

TX-3 TILE SAW OPERATION & PARTS MANUAL



Revision 104	05.2011
Manual Part No. 165808	

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

We at MK Diamond want to congratulate you on selecting the TX-3. We are certain that you will be pleased with your purchase. MK Diamond takes pride in producing the finest products in the industry.

Operated correctly, your TX-3 should provide you with years of quality service. In order to help you, we have included this manual. This owners manual contains information necessary to operate and maintain your TX-3 safely and correctly. Please take a few minutes to familiarize yourself with the TX-3 by reading and reviewing this manual.

If you should have questions concerning your TX-3, please feel free to call our friendly customer service department at: 800 421-5830

Regards,

MK Diamond


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Safety precautions should be followed at all times when operating this equipment. Failure to read and understand the Safety Precaution and Operating Instructions could result in injury to yourself and others.

This Operation and Parts Manual has been developed to provide complete instructions for the safe and efficient operation of the TX-3 Tile Saw.

Before using this machine, ensure that the person operating the machine has read and understands all instructions in this manual.

SAFETY MESSAGE / ALERT SYMBOLS

A safety message alerts you to potential hazards that could hurt you or others. Each safety message is preceded by a safety alert symbol () and one of three words: **DANGER**, **WARNING**, or **CAUTION**.

DANGER

You **WILL** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.

WARNING

You **CAN** be **KILLED** or **SERIOUSLY INJURED** if you do not follow directions.

CAUTION

You **CAN** be **INJURED** if you do not follow directions. It may also be used to alert against unsafe practices.

Each message tells you what the hazard is, what can happen, and what you can do to avoid or reduce injury. Other important messages are preceded by the word **NOTICE**.

NOTICE

You can cause **PROPERTY DAMAGE** to your machine if you don't follow directions.

The safety labels should be periodically inspected and cleaned by the user to maintain good legibility at a safe viewing distance. If the label is worn, damaged or illegible, it should be replaced, contact MK Diamond or your dealer for replacement.

SAFETY WARNINGS

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.

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.

Potential hazards associated with the TX-3 Tile Saw operation will be referenced with Hazard Symbols which appear throughout this manual, and will be referenced in conjunction with Safety Message/Alert Symbols.

HAZARD SYMBOLS



ALWAYS read this Owner's Manual before operating the machine.



ALWAYS avoid inhalation of and skin contact with silica dust and/or mist.



ALWAYS place the power ON/OFF switch in the **OFF** position when the TX-3 is not in use.



ALWAYS wear approved eye protection.



ALWAYS wear approved respiratory protection.



NEVER operate equipment with covers, or guards removed. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury.



ALWAYS use caution around gears. Keep fingers, hands, hair and clothing away from all moving parts to prevent injury.



NEVER touch the power cord with wet hands or while standing in water when it is connected to a power source.



NEVER operate the machine in an explosive atmosphere or near combustible materials.

RULES FOR SAFE OPERATION



DANGER

Failure to follow instructions in this manual may lead to serious injury or even death! This equipment is to be operated by trained and qualified personnel only! This equipment is for industrial use only.

The following safety guidelines should always be used when operating the TX-3 Tile Saw.

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 without proper protective clothing, shatterproof glasses, steeltoed boots and other protective devices required by the job.
- **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** check the machine for loose bolts before starting.



- **ALWAYS** wear proper respiratory (mask) hearing and eye protection equipment when operating this machine.

- **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** must be observed while servicing the machine. Rotating parts can cause injury if contacted.
- Ensure that any electrical extension cord is protected against damage. Always ensure that the electrical extension cord is not trapped underneath the machine. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. An undersized cord will cause a drop in line voltage that will result in a loss of power and overheating. The Table shown on page 9 shows the correct AWG size to use depending on cord length and nameplate ampere rating. If in doubt, use the next heaviest gage. The smaller the gage number, the heavier the cord.
- **DO NOT** allow extension cord to come into contact with water or fluids. **DO NOT** spray water onto electric motor.



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

- Before starting the machine, check that all guards are in position and correctly fitted.
- Keep area around the machine clear of obstructions which could cause persons to fall onto moving parts.
- **ALWAYS** ensure that the machine is on level ground before using.
- **DO NOT** overreach. Keep proper footing and balance at all times.

- **NEVER** stand on the tool. Serious injury could occur if a power tool is tipped, or if a cutting tool is unintentionally contacted.
- Become familiar with the controls of the machine before operating. Know how to stop the machine quickly in case of emergency.
- **ALWAYS** secure work. Clamps or a vise should be used to hold work whenever practical. Keeping your hands free to operate a power tool is safer.
- **ALWAYS** disconnect AC power plug from power source before moving, cleaning or servicing the machine.
- **NEVER** leave a tool running unattended. 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.
- Make sure the OFF/ON power switch on the electric motor is always in the **OFF** position before inserting the machine's power plug into an AC receptacle.
- Operate electric motor only at the specified voltage indicated on the nameplate.
- **NEVER** disconnect any "emergency or safety devices". These devices are intended for operator safety. Disconnection of these devices can cause severe injury, bodily harm or even death! Disconnection of any of these devices will void all warranties.
- Unauthorized equipment modifications will void all warranties. Manufacturer does not assume responsibility for any accident due to equipment modifications.
- **NEVER** use accessories or attachments, which are not recommended by MK Diamond for this equipment. Damage to the equipment and/or injury to user may result.
- Replace damaged cutting blade before operating.
- **NEVER** try to stop a moving blade with your hand.

**WARNING**

NEVER use this machine with any cutter designed for wood working.

MAINTENANCE SAFETY

- **NEVER** lubricate components or attempt service on a running machine.
- Keep the machinery in proper running condition.
- Before using a power tool, check for damaged parts. A guard or any other part that is damaged should be carefully checked to determine if it would operate properly and perform its intended function. Always check moving parts for proper alignment or binding. Check for broken parts and 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.

SAW SAFETY

**WARNING**

- Wear eye protection.
- Disconnect saw before servicing, when changing cutting blades and cleaning.
- Use tool only with smooth edge cutting blades free of openings and grooves.
- Replace damaged cutting blade before operation.
- Remove adjusting keys and wrenches.

ELECTRIC MOTOR SAFETY

For maintenance care and operation of the electric motor, refer to your electric motor instruction booklet furnished with the electric motor.

Protect the electric motor from dust as much as possible and keep ventilating openings clean.



CAUTION

- **DO NOT** spray water on the electric motor. Do not touch the plug with wet hands. To reduce the risk of electrocution, keep all connections dry and off the ground.
- **DO NOT** operate electric motor in an explosive environment.



WARNING

Use only extension 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. Always disconnect the extension cord from the receptacle before disconnecting the product from the extension cord.

Electric Motor Connection

ALWAYS make certain that the power source required for the electric motor is correct and always use the correct NEMA configuration plug. Motors can burn out when the line voltage falls 10% below the voltage rating of the motor. Failure to use proper voltage will cause the motor to overheat. Make certain that the correct size grounded (3-wires) extension cord is used. See the table below.

To choose the proper extension cord:

- Locate the length of extension cord needed in table to the right.
- Once the proper length is found, move down the column to obtain the correct AWG size required for that length of extension cord.

NOTICE

Most Motor Problems are caused by improper voltage and extension cords. Cord should be one-piece and short as possible. Cord selection should match the following table.

1-2 H.P.			
115v	230v		
25'	100'	Max. Cord Length	No. 12 Wire
50'	150'	Max. Cord Length	No. 10 Wire
75'	250'	Max. Cord Length	No. 8 Wire

Fig. 1 Extension Cord Table



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.

ELECTRICAL REQUIREMENTS AND GROUNDING INSTRUCTIONS

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



WARNING

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.

- 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 of Figure I. The tool has a grounding plug that looks like the plug illustrated in Sketch A of Figure I. 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.

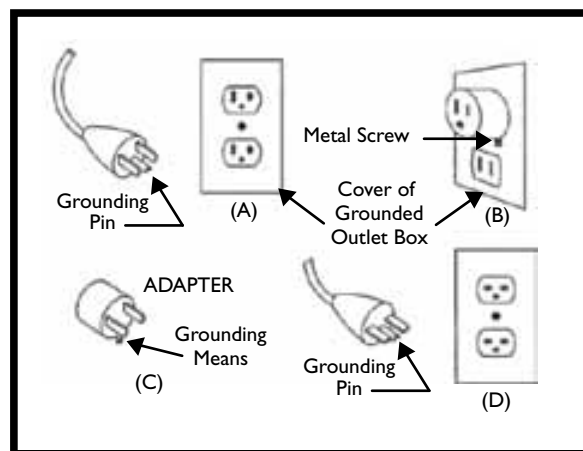


Fig. I Circuit and Adapter Information

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.

WARNING

The pump requires a GFCI. To reduce risk of electric shock when operating the machine with the pump plugged into the 3-pole receptacle on the motor, connect the saw to a GFCI outlet. See the pump manual and informational tags enclosed separately for all pump information.

WARNING

To avoid the possibility of the appliance plug or receptacle getting wet, position the machine to one side of a wall mounted receptacle. This will prevent water from dripping onto the receptacle or plug. A “drip loop,” shown in Figure 2, should be arranged by the user to properly position the power cord relative to the power source.

The “drip loop” is that part of the cord below the level of the receptacle, or the connector, if an extension cord is used. This method of positioning the cord prevents the travel of water along the power cord and coming in contact with the receptacle.

If the plug or receptacle gets wet, DO NOT unplug the cord. Disconnect the fuse or circuit breaker that supplies power to the tool. Then unplug and examine for presence of water in the receptacle.

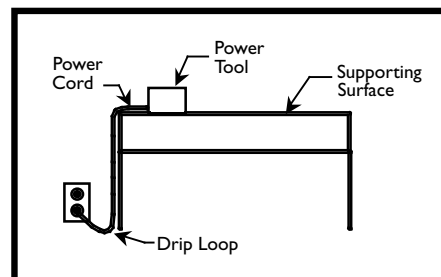


Fig. 2 Drip Loop Information

OPERATION & SAFETY DECALS

Safety labels are located on the back of the motor assembly (figure 3). The labels contain important safety information. Please read the information contained on each safety label. These labels are considered a permanent part of your saw. Should any of these decals become unreadable, replacements can be obtained by calling (800) 262-1575.



