SERIAL NUMBER OF YOUR DRILL IN THIS BLOCK.

#### SERIAL NUMBER

FOR YOUR ONE (1) YEAR WARRANTY TO BE EFFECTIVE, COMPLETE THE WARRANTY CARD (INCLUDE THE SERIAL NUMBER) AND MAIL IT IN AS SOON AS POSSIBLE.

> Manual Part No. 161117-DD Revision 06/07

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#### IMPORTANT SAFETY INSTRUCTIONS FOR THE DDM-Core Drill

For your safety, read all instructions!

These safety precautions should be followed at all times. Failure to follow these safety precautions could result in injury to yourself and others. Safety is a combination of operator common sense and alertness at all times when this drill rig is being used.

For your own safety and protection, do not attempt to operate the drill until it is completely assembled and installed according to the instructions, and until you read and understand all safety and operating instructions.

Take time to read and understand fully the owners manual and all safety labels attached to the core drill.

Use safety equipment. Everyone in the work area should wear safety goggles or glasses with side shields complying with current safety standards. Wear hearing protection during extended use and a dust mask for dusty operations. Hard hats, face shields, safety shoes, etc. should be used when specified or necessary.

Use the right tool. Do not use a tool or attachment to do a job for which it is not recommended. Do not alter the tool.

Keep your work area clean and safe to avoid accidents. Maintain a safe zone and keep all visitors at a safe distance from the work area.

Always insure that the switch is off before plugging unit into electrical power.

Never leave the drill running unattended. Turn power off.



Do not over reach, maintain control. Keep proper footing and balance at all times. Maintain a firm grip. Use extra care when using the tool on ladders, roofs, scaffolds, etc.

Maintain all tools with care for the safest and best performance.



Should any part of this drill become missing or damaged, or any component fail to perform properly, shut off the drill and unplug the power source. Replace the missing, damaged, and/or failed part before resuming operations.



Always keep alert. Do not allow familiarity (gained from frequent use) to cause a careless mistake. Always remember that a careless fraction of a second is sufficient to inflict serious injury.

<u>Think Safety</u> The operation of any power tool can result in foreign objects being thrown into the eyes causing severe damage. Use safety goggles to comply with ANSI Z87.1.

#### FORESIGHT IS BETTER THAN NO SIGHT!

#### Safety Messages & Symbols

A safety message informs you about potential hazards that could hurt you or others. Each safety message is preceded by one of the three words: Danger, Warning, or Caution.



You WILL be KILLED or SERIOUSLY injured if you don't follow instructions.

You CAN be KILLED or SERIOUSLY injured if you don't follow instructions.

You CAN be injured if you don't follow instructions.

Additional Information as to the nature of the hazard is provided by the following hazards symbols which appear throughout the manual in conjunction with safety message alert symbols.



### Electrical Shock!

Never touch electrical wires or components while the motor is running. They can be sources of electrical shock which could cause severe injury or burns.



## Accidental Starts!

Before plugging the equipment into an electrical outlet, ensure that the ON/OFF switch is in the OFF position to prevent accidental starting. Unplug unit before performing any service



### Rotating Parts!

Keep hands, feet, hair, and clothing away from all moving parts to prevent injury. Never operate the motor with covers, shrouds, or guards removed.

#### **Damage Prevention Messages**

Other important messages that are designed to help prevent damage to your DDM-Core Drill, other property, or the environment are preceded by the word, "notice."

Notice Your Core Drill or other property could be damaged if you don't follow instructions.

#### Safety Label Locations

Safety labels are located according to the table below. The labels contain important safety information. Please read them carefully. These labels are considered a permanent part of your core drill. If a label comes off or becomes hard to read, contact Dixie Diamond or your dealer for replacement.

	ItemLocation1Base, Top		Description	Part #
			Model and Serial Number	157730
	2	Base, Top	Label, Caution, Safety	155576



# **DDM-Core Drilling Machine**

#### The DDM-Core Drill is a powerful

all-purpose drilling rig that is designed to drill holes, up to 12 inches in diameter (14 inches with the 2 inch spacer), in all types of concrete slabs, floors, walls, and ceilings. The DDM-Core Drill is designed for easy anchoring using masonry anchors. A vacuum pump is provided to facilitate quick and easy anchoring to smooth floor surfaces.

<u>Motor</u>

The DDM-Core Drill is designed for use with a variety of motors. All motors are powerful two or three speed units that provide the correct cutting speed over a range of diamond drill sizes.

