

CHICAGO
Electric Power Tools
4" TILE SAW
WITH PVC TRAY

Model 03733

**ASSEMBLY AND
OPERATING INSTRUCTIONS**



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Visit our Web site at: <http://www.harborfreight.com>

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For technical questions, please call 1-800-444-3353.

PRODUCT SPECIFICATIONS

Item	Description
Electrical Requirements	120 Volt / 60 Hz 456 Watts / 4,480 RPM
Maximum Cutting Size Capacity	12" L x 12" W x 1-1/16" Thick
Blade Type	Diamond 4" Continuous
Arbor Size	5/8"
Water Coolant Basin Capacity	5 Cups, or 40 Ounces
Saw Bevel Capacity	22.5 Degree and 45 Degree
Scale Range	0 to 7-1/2" in 1/8" Increments (0 to 190mm in 1mm Increments)
Splash Guard	Yes
Accessories	Bench Stops (2) Blade Guard (1)
Weight	9.70 Pounds

SAVE THIS MANUAL

You will need this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures, parts list and assembly diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep this manual and invoice in a safe and dry place for future reference.

GENERAL SAFETY WARNINGS AND PRECAUTIONS

1. **KEEP WORK AREA CLEAN AND DRY.** Cluttered, damp, or wet work areas invite injuries.
2. **KEEP CHILDREN AWAY FROM WORK AREA.** Do not allow children to handle this product.
3. **STORE IDLE EQUIPMENT.** When not in use, tools and equipment should be stored in a dry location to inhibit rust. Always lock up tools and equipment, and keep out of reach of children.

4. **DO NOT USE THIS PRODUCT IF UNDER THE INFLUENCE OF ALCOHOL OR DRUGS.** Read warning labels on prescriptions to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not attempt to use this product.
5. **USE EYE & EAR PROTECTION.** Wear an ANSI approved, full face, safety shield and ear protection when using this product.
6. **DRESS SAFELY.** Do not wear loose clothing or jewelry, as they can become caught in moving parts. Wear a protective hair covering to prevent long hair from becoming caught in moving parts. If wearing a long-sleeve shirt, roll sleeves up above elbows.
7. **DO NOT OVERREACH.** Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.
8. **INDUSTRIAL APPLICATIONS MUST FOLLOW OSHA REQUIREMENTS.**
9. **STAY ALERT.** Watch what you are doing at all times. Use common sense. Do not use this product when you are tired or distracted from the job at hand.
10. **CHECK FOR DAMAGED PARTS.** Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace or repair damaged or worn parts immediately.
11. **REPLACEMENT PARTS AND ACCESSORIES:** When servicing, use only identical replacement parts. Only use accessories intended for use with this product. Approved accessories are available from Harbor Freight Tools.
12. **MAINTAIN THIS PRODUCT WITH CARE.** Keep this product clean and dry for better and safer performance.
13. **MAINTENANCE:** For your safety, service and maintenance should be performed regularly by a qualified technician.
14. **USE THE RIGHT TOOL FOR THE JOB.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this tool, and do not use this tool for a purpose for which it was not intended.
15. **WARNING:** The warnings, precautions, and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. The operator

must understand that common sense and caution are factors, which cannot be built into this product, but must be supplied by the operator.

SPECIFIC PRODUCT WARNINGS AND PRECAUTIONS

1. **MAINTAIN A SAFE WORKING ENVIRONMENT.** Keep the work area well lit. Make sure there is adequate surrounding workspace. Always keep the work area free of obstructions, grease, oil, trash, and other debris. Do not use the Tile Saw in excessively damp or wet areas or in areas near flammable chemicals, dusts, and vapors.
2. **PROPER TILE SAW LOCATION:** Make sure the Tile Saw is located on a flat, level, sturdy, surface capable of supporting the weight of the Tile Saw, the workpieces, and all additional tools and accessories.
3. **GROUND THIS PRODUCT.** The electrical Power Cord (part #11) for this product is equipped with a grounded, 3-Prong Plug. Never remove the grounding prong or modify the Plug in any way. Do not use adapter plugs with this product. To comply with the National Electric Code, and to provide additional protection from the risk of electrical shock, this product should only be connected to a 120 Volt, 3-hole electrical outlet that is protected by a Ground Fault Circuit Interrupter (GFCI).
4. **DO NOT ABUSE THE POWER CORD.** Do not use the Power Cord (part #11) to pull its Plug from an electrical outlet. Keep the Power Cord away from heat, oil, sharp edges, and moving parts. Route the Power Cord safely. Do not route the Power Cord where it can be walked on or tripped over. Replace a damaged Power Cord immediately.
5. **IF AN EXTENSION CORD (not provided) IS USED, MAKE SURE TO USE ONLY UL APPROVED CORDS HAVING THE CORRECT GAUGE AND LENGTH. (See Figure A.)**