Fig. 3 TX-3 Safety Decal Location




<p style="text-align: center; font-size: 24px; font-weight: bold;">⚠ WARNING</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">  <ul style="list-style-type: none"> For Your Own Safety Read Instruction Manual Before Operating Saw. Wear Eye Protection. Disconnect Saw Before Servicing, when Changing Cutting Wheels and Cleaning. Use Tool Only with Smooth Edge Cutting Wheels Free of Openings and Grooves. Replace Damaged Cutting Wheel Before Operating. Do Not Fill Water Bath Above Water Fill Line. See Manual for Pump Replacement.  <p style="font-size: 8px;">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.</p> </div> <div style="width: 45%;"> <p style="text-align: center; font-size: 24px; font-weight: bold;">⚠ NOTICE</p> <p style="font-size: 8px;">Most Motor Problems are caused by improper voltage and extension cords. Cord should be one-piece and short as possible. Cord selection should match the following table.</p> <table border="1" style="font-size: 8px; width: 100%; border-collapse: collapse;"> <tr> <td colspan="4" style="text-align: center;">1-2 H.P.</td> </tr> <tr> <td colspan="4" style="text-align: center;">115v 230v</td> </tr> <tr> <td style="text-align: center;">25'</td> <td style="text-align: center;">100'</td> <td style="text-align: center;">Max. Cord Length</td> <td style="text-align: center;">No. 12 Wire</td> </tr> <tr> <td style="text-align: center;">50'</td> <td style="text-align: center;">150'</td> <td style="text-align: center;">Max. Cord Length</td> <td style="text-align: center;">No. 10 Wire</td> </tr> <tr> <td style="text-align: center;">75'</td> <td style="text-align: center;">250'</td> <td style="text-align: center;">Max. Cord Length</td> <td style="text-align: center;">No. 8 Wire</td> </tr> </table> <p style="text-align: center; font-weight: bold; font-size: 12px;">FOR INFORMATION ON SERVICE OR WARRANTY</p> <p style="text-align: center; font-size: 10px;">PLEASE CALL 1-800-474-5594</p> </div> </div>	1-2 H.P.				115v 230v				25'	100'	Max. Cord Length	No. 12 Wire	50'	150'	Max. Cord Length	No. 10 Wire	75'	250'	Max. Cord Length	No. 8 Wire
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75'	250'	Max. Cord Length	No. 8 Wire																	

Fig. 4 TX-3 Safety Decal Sheet, Part #166787

Misting Version Only, Part #164800

⚠ NOTICE

Do not run misting pump dry to avoid failure of pump



⚠ WARNING

DO NOT operate this equipment before reading the owners' manual!

Flood Version Only, Part #166634

⚠ CAUTION

- Receptacle is for water pump only.
- This saw is to be used with a Ground Fault Circuit Interrupter.

PRODUCT SPECIFICATIONS

The TX-3 is a versatile tile saw. Operated and used according to this manual, the TX-3 will provide years of dependable service.

GENERAL DESCRIPTION

The TX-3 is engineered as a 10" Tile Saw with a misting or flood system.

PART #	DESCRIPTION
I64800	With Misting System
I66634	With Flood System

MOTOR AND WEIGHT SPECIFICATIONS

Motor and Weight specifications for the TX-3 are listed in the Table below.

VOLTAGE	120V
AMPERAGE	15
FREQUENCY	50-60 Hz
RPM	3,500 RPM
WEIGHT	85 lbs. (39 kg)

BLADE CAPACITY

The TX-3 uses a 10-inch diameter segmented MK Diamond blade with a .06-inch cutting width and 1-inch arbor.

TILE TYPES

The TX-3 can cut a variety of tile types including stone, masonry, and lapidary products.



NOTE

The TX-3 is not designed to cut plastic or metals.

SPRING ASSISTED CUTTING HEAD

The TX-3 is designed with a spring assisted Cutting Head to allow for plunge cutting. The Cutting Head can be locked in any down position when using with smaller blade or profile wheel.

REMOVABLE MOTOR AIR FILTER

The TX-3 is designed with an easy clean motor air filter to extend the life of the motor.

REPLACEABLE MOTOR BRUSHES

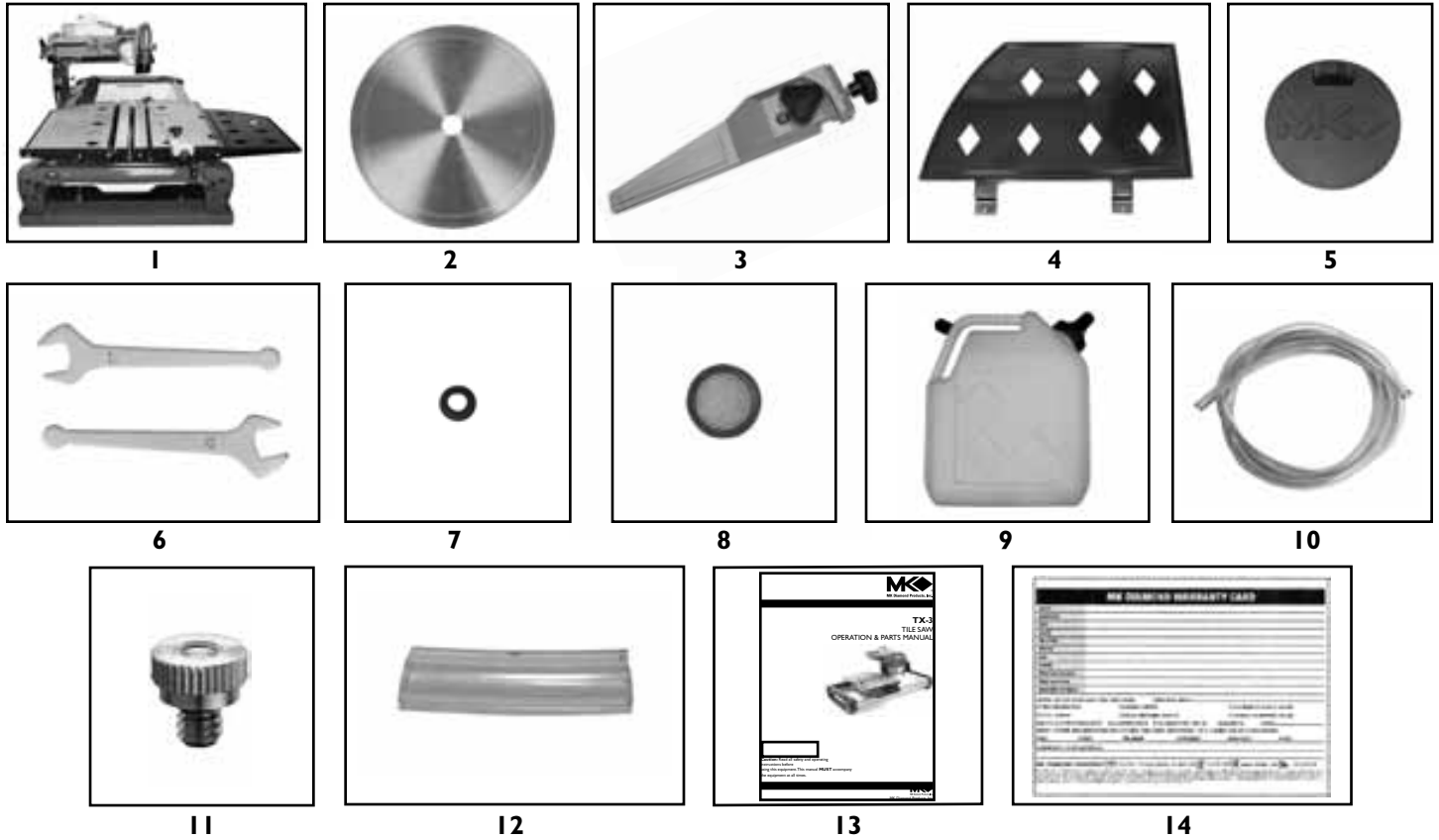
The TX-3 is designed with replaceable motor brushes to extend operating life.

UNPACKING

Your TX-3 has been shipped from the factory thoroughly inspected. Only minimal assembly is required.

CONTENTS

If not already done, remove the TX-3 from the carton and place it on a flat surface. Check contents with list below:



ITEM NO.	DESCRIPTION	QUANTITY
1	TX-3	1
2	10" WET CUTTING TILE BLADE	1
3	ADJUSTABLE CUTTING GUIDE	1
4	SIDE CUTTING TABLE	1
5	DRAIN PLUG	1
6	WRENCHES	2
7	GROMMET	1
8	FILTER	1
9	WATER TANK	1
10	PLASTIC TUBING	1
11	NOZZLE, 1.0mm	2
12	ADAPTER	1
13	OPERATION & PARTS MANUAL	1
14	WARRANTY CARD	1

SETUP AND ADJUSTMENTS

WARNING

ALWAYS disconnect unit from power supply when performing changes or adjustments.

You will need the following tools:

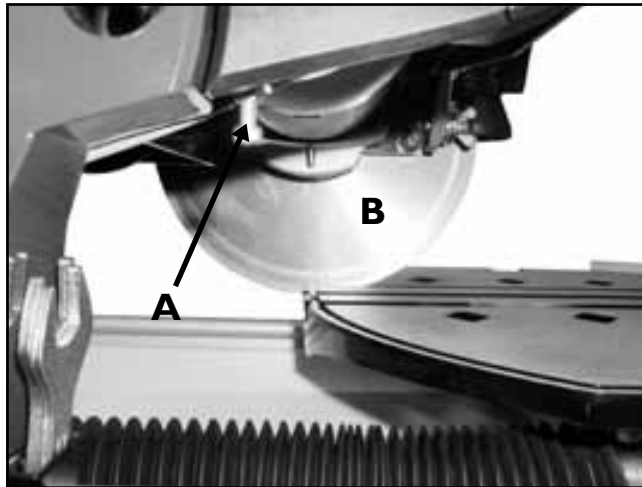
1. Combination Square
2. Hex Nut Wrench Set
3. Phillips Screwdriver

BLADE ALIGNMENTS

The TX-3 has been factory aligned. If any adjustment should occur, refer to steps below for specific adjustments.