#### Carriage, Column and Base

The carriage, column and base assembly of the DDM-Core Drill is the strong, sturdy drilling platform that provides the rigidity needed to quickly drill accurately placed, straight, smooth holes in all types of concrete. The DDM-Core Drill's base is slotted to provide easy anchoring of the drill, in a variety of drilling situations, with a single masonry anchor. The slot also allows more than one hole to be drilled from a single anchor location. The base contains four leveling screws to insure accurate hole alignment even on uneven concrete surfaces. The carriage also has a handle and the base has 6" wheels to provide easy transport. The carriage travel is controlled by a strong rack and pinion gear-system, that can be locked at any point on the column. The single spoked sliding handle allows the operator to easily control the drilling pressure and speed. At the top of the column is a strong jack-screw that allows for additional bracing to overhead or opposite surfaces.

#### Vacuum Pump

The vacuum pump provides quick and reliable mounting to smooth concrete slab and floor surfaces. The powerful vacuum pump provides 25 PSI of holding power which equates to over 1800 pounds of force, holding the DDM-Core Drill securely, for safe, accurate drilling. The pump has a quick disconnect connector on the hose at the base.

#### Water System

The water system for the DDM-Core Drill is a simple hose hook-up and shut-off valve that provides water under pressure to the diamond drill bit. The water travels to the center of the bit through the water swivel and spindle to insure that water is supplied to the cutting end of the bit, even in deep drilling operations.

#### **Unpacking**

Open the accessory pack and check each item with the contents list, making certain that all items are accounted for and in good condition before discarding any packing material. If there are any missing or damaged parts, call our toll free number 1-(800)-421-5830 for instructions before proceeding with the assembly.

Contents of the carton: It varies depending on model. DDM-Core Drill (including column, carriage, base and motor), Vacuum Pump and Accessory Pack.

Contents of the Accessory Pack: Control box, meter box knob, leveling screws (4), feed handle (1) and knobs (2), water valve, vacuum base gasket, wrench, DDM-Core Drill manual, Dixie Diamond warranty card, motor manual and motor warranty card.

#### Assembly



#### Feed Handle and Meter Box

For your own safety and protection, do not attempt to operate this drill until it is completely assembled and installed according to these instructions, and until you understand the machines capabilities and the potential hazards associated with it.

Step 1 Slide carriage assembly onto column. Assemble handle and hub.

#### Vacuum Gasket

Turn the vacuum base over. Press the gasket into the groove in the underside of the base. The gasket is cut, at the factory, to the correct length, so that the two ends will butt together once the gasket is installed.

Step 2 Assemble the two pieces of the water valve, and install the valve, into the water swivel, on the motor, just above the spindle (see Milwaukee literature).

#### Final Assembly

Plug the cord from the motor into the upper outlet on the meter box (the one opposite the motor on-off switch. The other outlet on the meter box is for use with the vacuum pump.

#### **Drilling Operations**

#### **Electrical Requirements**

The DDM-Core Drill rig has been equipped with a Milwaukee motor. The drill should be used on an electrical circuit, separate from other loads, and protected by a 30 amp circuit breaker. The DDM-Core Drill has been provided with a 20 Amp plug (NEMA 15-20) or a 30 Amp (NEMA 15-30) locking plug depending on the model.

#### Grounding

The DDM-Core Drill is marked "Grounding Required" and has a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet (see figure below). If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk of electrical shock. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool's grounding systems and must never be attached to an electrically live terminal.

Your tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances.



### WARNING

Improperly connecting the grounding wire can result in the risk of electric shock. Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the tool. Never remove the grounding prong from the plug.

#### **Extension Cords**

Do not use the tool if the cord or plug is damaged. If damaged, have it repaired by an authorized service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician. The use of a circuit protected by a ground fault interrupter (GFI) is highly recommended.

Use extension cords of the proper cable size, referring to the following chart.

Cord length	25 feet	50 feet	75 feet
Wire Size (AWG)	#10	#8	#6



### WARNING

Never use a extension cord smaller than shown in the chart. 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 electrician before using it. Protect your extension cords from sharp objects, excessive heat and damp or wet areas.

Notice: Using an extension cord with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage.

Securing the Rig: Recommended Methods

A. <u>Use a concrete ancho</u>r. Use either a 1/2 or 5/8 concrete anchor to secure the base to the work surface. Always be sure to level the rig and tighten the lock nuts on the leveling screws before tightening the anchor. Using a concrete anchor, insert a bolt through the slot located on the base and tighten the bolt firmly in the anchor.



It is essential to always secure the rig to the work surface to help prevent personal injury and also to protect the rig. An unsecured rig could rotate during drilling and possibly cause injury. It could also cause the bit to chatter against the work surface or bind in a hole, which can fracture the diamond. Always test the anchor for firm attachment before drilling.