REQUIRED MINIMUM EXTENSION CORD GAUGE – 120 VOLT					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	0 - 25 Feet	25 - 50 Feet	50 -100 Feet	100 – 150 Feet	150– 200 Feet
0 - 5	16	16	16	12	12
5.1 - 8	16	16	14	10	-
8.1 - 12	14	14	12	-	-
12.1 - 15	12	12	10	-	-
15.1 - 20	10	10	10	-	-

FIGURE A

6. **KEEP ALL SAFETY GUARDS IN PLACE, IN PROPER ADJUSTMENT, AND IN PROPER ALIGNMENT.**
7. **REDUCE THE RISK OF ACCIDENTAL STARTING.** Make sure the Power Switch (part #4) is in the “OFF” position before plugging the Power Cord (part #11) into a grounded, 3-hole, 120 Volt, electrical outlet.
8. **THIS TILE SAW IS DESIGNED FOR USE ONLY WITH A 4” WET DIAMOND TILE SAW BLADE (part #36) REQUIRING A 5/8” DIAMETER ARBOR.**
9. **USE THE TILE SAW ONLY FOR CUTTING CERAMIC TILE, QUARRY TILE, MARBLE, TERRA COTTA, AND SLATE WITH A MAXIMUM THICKNESS OF 1-1/16”.**
10. **DO NOT USE THE TILE SAW FOR CUTTING METALS, OR FOR CUTTING CURVES.** This may cause the Tile Saw Blade (part #36) to break, and reduce its service life.
11. **MAKE SURE THE TILE SAW BLADE (part #36) REMAINS WET AT ALL TIMES WHILE CUTTING.**
12. **TO AVOID ELECTRICAL SHOCK AND/OR DAMAGE TO THE TILE SAW, DO NOT FILL THE BODY’S (part #19) WATER BATH ABOVE THE WATER FILL LINE. (See Figure D.)**
13. **AVOID SPLASHING WATER ON THE MOTOR, SWITCHES, OR ANY ELECTRICAL COMPONENT.** Make sure to stand on a dry, insulated surface, such as a rubber mat, while using this Tile Saw.
14. **FOR YOUR SAFETY:** In extreme working conditions, sensors in the Tile Saw will automatically switch off the Motor to prevent overheating. The Tile Saw will automatically reset after it has sufficiently cooled.
15. **CAUTION: Never pass hands directly in front of or over the Tile Saw Blade (part #36) when cutting a workpiece. Always keep hands and fingers a safe distance away from the spinning Tile Saw Blade.**
16. **PRIOR TO STARTING THE TILE SAW, MAKE SURE ALL ADJUSTING KEYS AND WRENCHES ARE REMOVED FROM THE TOOL.**
17. **ALLOW THE TILE SAW BLADE (part #36) TO SPIN UP TO FULL SPEED BEFORE FEEDING A WORKPIECE INTO THE BLADE.** When turning off the Tile Saw, allow the Tile Saw Blade to spin down and stop on its own. Do not press against the Tile Saw Blade to stop it.