BLADE DEPTH ADJUSTMENT

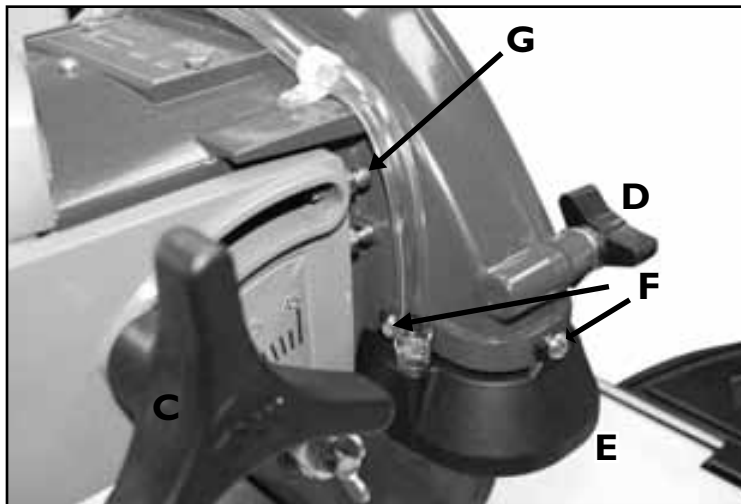
1. Loosen Hex Nut (A) on blade depth adjustment screw.
2. Set Blade (B) approximately 3/16" below the table surface by turning adjustment screw. Retighten Hex Nut to secure Screw after desired depth is achieved.



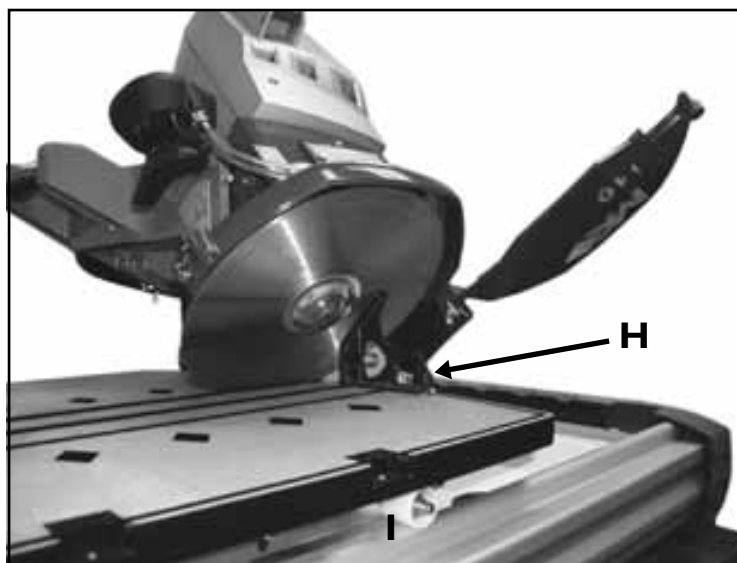
45° MITER ADJUSTMENT

A Combination Square (H) is needed for 45° adjustment.

1. Loosen Miter Adjustment Knob (C) and tilt Cutting Head.
2. Remove Outer Blade Guard by turning Outer Blade Guard Release Knob (D) and pushing Outer Blade Guard back.
3. Remove Misting Module (E) by loosening the two Misting Module Screws (F).
4. Loosen the Hex Nut on the 45° Adjustment Screw (G).



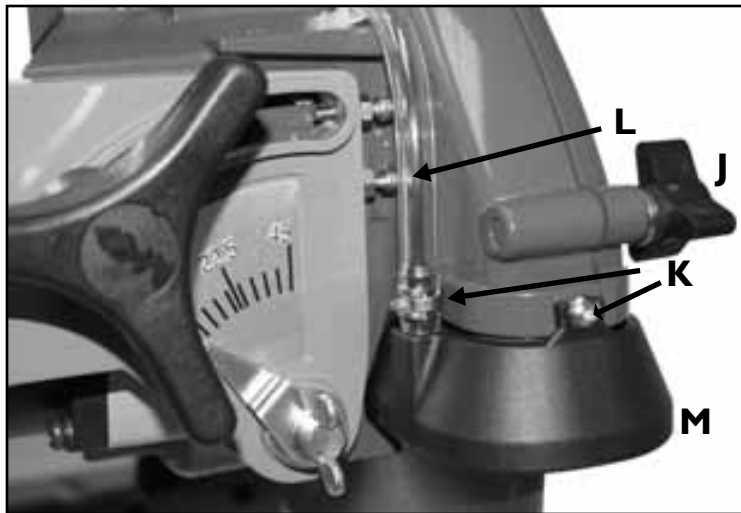
5. Turn 45° Adjustment Screw (G) and set vertical position of Roller Wheel Bracket (I) until Blade is parallel with 45° level on the Combination Square (H).
6. Tighten Hex Nut on the 45° Adjustment Screw (G) to secure Screw and Roller Wheel Bracket (I) in place.



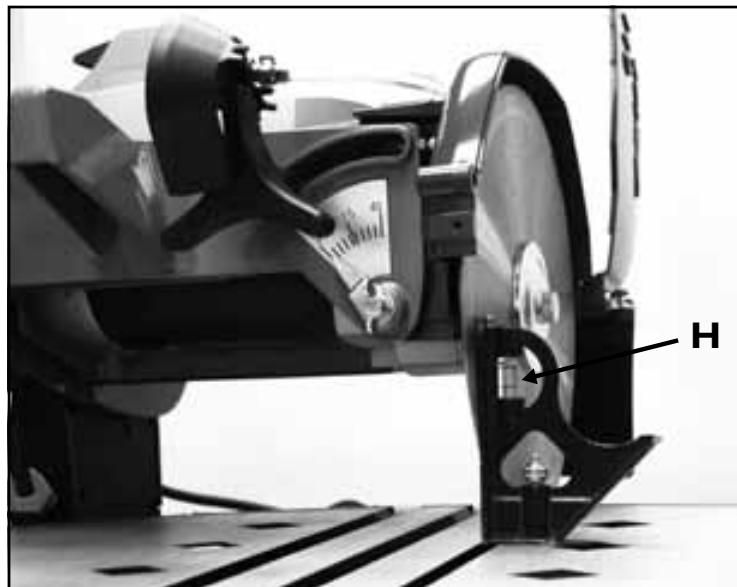
BLADE VERTICAL ADJUSTMENT

A combination square (H) is needed for 45° adjustment.

1. Remove Outer Blade Guard by turning Outer Blade Guard Release Knob (J) and pushing Outer Blade Guard back.
2. Remove Misting Module (M) by loosening the two Misting Module Screws (K).
3. Loosen the Hex Nut on the Vertical Adjustment Screw (L).



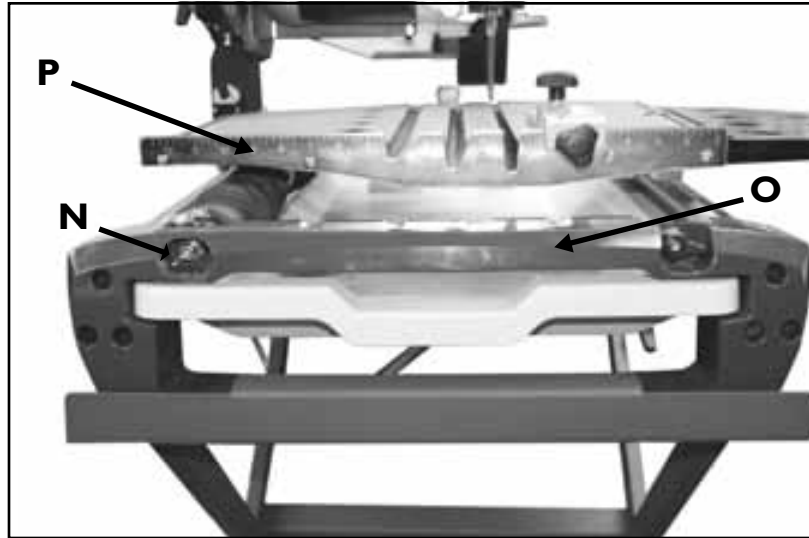
4. Turning Vertical Adjustment Screw (L) until Blade is perpendicular with the top surface of the table by using a square (H) as shown in figure below.
5. Tighten Hex Nut to secure Vertical Adjustment Screw (L) in place.



LINEAR GUIDE BAR ADJUSTMENT

A combination square is needed for 45° adjustment. This adjustment is to ensure consistency of material cutting width.

1. Loosen Guide Bar Adjustment Screws (N) on front and rear End Caps (O).
2. Tap Guide Bar lightly until Table Fence (P) is perpendicular with the blade by using a combination square.
3. Tighten up Screws and re-check that the Blade is square with the Table Fence (P).



MISTING SYSTEM SETUP

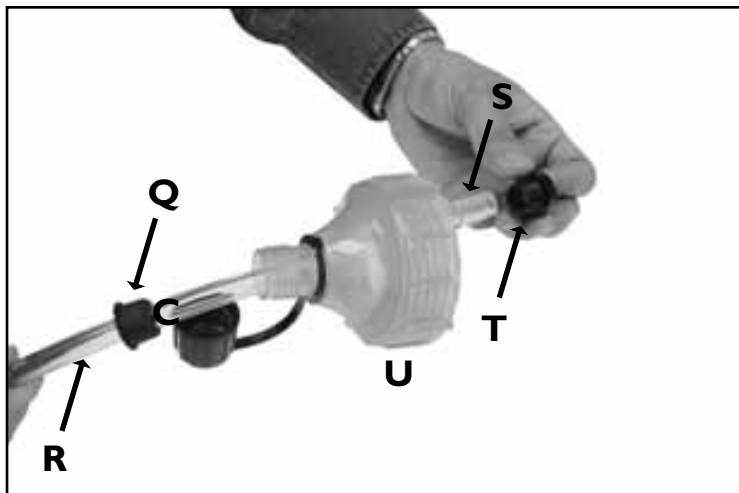


WARNING

ALWAYS disconnect unit from power supply when performing changes or adjustments.