B. <u>Vacuum base</u>. The DDM-Core Drill Rig is equipped with a vacuum pump. This pump is designed to provide approximately 1800 pounds of total holding power. In order to provide the most rigidity to your core rig the unit should be used on a relatively smooth surface such as concrete. (If the surface is too porous or rough the vacuum mount may not hold securely.)

1. Turn the vacuum pump on and step on the vacuum base until a vacuum is created and the base adheres to the work surface.

2. Level the rig using the leveling bolts. Use a minimum amount of adjustment to the leveling bolts to avoid breaking the vacuum seal.

The vacuum gauge should read approximately 25 pounds per square inch (PSI) of pressure. If the gauge reads 20 PSI or less, check the work surface for conditions which may interfere with adequate suction such as cracks, dirt or debris on a porous surface.



WARNING Do not drill if the gauge reads less than 20 PSI. Do not use vacuum base on cracked, uneven, porous or vertical surfaces.

C. <u>Additional Support</u>. For added rigidity, you may use a telescoping extension assembly in conjunction with a concrete anchor or vacuum base. To use a telescoping assembly, first

level the rig with the leveling screws. Secure the rig with an anchor or the vacuum base. Place the top flange of the extension against a ceiling or wall and place the other end on the jack screw of the column. The assembly is adjustable up to 14 feet. Use the jack screw to tighten the assembly and to make small adjustable. Specifications for the different motors are listed in the table below.

#### Drilling Speeds

Manufacturer	Model #	Amps	Volts	Safety Override	Speed (RPM)	Part Number
Milwaukee	4090	15	120	Shear Pin	375-750	155976
Milwaukee	4094	20	120	Shear Pin	450-900	154633
Milwaukee	4095	15	120	Shear Pin	500-1000	155045
Milwaukee	4095-5	10.45	220	Shear Pin	400-900	154817
Milwaukee	4096	20	120	Shear Clutch	450-900	155540
Milwaukee	4099	20	110	Shear Pin	600-1200	157378
Eibenstock	EBM 300/ 3 P	20	120	Slip Clutch	270/ 700/ 1250	158754

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The DDM-Core Drill, Milwaukee and DeWalt will operate in either a high or low gear speed. This speed combined with applied pressure provides the cutting action for the core bit. Speed selection and pressure are determined by hardness of material, aggregate size and grade of diamond core bit. Generally, harder material and larger aggregates require more speed and pressure. Use low speed for large diameter bits and high speed for small diameter bits. Changing of the speeds is accomplished by using the speed shift lever built into the gear case.

Notice: Change the gears only when the motor is off.

All building materials and work surfaces are composed of aggregate of various size. Aggregates are materials such as gravel or crushed stone. The size of the grains and the hardness of the material affects the speed of drilling. Most building materials contain some type of steel reinforcements. All DDM-Core Drill bits are designed to cut through these types of reinforcing steel. However, bits should never be used for drilling solid steel plates. Proper selection of the diamond core bit should be based on material to be drilled and performance requirements.

#### Drilling Pressure and the Ammeter



Steady, even pressure assures accurate holes and longer bit life. Always maintain consistent pressure so that the bit is constantly cutting.

Notice: Too much pressure will damage the bit and motor. Too little pressure will glaze over the diamonds, reducing cutting efficiency and prematurely wearing the bit. The ammeter is the gauge on the Control Box.It provides pressure feedback information during drilling, allowing the operator to help prevent motor overload and premature bit wear. The green area is the operating range, and the red area is the overload range. Generally, the operator should keep the ammeter needle in the upper area of the operating range for large diameter bits, and in the lower green area for small diameter bits. If the bit contacts steel reinforcing rods, the needle on the ammeter may jump slightly showing a heavier load. If this occurs, do not decrease pressure or you may damage the diamonds. The DDM-Core Drill may be operated with the ammeter needle into the red area for the short period of time that it takes to cut through a steel rod.

#### Water Supply

An adequate supply of clean water is necessary for drilling. Connect the water supply hose to the hose fitting on the output of core drill motor. Take precautions that the water supply will not be interrupted during the drilling operations.

Notice: If a bit is run dry it can be ruined in a few seconds.

#### Carriage Rigidity

It is essential that the carriage fits snugly on the column to prevent the motor or bit from wobbling during drilling. Through normal use the carriage may loosen from the column and begin to wobble. Before drilling, always make sure the carriage is rigid by trying to wiggle it with your hand. If the carriage is secure it should not move. If it does move, tighten the adjustment screws for the nylon gibs that secure the carriage to the column.

Tighten only enough to remove the play. Do not over tighten.