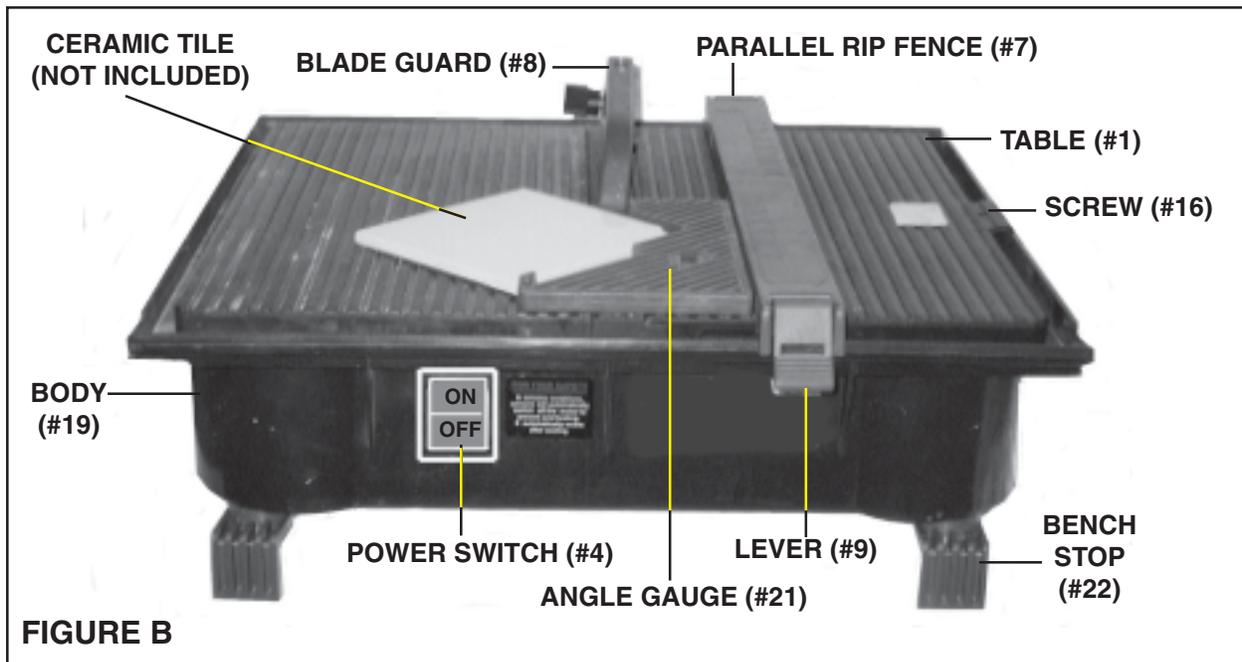
18. **FEED THE WORKPIECE GRADUALLY INTO THE TILE SAW BLADE (part #36) WHEN CUTTING.** Do not force the machine to remove material faster than it was designed to cut.
19. **WHEN CUTTING A LARGE WORKPIECE, MAKE SURE ITS ENTIRE LENGTH IS PROPERLY SUPPORTED.** If necessary, use a roller stand (not provided) with larger workpieces.
20. **NEVER ATTEMPT TO REMOVE MATERIAL STUCK IN THE MOVING PARTS OF THE TILE SAW WHILE IT IS PLUGGED IN AND RUNNING.**
21. **TURN OFF THE TILE SAW IF THE WORKPIECE IS TO BE BACKED OUT OF AN UNCOMPLETED CUT.**
22. **NEVER LEAVE THE TILE SAW UNATTENDED WHEN IT IS RUNNING.** Turn off the machine, and wait until it has completely stopped before leaving.
23. **ALWAYS TURN OFF THE TILE SAW, AND UNPLUG THE TILE SAW FROM ITS ELECTRICAL SUPPLY SOURCE BEFORE PERFORMING ANY INSPECTION, MAINTENANCE, OR CLEANING PROCEDURES.**
24. **NEVER STAND ON THE TILE SAW.** Serious injury could result if the Tile Saw is tipped or if the rotating Tile Saw Blade (part #36) is accidentally contacted.
25. **WARNING:** 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 or other masonry products, 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. *(California Health & Safety Code 25249.5, et seq.)*
26. **WARNING:** People with pacemakers should consult their physician(s) before using this product. Operation of electrical equipment in close proximity to a heart pacemaker could cause interference or failure of the pacemaker.

UNPACKING

When unpacking, check to make sure all the parts shown on the **Parts List on page 12** are included. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

PRODUCT DESCRIPTION

1. The Tile Saw features a built-in water supply that keeps its Tile Saw Blade cool, reduces dust and debris, and is easy to clean. Its efficient design returns water directly to the reservoir and is accurate enough for most ceramic tile, quarry tile, marble, terra cotta, and slate jobs. (See Figure B.)