STEP 1 - SETTING UP THE WATER TANK

1. Install Grommet (Q) through one end of the Hose (R).
2. Feed the Hose through the Main Cap (U).
3. Insert Hose 1" minimum into Tube Adapter (S).
4. Insert Tube Adapter (S) into Filter (T).

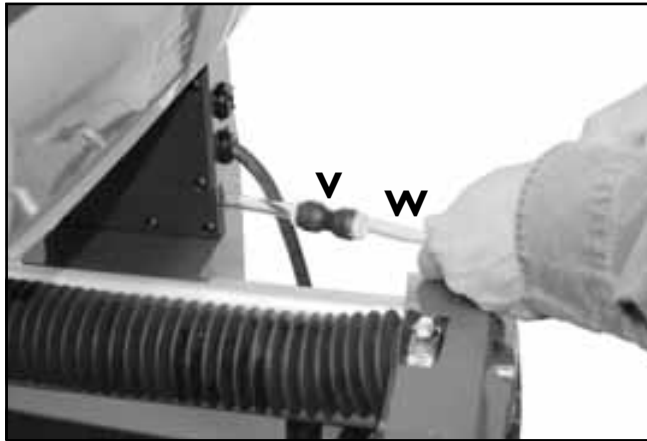


5. Press Grommet (Q) into the Main Cap (U).
6. Fill Water Tank up with clean water.
7. Screw Main Cap (U) onto Water Tank.
8. Ensure Filter sits on the bottom of the Tank at all times.



STEP 2 - ATTACHING WATER TANK TO SAW

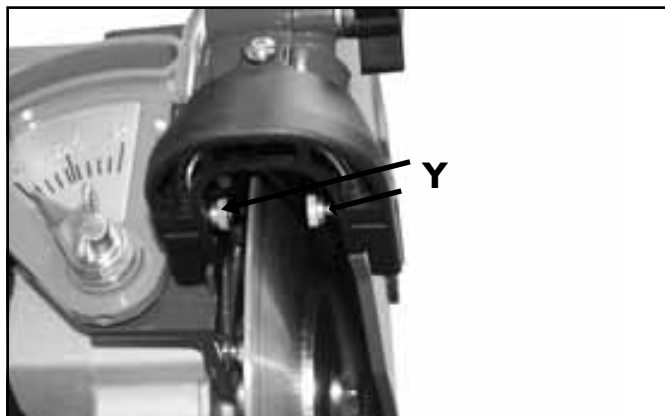
1. Insert other end of the Hose (W) into Coupling (V) attaching to the Saw.



2. Open Vent Cap (X) on Water Tank before operating the equipment.



3. Turn on equipment to make sure fine mists are being delivered through both Misting Nozzles (Y).



Note: Nozzles may be changed to provide additional water flow. The TX3 is shipped with 0.3mm misting nozzles installed on the saw, with an additional pair of 1.0mm nozzles included (see contents table on page 14). If you are in need of more water flow to control dust, the 1.0mm nozzles may be substituted. To remove a nozzle, simply unscrew it counterclockwise. If even more water is needed, the nozzles can be removed completely, thus making a “flood” type saw. If running the saw without nozzles, the water supply will diminish quickly. Keep an eye on the water level, so as not to run the pump when dry. Running the pump dry will cause damage.

! WARNING

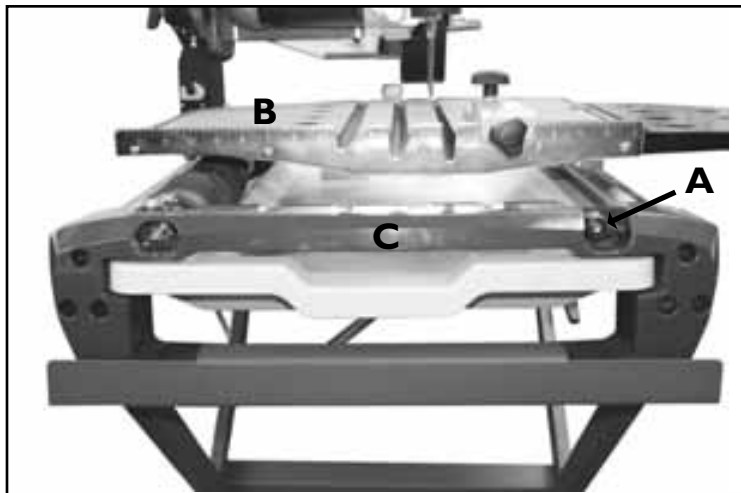
ALWAYS disconnect unit from power supply when performing changes or adjustments.

! CAUTION

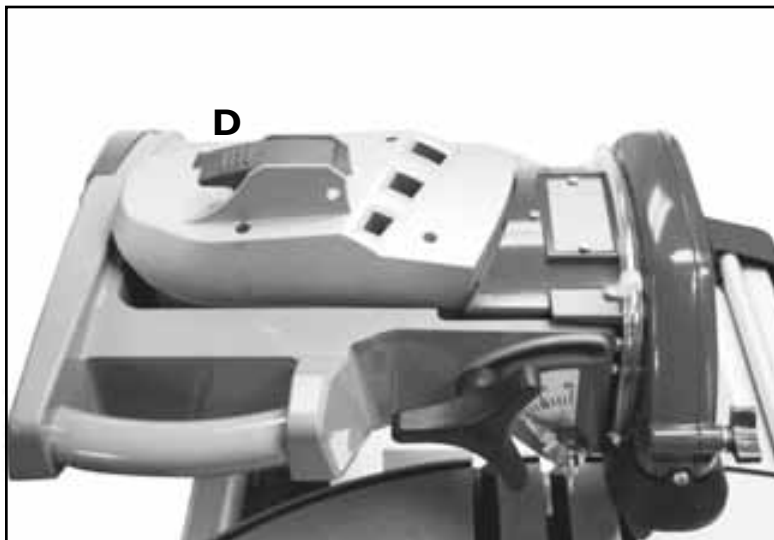
ALWAYS ensure there is a sufficient amount of clean water in the Water Tank and the Filter is submerged in the water to ensure proper performance of the misting system and to prevent Pump damage.

SAW SETUP

1. Rotate Table Lock (A) clockwise to release Table (B) from lock position.



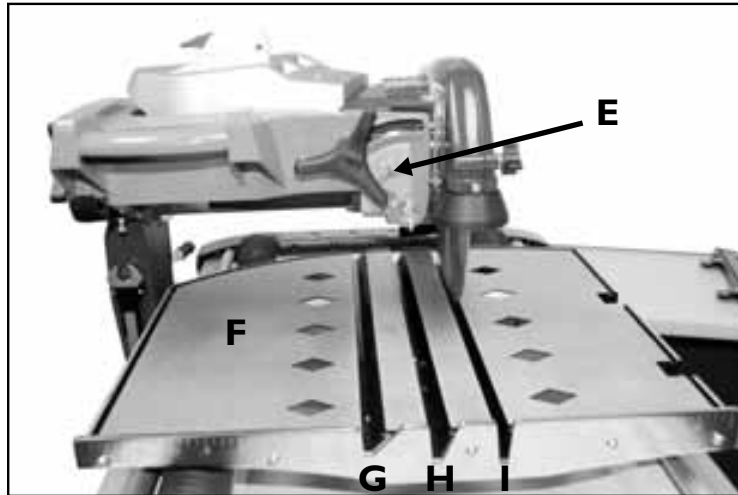
2. Turn on equipment with the Toggle Switch (D) to make sure fine mists are delivered through Misting Nozzles.

**! NOTICE**

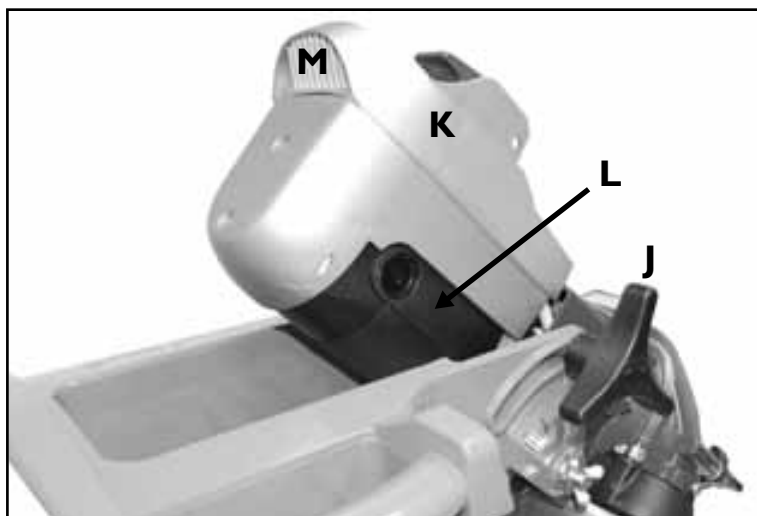
Move Table (B) all the way to the Front End Cap (C), hold Table (B) in place and rotate Table Lock (A) counterclockwise to lock Table (B) in place for transportation.

MITER CUTS

1. The Table (F) has 45° (G), 22.5° (H) and 90° (I) clearance slots built-in. 90° and 45° are pre-set at the factory. 22.5° miter can be obtained by aligning the Pointer to 22.5 mark on the Miter Index (E). All other angular cuts can be obtained by raising the work up. Make sure the Blade will clear the Table before operations.