#### Shear Pin and Clutch Protection

The DDM-Core Drill uses either a shear pin or a friction clutch to protect the gear and motor against overload. The shear pin drives the outer portion of the drive spindle. If the motor should overload the pin will shear. Extra shear pins are supplied or can be ordered from Dixie Diamond's Customer Service. Tighten only enough to remove the play. Do not over tighten. Another model features a friction clutch rather than a shear pin to protect the motor and gears. If the motor overloads the clutch will begin to slip and the bit will stop rotating. The clutch is factory-set and does not require adjustments. However, under normal use, the clutch may start to slip at low torque. If this happens, refer to the motors Owner's Manual.

#### Mounting Bits

Bits with permanently attached adapters simply screw directly onto the threads of the drill spindle. Ensure that the end of the bit butts up squarely against the shoulder on the spindle.

- \*Thread anti-clockwise to attach core bit.
- <u>\*Thread clockwise to loosen.</u>



The DDM-Core Drill, equipped with either the Milwaukee or Eibenstock motor, has a 1 1/4"-7 thread. For bits with other threads, use a shaft coupling. After a bit has been mounted, turn the power on and check that there is a minimum of run-out or wobble.



To reduce the risk of injury, always unplug tool before attaching or removing accessories. Only use specifically recommended accessories. Others may be hazardous.

#### **Drilling Procedure**

When drilling through concrete floors, the core will generally drop from the diamond bit. Caution should be provided for people and property below the drilling area.

1. Ensure that you have read and fully understand the complete operation of the DDM-Core Drill you have purchased prior to commencing drilling operations.

2. Select and install a diamond core bit appropriate for the job. Note: Grease the bit threads to help prevent the bit from seizing on the spindle due to surface corrosion.

3. Select either high or low gear speed according to the chart in the Drilling Speeds section of this manual. (Do not shift speed when motor is on.)

4. Connect water hose to water swivel.

5. Secure the rig as described in the Securing the Rig section of this manual.

## WARNING

If using the vacuum base, do not continue operations unless the vacuum gauge reads more than 20 inches of mercury. Normally, the gauge will read 23 inches or more.

6. Turn the motor switch on the control box on. Turn the water on so that an adequate flow of water is supplied through the water swivel, to the bit. Hold the sliding handle and slightly loosen the carriage lock knob. Slowly rotate the handle to lower the bit into the work piece - apply steady even pressure.

Note: To prevent the bit from wandering, always use a light load to start the hole and wait for the diamond tip of the bit to penetrate the work surface before increasing the load.

7. Use consistent pressure so that the bit cuts consistently. Insufficient pressure will cause the diamond core bit to glaze over. Too much pressure will overload the motor and crush the diamonds. Use the ammeter on the control box as a guide for proper pressure.

CAUTION If the rig shifts during drilling, stop the motor, reposition the rig, and resume drilling.

8. Monitor the water flow. If the water flow is adequate, the water leaving the cut should be slightly sludgy. When cutting metal rebar, the water should have a gray metal coloring

**Notice:** When drilling into prestressed concrete the bit may cut into the hardened steel cable under tension. As the bit cuts through each strand, the tension in the cable is released. The diamond segments on the bit crown can be damaged by the loose wires. The best prevention for bit damage is to use a core bit designed especially for drilling in prestressed concrete.

9. When the cut is complete, keep the drill motor on and rotate the sliding handle to bring the bit up out of the hole. The bit may become stuck if the motor is turned off before the bit is completely clear of the hole. Once the bit is clear of the hole, tighten the carriage lock knob, turn off the motor and the water supply.



**Note** Normally the core will drop out of the bit, and remain in the hole. However, in cases where the core sticks in the bit, it is sometimes necessary to push the core up and down with the water running to allow the core to drop out. Sometimes very light tapping on the barrel of the bit with a piece of wood will loosen the core.

# **CAUTION**

Perform this action only with the motor turned off and the unit unplugged to prevent accidental starting and injury. Exercise extreme caution in hand placement when removing a stuck core, as the core can be heavy and inflict injury.

Deep Drilling

When drilling holes that are longer than the core bit, follow the steps below.

1. Begin drilling the hole as usual. When you have drilled to the length of the bit, retract the bit from the hole and turn off the motor and water as usual.

2. Break off the core by driving a chisel or slender wedge into the circular kerf. Remove the core using core tongs, bent music wire or anchor bolts.

3. After removing the core, insert the bit carefully into the hole, attach a bit extension to the bit and core drill rig, then continue drilling as usual.

Maintenance



Periodic maintenance, including cleaning, lubrication and inspection for wear and damage are routine servicing procedures. Following the procedures as outlined can prevent serious damage or malfunctioning of the machine, and aid in preserving the useful life of core drill bits.

# CAUTION

Before performing any maintenance to the DDM-Core Drill, always unplug the unit from the electrical power source. Be sure the On-Off switches are in the Off position, after servicing, and before plugging the unit back in.