ASSEMBLY AND OPERATING INSTRUCTIONS

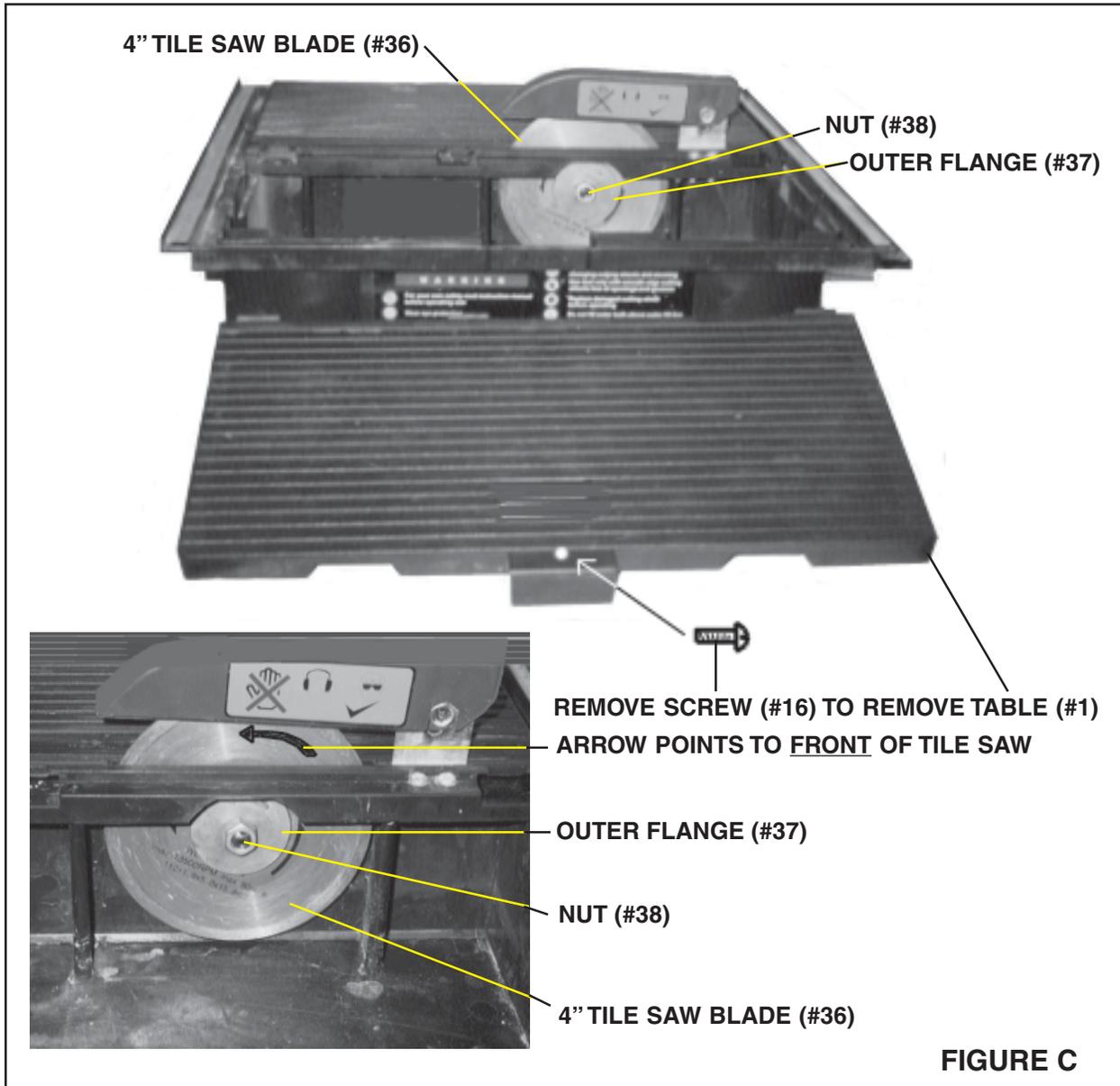
NOTE: For additional references to the parts listed below, refer to the **Assembly Diagram on page 12.**

Warning: Always wear ANSI approved, full face, safety shield and ear protection when using this product.

To Change A 4" Diamond Tile Saw Blade:

1. **CAUTION:** Make sure the Power Switch (part #4) is in its "OFF" position, and the Tile Saw is disconnected from its electrical outlet before performing this procedure. (See Figure B.)
2. Remove the Screw (part #16). Then, remove the Table (part #1) from the Tile Saw unit. (See Figure B above, and Figure C next page.)
3. Remove the Nut (part #38). Then, remove the Outer Flange (part #37). (See Figure C.)