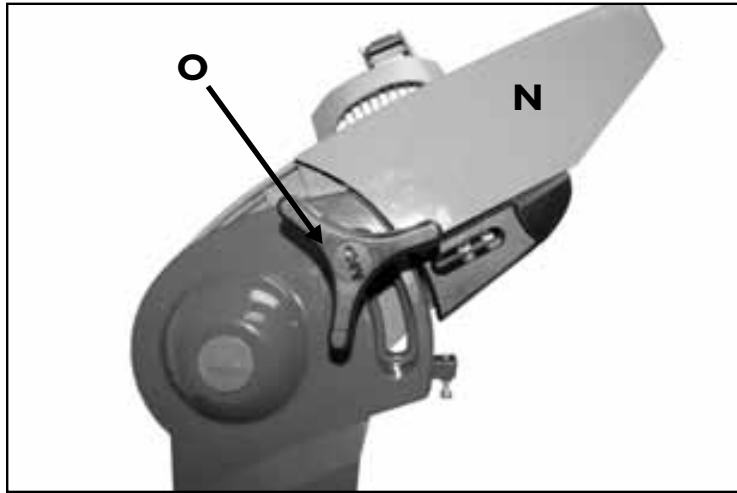


2. Move the Table (F) toward the front of the Saw so that the Blade does not interfere with the Table when setting up the Cutting Head.
3. To perform miter cuts, loosen the Miter Adjustment Knob (J) and lift Air Flow Module (K) with the Air Flow Module Handle (M) located in the rear of the Upper Air Flow Module (K).
4. Tilt Motor Assembly (L) to desired degree using the Miter Index (E).
5. Tighten Miter Adjustment Knob (J) to hold Motor Assembly (L) in position.

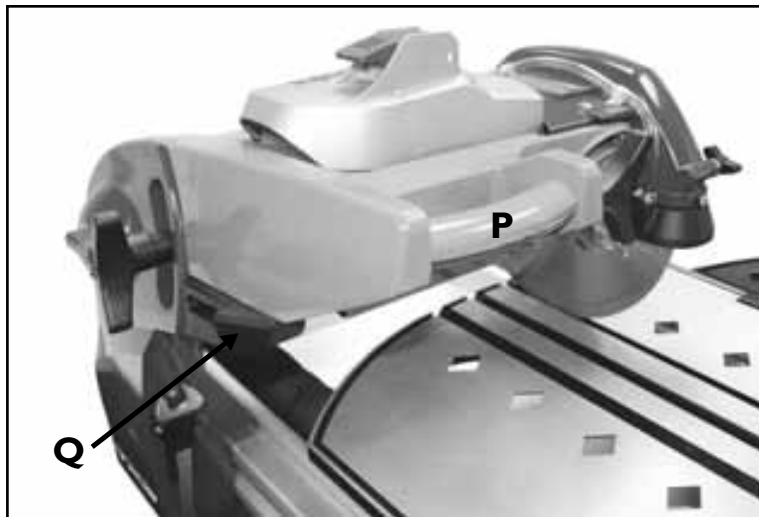


PLUNGE CUTS

1. Loosen Cutting Head Knob (O) so that the Cutting Head Assembly (N) will swing upward.
2. Shift Plunge Lock Lever (Q) forward.
3. Push Cutting Head Handle (P) downward to perform plunge cuts.



4. Shift Plunge Lock Lever (Q) back while Cutting Head Assembly (N) is at uppermost position.
5. Bring Cutting Head Assembly (N) down to stop on the Plunge Lock Lever (Q).
6. Tighten Cutting Head Knob (O) for normal operations.

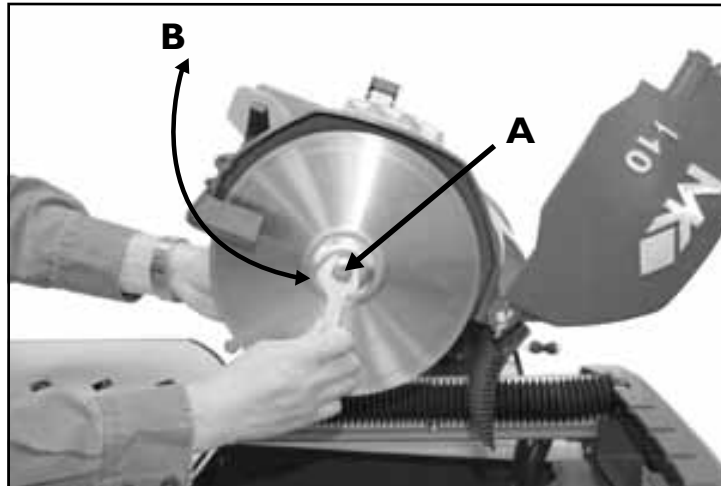


**WARNING**

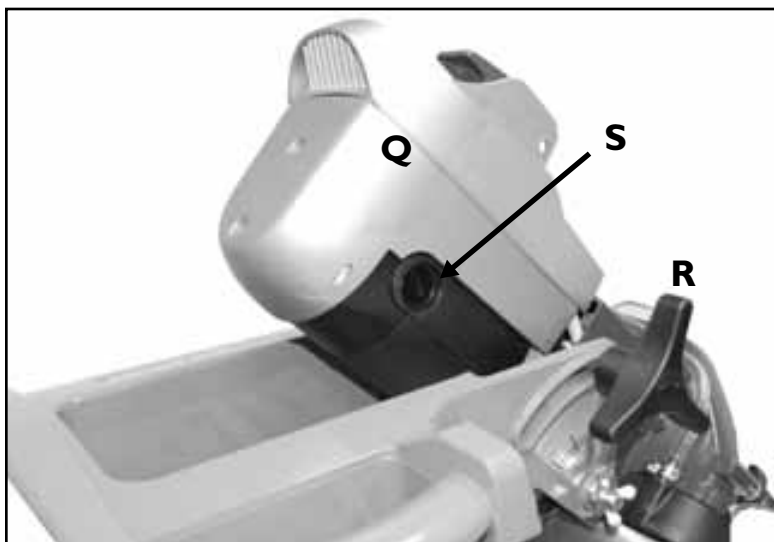
ALWAYS disconnect unit from power supply when performing changes or adjustments.

BLADE REPLACEMENT

1. Hold Wrench over two flats on Motor Shaft on the inner side of the Blade.
2. Rotate Wrench (B) on the outer side of Blade counterclockwise to loosen and clockwise to tighten the Blade Screw (A).

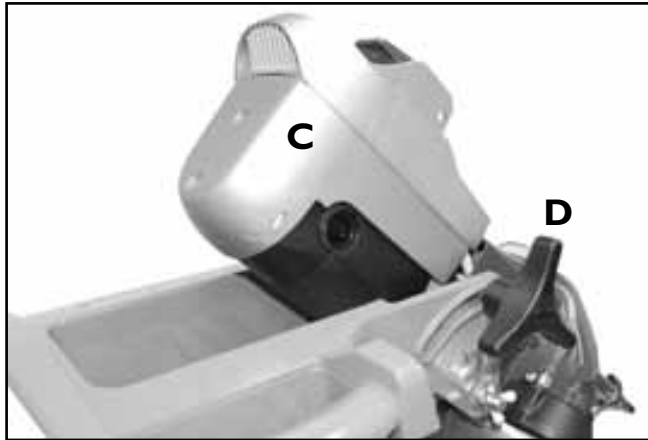
**MOTOR BRUSHES REPLACEMENT**

1. Tilt Motor Assembly (Q) at 45° and tighten Miter Adjustment Knob (R) to hold Motor Assembly in place.
2. Remove Brush Caps (S) on both sides of Motor.
3. Replace Brushes and reinstall Brush Caps (S).

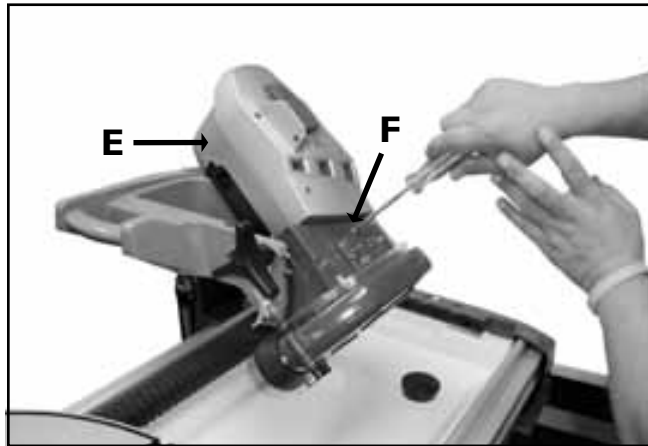


FILTER REPLACEMENT

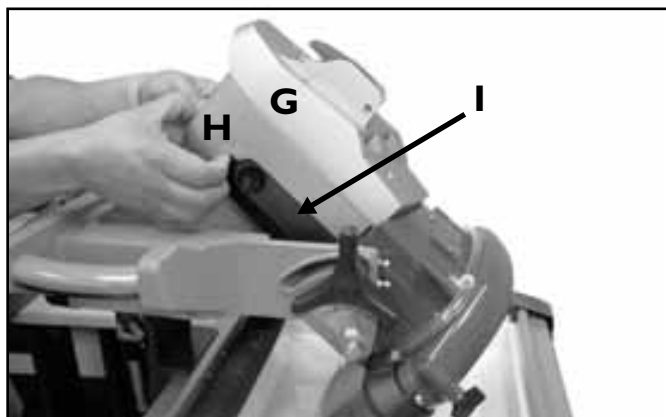
1. Tilt Motor Assembly (C) at 45° and tighten Miter Adjustment Knob (D) to hold Motor Assembly (C) in place.



2. Remove one screw, which secures Lower Air Flow Module (E) through Inner Blade Guard (F) with a Phillips screwdriver.

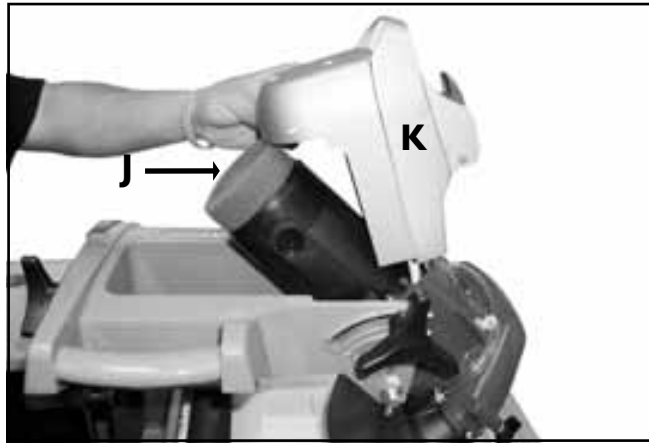


3. Pull Lower Air Flow Module (H) backward to separate Upper and Lower Air Flow Module from Motor (I).



FILTER REPLACEMENT CONTINUED

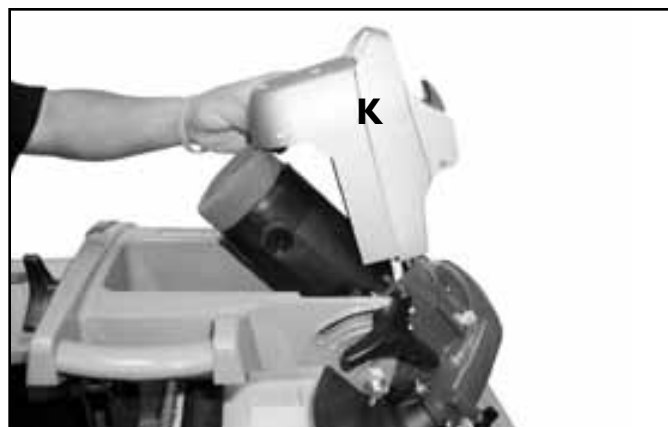
4. Lift Air Flow Module (K) up to remove Filter (J). Place a clean Filter onto Spacers (L) through holes in the Filter.