#### Cleaning

Clean the machine after use, being careful to remove dust and slurry from the motor, vents, carriage and column. Keep tool handles clean, dry and free of oil and grease. Use only mild soap and a damp cloth to clean this tool since certain agents and solvents are harmful to plastics and other insulated parts.



### WARNING

Never use flammable or combustible solvents around tools.

#### Vacuum Base Gasket

Through normal use, the rubber gasket on the underside of the vacuum base can become worn, requiring replacement. Periodically check the gasket for wear. If replacement is required, clean the groove in the base before installing a new gasket.

#### Troubleshooting

When trouble occurs, be sure to check the simple causes which, at first may seem too obvious to be considered. Refer to the table on page 8 for problems and their possible causes.

PROBLEM	WHAT TO DO?	INDICATION	CAUSE	SOLUTION/RECOMMENDATIONS
	1. Check fluid return.	Fluid not muddy. Evidence of steel cuttings.	Drilling in steel reinforcement.	Adjust drilling parameters to recommendations for reinforcement.
	2. Check motor speed range.		Speed not correct for the bit size used.	See recommended speeds.
Low		Bit worn out.		Replace with new bit.
Penetration Rate Under			Insufficient bit load.	Increase bit load.
Prevaiing Drilling Parameters	3. Check wear picture of bit face.	Diamond without exposure. (flush with bond matrix)	Rotated with high RPM on reinforcement.	Reduce RPM, or resharpen bit.
			Loose material at bottom of hole.	Break core, clean bottom of hole or reduce RPN and drill with increased bit load.
		Face of bit plugged with cuttings.	Not enough fluid pumped. Cuttings burnt to matrix. Diamonds prevented from cutting.	Clean bit face by sharpening methods such as drilling dry at low RPM in a concrete block 3/8" deep max. Increase water flow rate.
		Face of bit covered with steel Steel cuttings stick to bit face.	Steel cuttings stick to bit face. Diamonds prevented from cutting.	Clean bit face by drilling in abrasive concrete block. Reduce RPM.
		Wear picture of polished	Bit load too low.	Increase bit load.
		diamonds.	Bit speed too high.	Use lower speed; increase bit load.
Heavy Wear at Steel Tube Worn or open guide ways on cradle. Borehole is getting undulated.		Adjust guidance on carriage.		
			Protruding steel. Spindle is offset. Bit out of true.	Adjust guidance on carriage. Nicks or dirt on mounting faces.
			Bit is deformed.	Replace bit.
		Heavy Wear.	Poor cleaning of abrasive cuttings.	Improve flushing.
			Crown clearance worn out.	Replace bit.
No return of fluid	Check where fluid is leaking.			If Leaking can be tolerated; continue drilling with increased attention.
Bit Stuck	1. Try to raise bit, if impossible:	Loose material (cut steel or aggregates) is blocking between core		Step 1: Apply wrench and rotate bit in both directions while bit is under tension. If not successful:
	2. Stop rotation.	and bit or between borehole and bit.		Step 2: Try to over drill a hole slightly larger than the stuck bit.
		Drill moved during drilling (poor fastening).		Disconnect bit and remove, break core. Start over with improved fastening of machine.
	1. Stop rotation.	Bit deviates, guide ways on cradle have too much clearance.		Disconnect machine, adjust guidance.
Shear Pin Fail	2. Raise bit.	No clearance between tube I.D. or O.D. and crown I.D. or O.D.		Replace bit.
		Drill impacted to stall at lower speeds.		Use recommended speed for the bit diameter used. Raise bit when it begins to load down. Feed bit slowly when chattering begins.

# CORE DRILL COMBO EXPLODED VIEW AND PARTS LIST



#### **EXPLODED VIEW**









(BB1)

(вв8)

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ASSEMBLY "BC"
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G

ASSEMBLY "EB & EC"



ASSEMBLY "M, MA & MB"