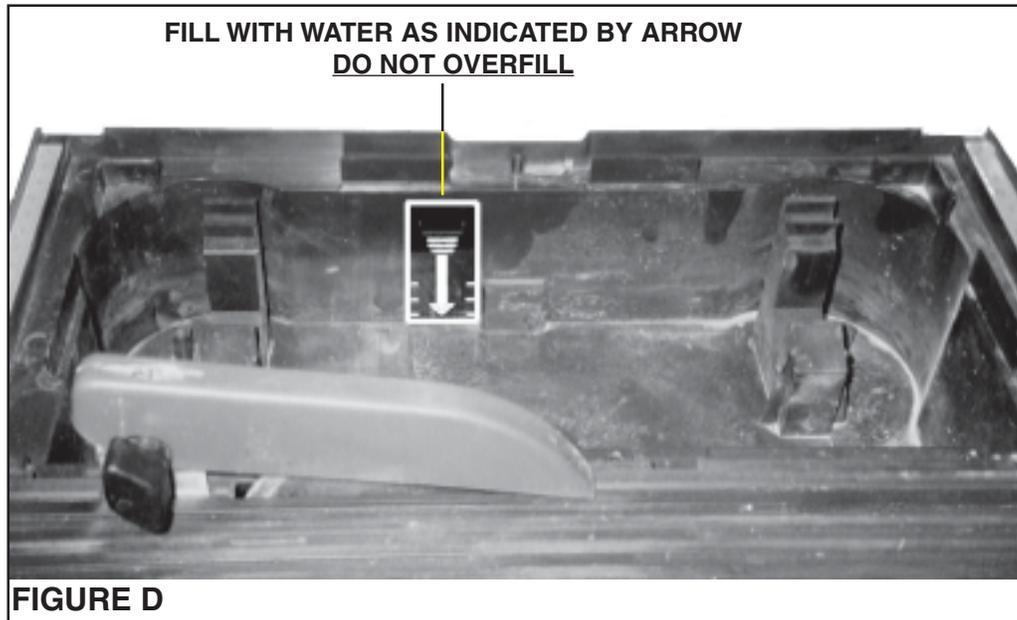
4. Remove the old Tile Saw Blade (part #36), and replace it with a new Tile Saw Blade. **NOTE: Make sure to install the new Tile Saw Blade with the arrow pointing toward the front of the machine. (See Figure C.)**
5. Replace the Outer Flange (part #37), and retighten the Nut (part #38) to secure the Tile Saw Blade in place. **(See Figure C.)**



6. Reinstall the Table (part #1), and secure it in place with the Screw (part #16). **(See Figure C.)**

To Make Straight Cuts:

1. Remove the Screw (part #16). Then, remove the Table (part #1) from the Tile Saw unit. **(See Figure C.)**
2. Fill the Body (part #19) with water. **CAUTION: Make sure the water level is high enough to cover the lower edge of the Tile Saw Blade (part #36), but *not* above the maximum water level as indicated by the arrow.** (See Figure D.)