5. Move Air Flow Module (K) over the Filter.

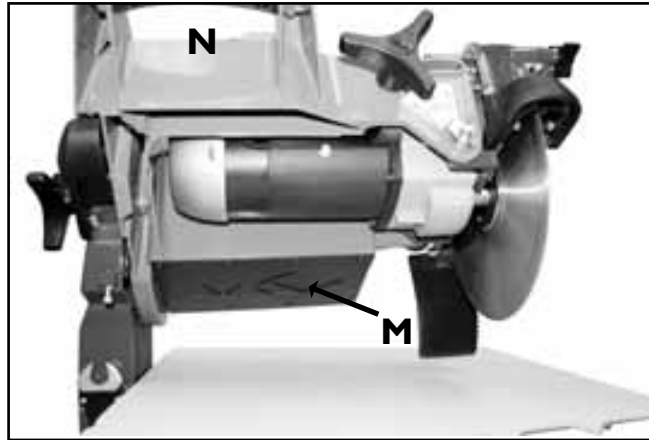


6. Align holes in Lower Air Flow Module with Spacers (L). Push Air Flow Module (K) back onto Spacers (L).

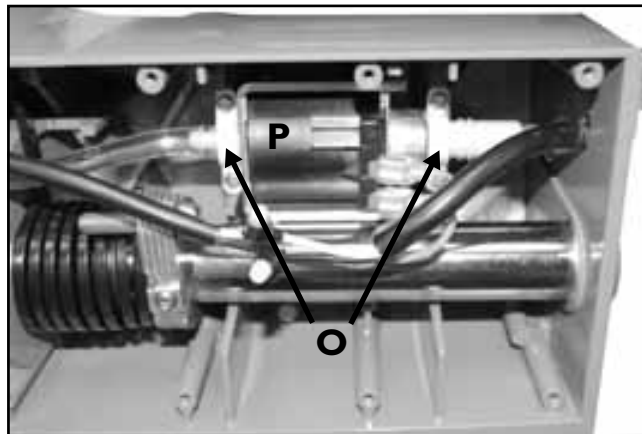


MISTING PUMP REPLACEMENT

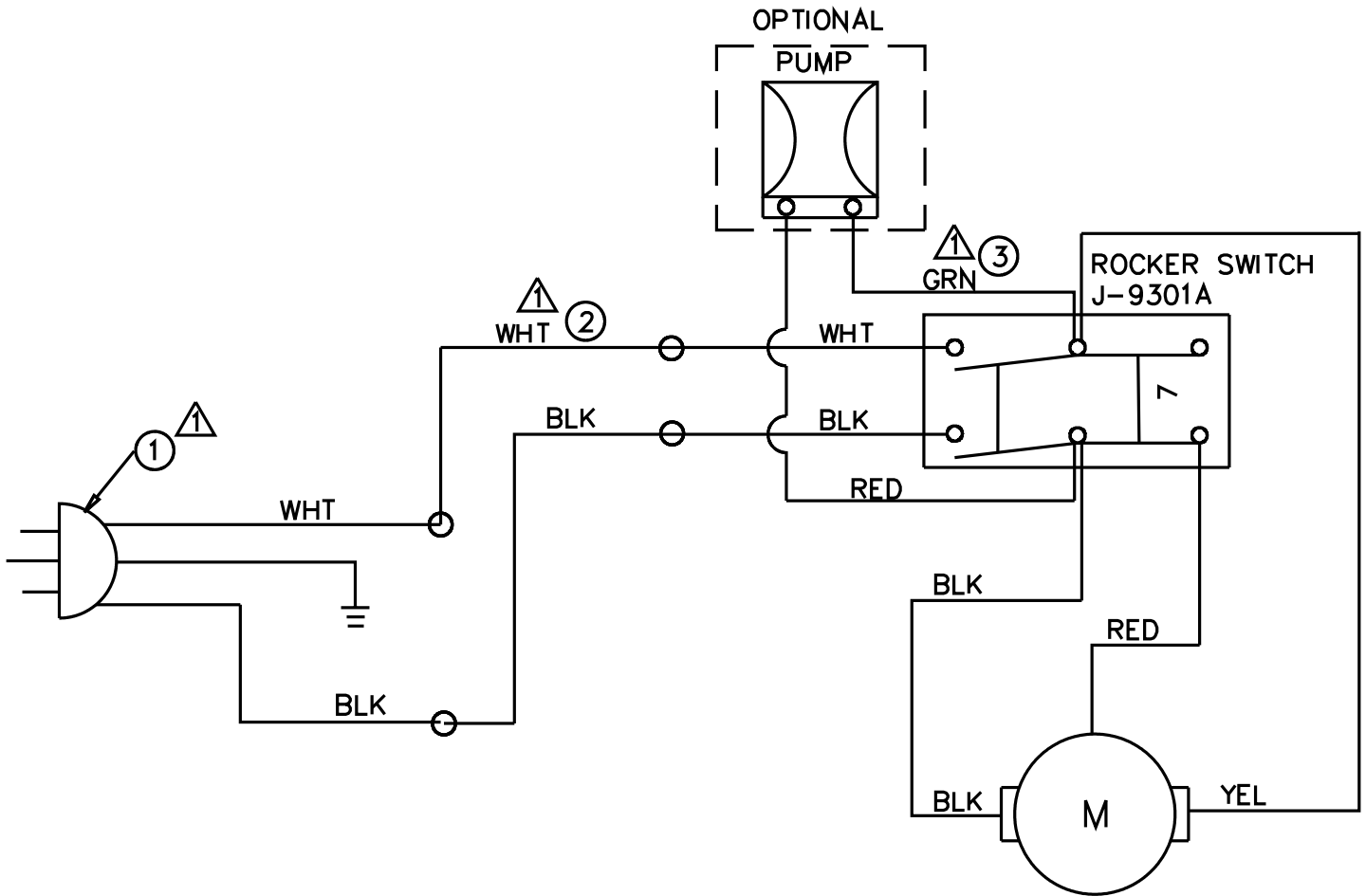
1. Remove Pump Cover (M) from underside of Cutting Head (N) by loosening screws with a Phillips screwdriver.



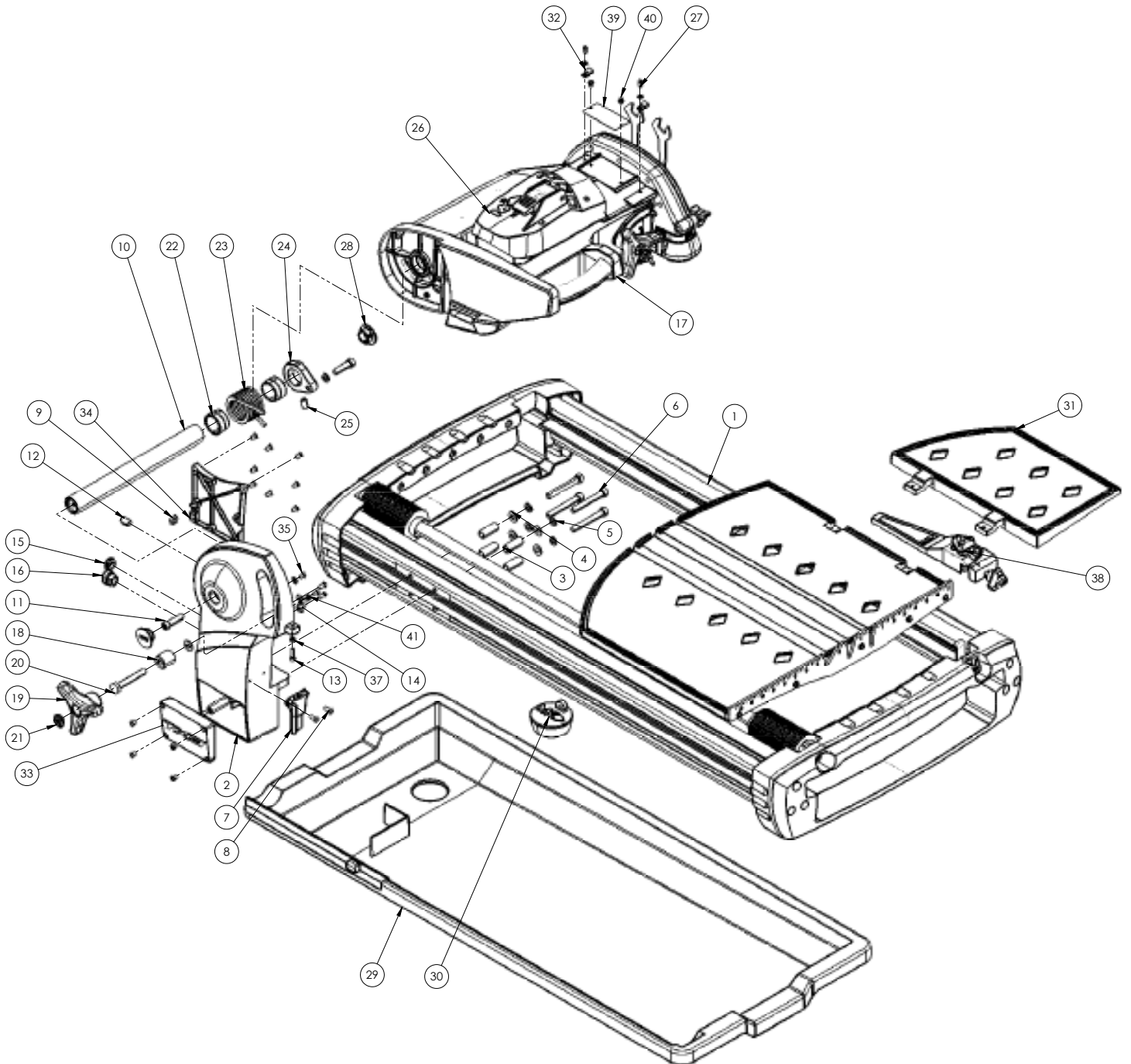
2. Disconnect Terminals to Pump (P) and remove Clamps (O). Replace Pump (P) and reinstall Clamps (O).