# CORE DRILL COMBO PARTS LIST

### PARTS LIST:

Item	Description	Qty	Part No.
AE	Assembly, M3 Base, Combination	1	n/a
AE1	Base, M3 Combination	1	157427
AE2	Screw, 1/2-13 x 3 1/2 Hex Hd. Cap, Full Thread	4	158284
AE3	Level, Circular Bubble	1	157429
AE4	Gasket, Neoprene size 1" x 1/2 x 47.8"	3.98'	154543
AE5	Plate, Air Seal	1	157430
AE6	Gasket, 1/8" Neoprene Rubber	1	157431
AE7	Fitting, ¼ MNPT x 3/8 Barb	1	154659
AE8	Screw, Spade Hd. Thumb 1/4-20 x 3/4 w/ Shoulder	2	157432
AE9	Label, CORE DRILL Serial Tag	1	157730
AE10	Label, Caution, Safety	1	155576
AF	Assembly, M3 Base, Combination Tilt	1	n/a
AF1	Base, M3 Combination Tilt	1	158393
AF2	Screw, 1/2-13 x 3 1/2 Hex Hd. Cap, Full Thread	4	158284
AF3	Level, Circular Bubble	1	157429
AF4	Gasket, Neoprene size 1" x 1/2 x 47.8"	3.98'	154543
AF5	Plate, Air Seal	1	157430
AF6	Gasket, 1/8" Neoprene Rubber	1	157431
AF7	Fitting, ¼ MNPT x 3/8 Barb	1	154659
AF8	Screw, Spade Hd. Thumb 1/4-20 x 3/4 w/ Shoulder	2	157432
AF9	Label, CORE DRILL Serial Tag	1	157730
AF10	Label, Caution, Safety	1	155576
AF12	Screw, 1/2-13 x 4-1/2 Hex Hd. Cap	1	158397
AF13	Washer, ½ SAE Flat	2	150924
AF14	Washer, ½ Split Lock	1	153524
AF15	Nut ½-13 Hex	1	151282
AG	Assembly, M3 Base, Anchor Tilt	1	n/a
AG1	Base, M3 Anchor, Tilt	1	157413
AG2	Screw, ½-13 x 3 ½ Hex Hd. Cap, Full Thread	4	158284
AG3	Nut, ½-13 Hex Hd.	2	151282
AG4	Screw, ½-13 x 4 ½ Hex Hd. Cap	2	158397
AG5	Washer, ½ SAE Flat	4	150924
AG6	Washer, ½ Split Lock	2	153524
AG7	Label, Caution, Safety	1	155576
AG8	Level, Circular Bubble	1	157429
AG9	Label, CORE DRILL Serial Tag	1	157730
AG11	Label, For Information on Service	1	155038
В	Assembly, M3 Wheel Bracket, Combo		n/a
B1	Bracket, Wheel, Combo	1	158392
B2	Wheel 6" x 1 1/2 x 1/2 axle	2	157434
B3	Cap, Push ½" Stainless Steel	2	157435
B4	Collar, ½ I.D. x 1" O.D. x 7/16	2	157518
B5	Screw, ¼-20 x ¾ Flat Head Socket	4	154657
B6	Knob, Knurled Head ¼-20 x 2 ½	1	157436
B7	Pad, Toggle ¼-20	1	157437
B8	Label, CORE DRILL 1-1/4 x 5 1/8	1	155388
BA	Assembly, M3 Wheel Bracket, Tilt Combo		n/a
BA1	Bracket, Wheel, M3 Tilt Combo	1	158321
BA2	Wheel 6" x 1 1/2 x 1/2 axle	2	157434
BA3	Cap, Push ½" Stainless Steel	2	157435
BA4	Collar, ½ I.D. x 1" O.D. x 7/16	2	157518
BA5	Screw, ¼-20 x ¾ Flat Head Socket	4	154657