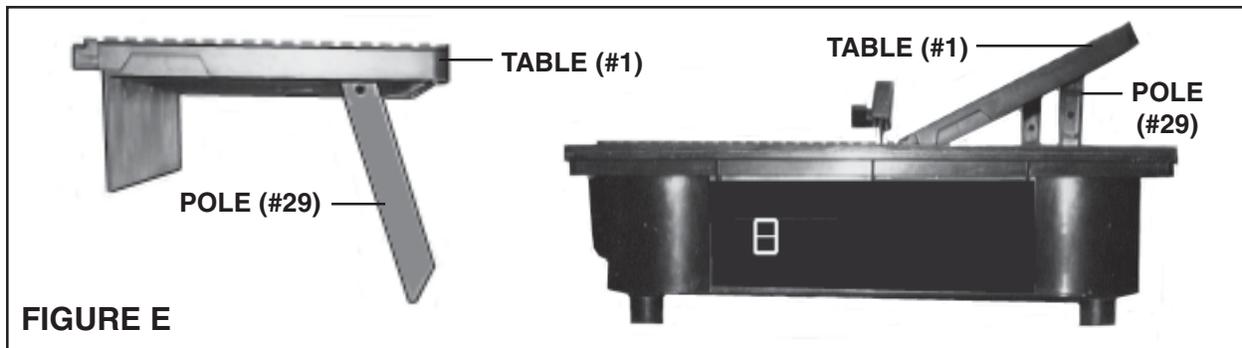


3. Reinstall the Table (part #1), and secure it in place with the Screw (part #16). **(See Figure C.)**
4. Adjust the Parallel Rip Fence (part #7) to the width of cut desired. To do so, lift up on each Lever (part #9) located at each end of the Parallel Rip Fence. Slide the Parallel Rip Fence to the right or left until the desired width of cut is obtained. Then, lock the Parallel Rip Fence in place by pressing down on each Lever. **(See Figure B.)**
5. Plug the Power Cord (part #11) into a grounded, 120 Volt electrical outlet.
6. Turn the Power Switch (part #4) to its "ON" position, and allow the Tile Saw Blade (part #36) to spin up to full speed. **NOTE: Make sure the Tile Saw Blade is picking up water from the Body (part #19) of the unit. If not, turn the Power Switch to its "OFF" position, and unplug the Power Cord from its electrical outlet. Then, check the water level. (See Figures B, C, and D.)**

- Once the proper water level is acquired, plug the Power Cord (part #11) into its electrical outlet and turn the Power Switch (part #4) to its "ON" position.
- Place the workpiece to be cut against the Parallel Rip Fence (part #7), and *slowly* feed the workpiece into the spinning Tile Saw Blade (part #36). **(See Figure B.)**
- When finished making the cut, turn the Power Switch (part #4) to its "OFF" position and unplug the Power Cord (part #11) from its electrical outlet. **(See Figure B.)**

To Make Beveled Cuts:

- Remove the Screw (part #16). Then, remove the Table (part #1) from the Tile Saw unit. **(See Figure C.)**
- Fill the Body (part #19) with water. **CAUTION: Make sure the water level is high enough to cover the lower edge of the Tile Saw Blade (part #36), but *not* above the maximum water level as indicated by the arrow.** **(See Figure D.)**
- NOTE:** The Table (part #1) may be adjusted in order to make a **22.5 Degree** beveled cut or a **45 Degree** beveled cut. To do so, adjust each Pole (part #29) on the underneath of each end of the Table to either the 22.5 Degree or 45 Degree setting. Then reinstall the Table (part #1). **(See Figures C, D, and E.)**



- Place the workpiece to be cut against the Parallel Rip Fence (part #7), and *slowly* feed the workpiece into the spinning Tile Saw Blade (part #36). **(See Figure B.)**
- When finished making the beveled cut, turn the Power Switch (part #4) to its "OFF" position and unplug the Power Cord (part #11) from its electrical outlet. **(See Figure B.)**

To Make Mitered Cuts:

- To make a mitered cut, place the Angle Gauge (part #21) against the Parallel Rip Fence (part #7). Then position the workpiece against the Angle Gauge, and

slowly feed the workpiece into the spinning Tile Saw Blade (part #36).
(See Figure B.)

2. When finished making the angled cut, turn the Power Switch (part #4) to its “OFF” position and unplug the Power Cord (part #11) from its electrical outlet.
(See Figure B.)

INSPECTION, MAINTENANCE, AND CLEANING

1. **CAUTION:** Always turn the Power Switch (part #4) to its “OFF” position, unplug the Power Cord (part #11) from its electrical outlet, and wait until the Tile Saw Blade (part #36) has completely stopped rotating before performing any inspection, maintenance, or cleaning.
2. **BEFORE EACH USE,** inspect the general condition of the Tile Saw. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts (i.e., Tile Saw Blade), damaged electrical wiring, and any other condition that may affect its safe operation. If abnormal noise or vibration occurs, have the problem corrected before further use. **Do not use damaged equipment.**
3. **TO CLEAN:** Clean with a soft brush, cloth, or vacuum to remove dust and debris from the Tile Saw. If necessary, use a mild detergent or mild solvent. **Do not use solvents to clean the plastic parts of the Tile Saw, as these may damage and crack plastic parts.**

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS LIST AND ASSEMBLY DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER OR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT, OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS, AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