WIRING DIAGRAM



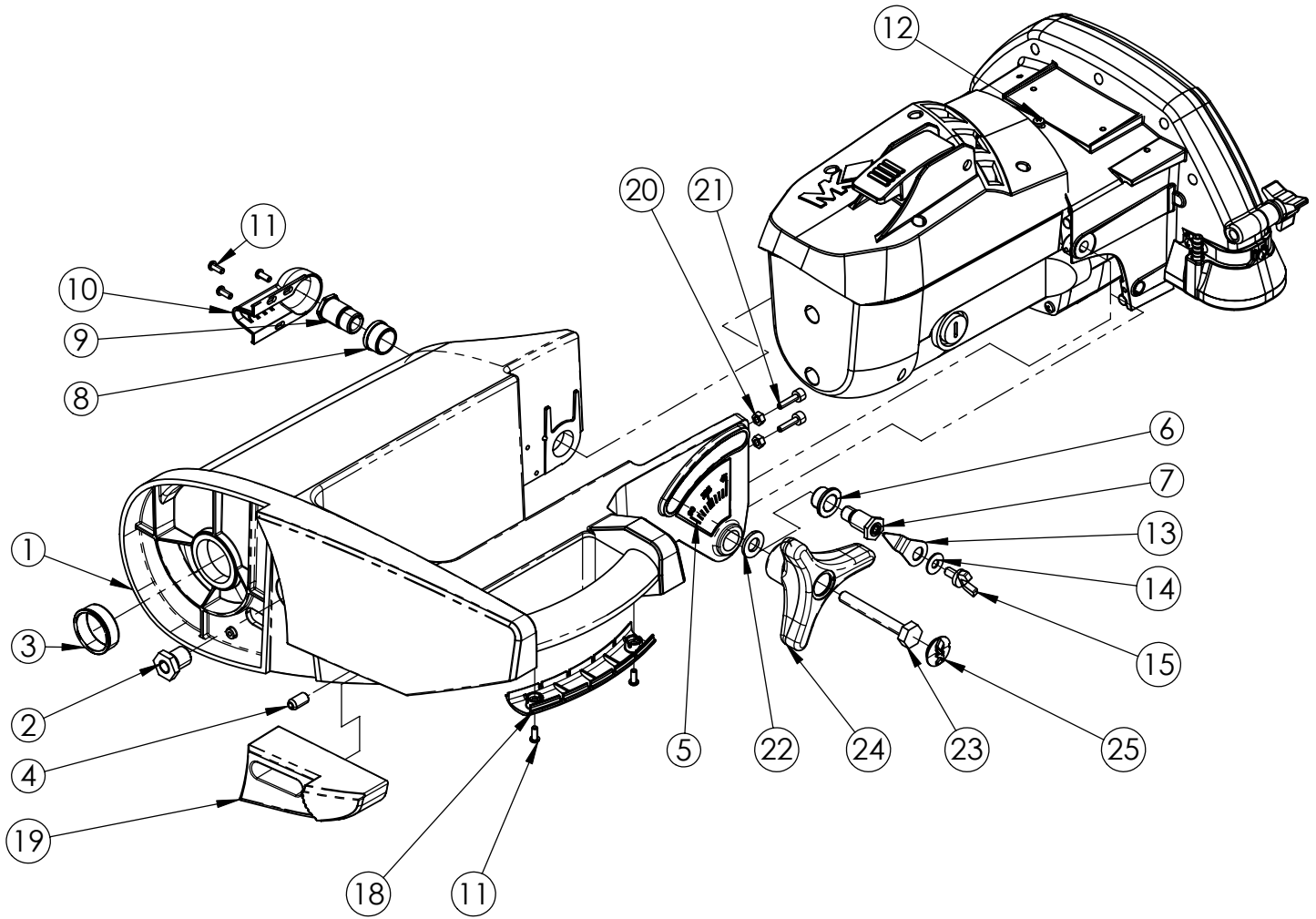
PARTS LIST - ASSY, FINAL - P/N 164800



PARTS LIST - ASSY, FINAL - P/N I64800

ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	ASSY, LOWER FRAME	165294	1
2	POST	164843	1
3	SPACER, POST MOUNTING	164839	4
4	WASHER, FLAT, M8	164855	5
5	WASHER, SPLIT LOCK, M8	164860	5
6	SCREW, SOCKET HD CAP, M8 X 70 MM	165301	4
7	HOLDER, WRENCH	164669	1
8	SCREW, PAN HD PHIL, M4 X 12 MM	164778	4
9	O-RING, BUNA-N, .500 X .094	165028	1
10	SHAFT, PIVOT	166686	1
11	SCREW, SOCKET HD CAP, M5 X 35 MM	165311	2
12	SCREW, SOCKET HD SET, M10 X 6 MM	166680	1
13	SCREW, SOCKET HD CAP, M5 X 18 MM	166675	1
14	CLAMP, CABLE	164759	1
15	CAP, POWER CORD	166679	1
16	BUSHING, STRAIN RELIEF	164725	1
17	ASSY, CUTTING HEAD	164850	1
18	SPACER, POST KNOB	166657	1
19	KNOB, TRI	166312	1
20	SCREW, HEX HD CAP, M8 X 65 MM	165318	1
21	CAP, TRI KNOB	166311	1
22	SPACER, SPRING	166684	2
23	SPRING, TORSION	164770	1
24	RETAINER, SPRING	164794	1
25	SCREW, SOCKET HD SET, M8 X 16 MM	166677	1
26	COVER, CUTTING HD	164847	1
27	SCREW, PAN HD PHILIP, M4 X 10 MM	164777	10
28	CAP, MK LOGO	166656	2
29	PAN, WATER	165303	1
30	PLUG, DRAIN	159858	1
31	ASSY, SIDE TABLE	165317	1
32	CLAMP, TUBE	164698	2
33	COVER, OUTER POST	164766	1
34	COVER, INNER POST	164771	1
35	SCREW, PAN HD PHIL, M4 X 8 MM	164776	14
36	WASHER, FLAT, M4	164795	2
37	NUT, HEX, M5	157405	1
38	ASSY, RIP GUIDE	165356	1
39	SERIAL TAG	157500-TX3	1
40	SCREW, QUICK DRIVE, #8 X 1/4	162850	2
41	WASHER, TOOTH LOCK EXT, M4	165352	2

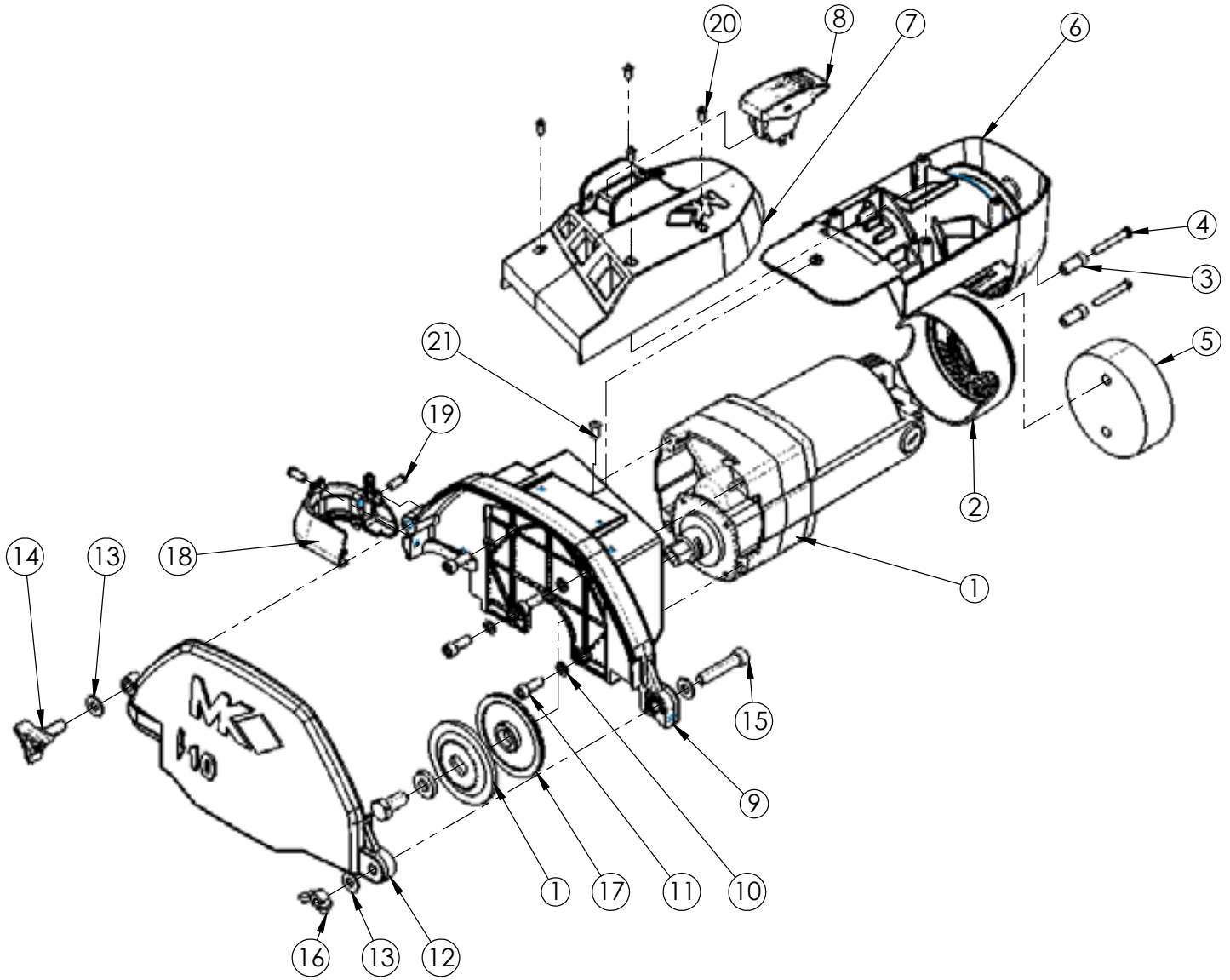
PARTS LIST - ASSY, CUTTING HEAD - P/N 164850