# **CORE DRILL COMBO PARTS LIST(cont...)**

BA6	Knob, Knurled Head ¼-20 x 2 ½	1	157436
BA7	Pad, Toggle 1/4-20	1	157437
С	Assembly, Telescoping Support		n/a
C1	Tube. Telescoping Support	1	158340
C2	Rod. Telescoping Support	1	158341
C3	Clovis Pin Dia. $1/4 \times 1 \frac{1}{4}$	1	158452
C4	Clovis Pin Dia, 1/4 x 1 5/8	1	158453
C5	Pin Cotter 1/16 x 5/8	2	158451
C6	Knob Tri Plastic $5/16-18 \times \frac{3}{4}$	1	158456
C7	Bracket Telescoping Bod Support	1	158342
C8	Nut M22 x 1 5	1	158455
C9	Washer M22 Flat	1	158454
	Assembly Carriage 2 1/2"	1	n/a
D1	Body Carriage	1	155757
D2	Shaft Gear Short	1	1583/18
D3	Bearing	2	137711
	Plate Adjustment	2	157317
D4 D5	Slide Carriage	<u> </u>	157318
	Scrow 6-32 x 1/2 Elat Hoad Philling Machine	<u>    0</u>	15///8
	Scrow, 6-32 x 3/8 Flat Hoad Phillips Machine	<u>    0</u>	157521
	Nut 6-32 Nulok Hov	<u>    0</u>	157510
	Knob Davies 1/ 20 x 3/	1	151691
	Mashar 1/ SAE Elat	1 1	151015
	Rock Corriggo	1 1	157/20
	Scrow 1/4 20 X 1 Socket Head Cap	1	151040
	Screw, 1/4-20 X T Sucket Head Cap	6	151049
	Handle, Carriage	1	157420
D14	Screw $1/4_{-}20 \times 3$ Pan Head Philling	2	157523
D17	Screw, $1/4-20 \times 14$ Socket Head Can	<u> </u>	159336
F	Assembly Control Box Fixed Dual Switch 120V	1	158428
F1	Box Fixed Dual Switch Control	1	158274
F2	Cover Fixed Dual Switch Control Box	1	158276
E3	Screw 1/2-20 x 3/2 Socket Head Cap	2	152587
= <u>E0</u>	Washer 1/2 Split Lock	2	152591
F5	Screw 10-24 x 5/8 Self Tapping	6	153681
E0 F6	Ammeter 120V	1	15//89
E0	Switch 30A Toggle	2	154491
E7 F8	Becentacle Flanged 15A / 125V	1	154473
F9	Cord Power SOWA 12/3 Yellow	3'	154494
E10	Connector Cord 1/2	1	151307
F11	Becentacle Flanged Twist-lock 20A / 125V	1	157375
F12	Transformer Current 120 V AC	1	154490
E12	Screw $6-32 \times \frac{1}{2}$ Pan Head	2	153459
F14	Plug Twist-lock 125V / 20A	1	154556
E15	Wire Harness (not shown)	1	154715
F17	Cover. Toggle Switch	2	154301
FR	Assembly, Control Box, Single Switch 120V	1	158430
EB1	Box. Single Switch Control	1	158385
EB2	Cover. Single Switch Control Box	1	158387
EB3	Screw, 14-20 x 34 Socket Head Cap	2	152587
EB4	Washer, 1/4 Split Lock	2	152591
EB5	Screw, 10-24 x 5/8 Self Tapping	6	153681
EB6	Ammeter 120V	1	154489

EB7	Switch, 30A Toggle	1	154491
EB8	Cord, Power SOWA 12/3 Yellow	3'	154494
EB9	Connector, Cord 1/2	1	151307
EB10	Receptacle, Flanged Twist-lock 20A / 125V	1	157375
EB11	Plug, Twist-lock, 125V / 20A	1	154556
EB12	Transformer, Current 120 V AC	1	154490
EB13	Screw. 6-32 x ½ Pan Head	2	153459
EB14	Wire Harness (not shown)	1	154715
FB16	Cover. Togale Switch	1	154301
F1	Assembly. Column		n/a
F1	Core Drill Column (w/Gear Back)	1	158425-2
F3	Screw 10-32 X ½ Socket Hd. Cap	4	157525
F4	Washer #10. Split Lock	4	153684
E5	Screw M22 x 1 25 Jack	1	157445
F6	Screw, 1/2-13 X 3 1/2 Hex Head Can	2	154574
F7	Washer 1/2 Split Lock	2	153524
F8	Washer, 1/2 SAF Flat	2	150924
G	Assembly, M3 Vacuum Pump 120V	1	158530
G1	Pump Vacuum 120V	1	15//75
G2	Screw 10-32 X 3/ Slotted Truss Head	2	157526
G3	Hose 3/8 LD Air	10"	15/656
GA	Fitting 1/4 ENPT	1	15/617
G5	Gauge Vacuum	1	15//77
G6	Ninnle 1/ NPT X Close Galvanized	1	152508
G7	Tee 1/1 NPT Galvanized	2	15//97
	Valvo 14 NPT X Poteook	1	154497
GQ	Filtor Wator	1	154400
G10	Bracket Pump Hold Down	1	157446
G11	Screw 1/2-20 x 1/2 Phil Flat Head	2	157527
G12	Ferrel Crimp	2	154660
G13	Fitting 90° ¼ Street	1	154615
GB	Assembly Vacuum Pump w/ Handle 120V	1	154741
GB1	Pump Vacuum 120v	1	154475
GB2	Filter Water	1	154476
GB3	Gauge Vacuum	1	154477
GB4	Nipple 1/4 MNPT X Close	3	152598
GB5	Fitting 1/4 ENPT X 1/4 ENPT X 1/4 ENPT Tee	2	154497
GB6	Valve 1/4" Pettcock	1	154488
GB7	Hose 3/8 I.D. Air	6'	154656
GB8	Coupler Body 1/4 ENPT	1	154617
GB9	Fitting 1/4 MNPT X 3/8 BABB	2	154659
GB10	Ferrell Crimp	2	154660
GB11	Base Vacuum Pump	1	154495
GB12	Handgrin 3/4 X 4 9/16 Black	1	139949
GB13	Screw 10-32 X 1/2 Phillins Pan. Head Can	4	151052
GB14	Foot Bubber	4	154496
GB15	Screw 1/4-20 X 3/4 Flat Head Phillins Can	 Д	154657
GB16	Nut 1/4-20 Hex	4	151893
Н	Assembly, Handle, Slip	1	n/a
H1	Hub. Slip Handle	1	157321
H2	Spoke. Slip Handle	1	157322
H3	Knob. Ball ½-20 Female	2	154486
H4	Screw, 1/4-20 X ¾ Thumb	1	157432
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# **CORE DRILL COMBO PARTS LIST(cont...)**

H5	Screw, 1/4-20 X 1/4 Socket Head Set	2	157528
K	Assembly, Accessory Pack (not shown)	1	n/a
K1	Carton, Accessory Pack	1	157323
K2	Owner's Manual, DDM-CORE DRILL	1	161117-DD
K3	Card, Warranty	1	155859
LA	Assembly, Motor, Milwaukee 4094	1	n/a
LA1	Motor, Milwaukee 4094, Shear Pin, 20A/120V	1	154633
LB	Assembly, Motor, Milwaukee 4096	1	n/a
LB1	Motor, Milwaukee 4096, Slip Clutch, 20A/120V	1	155540
LD	Assembly, Motor, Milwaukee 4004	1	n/a
LD1	Motor, Milwaukee 4004, Slip Clutch, 20A/120V	1	159263
LE	Assembly, Motor, Milwaukee 4097-20	1	n/a
LE1	Motor, Milwaukee 4097-20, Slip Clutch, 15A/120V	1	159264
LF	Assembly, Motor, Milwaukee 4090	1	n/a
LF1	Motor, Milwaukee 4090, Shear Pin, 15A/120V	1	155976
LJ	Assembly, Motor, Eibenstock EBM 300/3 P	1	n/a
LJ1	Motor, Eibenstock EBM 300/3/P, Slip Clutch, 20A/120V	1	158754
М	Assembly, ¾" Motor Mount Plate, Hybrid, Milwaukee	1	n/a
M1	Motor Mount Plate, Hybrid	1	158412
M2	Screw, 3/8-16 x 1 ¼, Socket Hd. Cap	4	157529
M3	Key, 3/8 x 3/8 x 5	1	157520
M4	Screw, ¼-20 x 1.0, Socket Hd. Cap	4	151049
MA	Assembly, ¾" Motor Mount Plate, Hybrid, CB748	1	n/a
MA1	Motor Mount Plate, Hybrid	1	158412
MA2	Screw, 3/8-16 x 1 ¼, Socket Hd. Cap	4	157529
MA3	Key, 3/8 x 3/8 x 5	1	157520
MA4	Screw, ¼-28 x 1 ½ , Socket Hd. Cap	4	154684
MB	Assembly, ¾" Motor Mount Plate, Hybrid, Ebinstock	1	n/a
MB1	Motor Mount Plate, Hybrid	1	158412
MB2	Screw, 3/8-16 x 1 ¼, Socket Hd. Cap	4	157529
MB3	Key, 3/8 x 3/8 x 5	1	157520
MB4	Screw, M8 x 1.25 x 25mm, Socket Hd. Cap	4	157530
	Optional Accessories:		
N	Assembly, 2", Spacer Block Milwaukee (optional)	1	155614
N	Spacer Block, 2" Milwaukee	1	154721
N2	Screw, 1/4-20 x 3, Socket Hd. Cap	4	155615
N3	Key, 3/8 x 3/8 x 5	1	157520

Dixie Diamond Manufacturing, Inc. 205 Buxton Court • Lilburn, Georgia 30047 Phone:800.654.7224 or 770.921.2464 (8:00 a.m. to 7:00 p.m. Eastern Time) Fax: 770-921-4370

# SOLD AND SERVICED BY:

# WARRANTY

Dixie Diamond warrants all products manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to the customer.

The responsibility of Dixie Diamond under this warranty is limited to replacement or repair of defective parts at Dixie Diamond's factory, or at a point designated by it, of such part as shall appear to us upon inspection at such point, to have been defective in material or workmanship, with expense for transportation borne by the customer.

In no event shall Dixie be liable for consequential or incidental damages arising out of of the failure of any product to operate properly.

Integral units such as gasoline engines, electric motors, batteries, tires, transmissions, etc. are excluded from this warranty and are subject to the prime manufacturer's warranty.

This warranty is in lieu of all other warranties. expressed or implied, and all such other warranties are herby disclaimed.

Important: Before placing equipment in operation, record the following information.

MODEL:	SER	
<b>PURCHASE FRO</b>	OM:	
ADDRESS:		
CITY:	_ STATE	ZIP
TELEPHONE NO	)	

Before using this equipment, make sure that person using it reads and understands the instructions in this owners manual.