PARTS LIST - ASSY, CUTTING HEAD - P/N 164850

ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	CUTTING HEAD	164841	1
2	BUSHING, THDED FLANGE	164844	1
3	BUSHING, PIVOT SHAFT	166668	2
4	PLUNGER, BALL, M8 X 15 MM	166669	1
5	INDEX, MITER	165310	1
6	BUSHING, MITERING, LEFT	166659	1
7	STUD, PIVOT	165308	1
8	BUSHING, MITERING, RIGHT	166660	3
9	BUSHING, WIRE ROUTING	164825	1
10	COVER, WIRE	164786	1
11	SCREW, PAN HS PHILIP, M4 X 10 MM	164777	9
12	ASSY, MOTOR	165029	1
13	POINTER	164828	1
14	WASHER, FLAT, 16 X 6.5 X 1 MM	166681	1
15	SCREW, WING, M6 X 12 MM	165323	1
16	PUMP	164693	1
17	CLAMP, PUMP	165027	2
18	COVER, HANDLE	166670	1
19	STOP, BLADE DEPTH	165014	1
20	NUT, HEX, M5	157405	2
21	SCREW, SOCKET HD CAP, M5 X 18 MM	166675	2
22	WASHER, FLAT, M10	160203	2
23	SCREW, HEX HD CAP, M8 X 65 MM	165318	1
24	KNOB, TRI	166312	1
25	CAP, TRI KNOB	166311	1

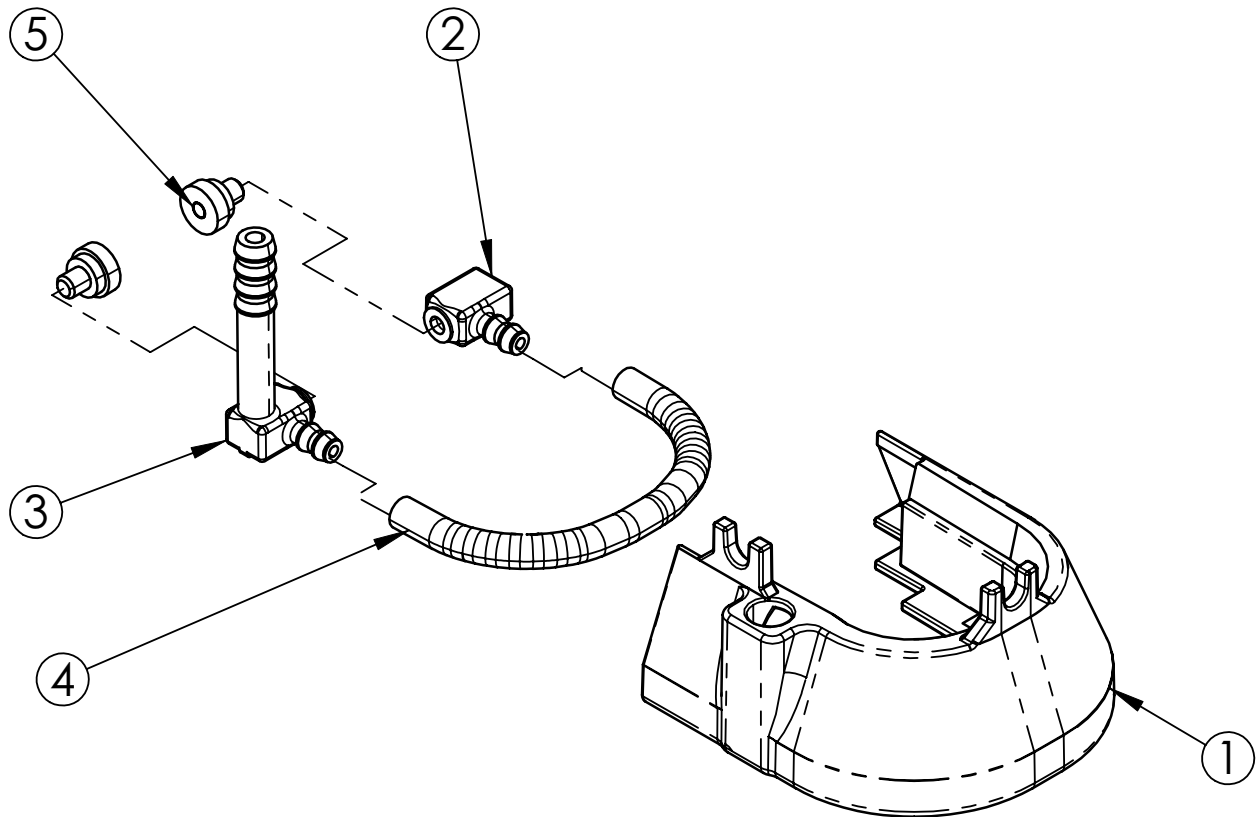
PARTS LIST - ASSY, MOTOR - P/N 165029



PARTS LIST - ASSY, MOTOR - P/N 165029

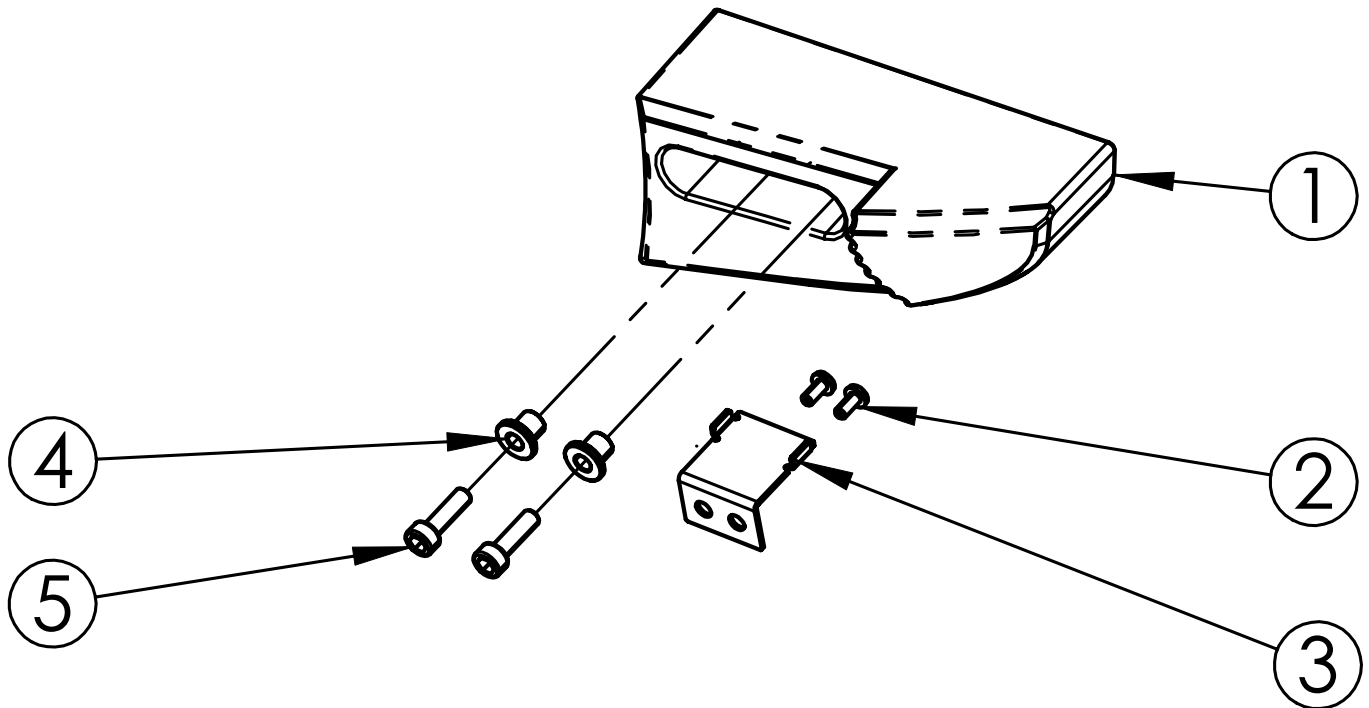
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	MOTOR & ACCESSORIES	157801-C	1
2	CAP, MOTOR	157877	1
3	SPACER, FILTER	157879	2
4	SCREW, PAN HD COMB SELF TAPPING, #8 X 1-1/2	158157	2
5	FILTER	157729	1
6	AFM, LOWER	166688	1
7	FILTER, AFM	166687	1
8	SWITCH, TOGGLE	164761	1
9	GUARD, INNER BLADE	164756	1
10	WASHER, SPLIT LOCK, M6	158159	4
11	SCREW, SOCKET HD CAP, M6 X 20 MM	166674	4
12	GUARD, OUTER BLADE	166661	1
13	WASHER, FLAT, M8	164855	3
14	KNOB, 3 PRONG, M8 X 23 MM	166662	1
15	SCREW, SOCKET HD CAP, M8 X 45 MM	165319	1
16	NUT, WING, M8	165320	1
17	FLANGE, INNER	158106	1
18	MODULE, MISTING	164782	1
19	SCREW, SOCKET, BUTTON HEAD, M5 X 15 MM	165296	2
20	SCREW, PAN HD PHILLIP, M4 X 10 MM	164777	4
21	SCREW, PAN HD PHIL, M4 X 12 MM	164778	1

PARTS LIST - MODULE, MISTING - P/N 164782



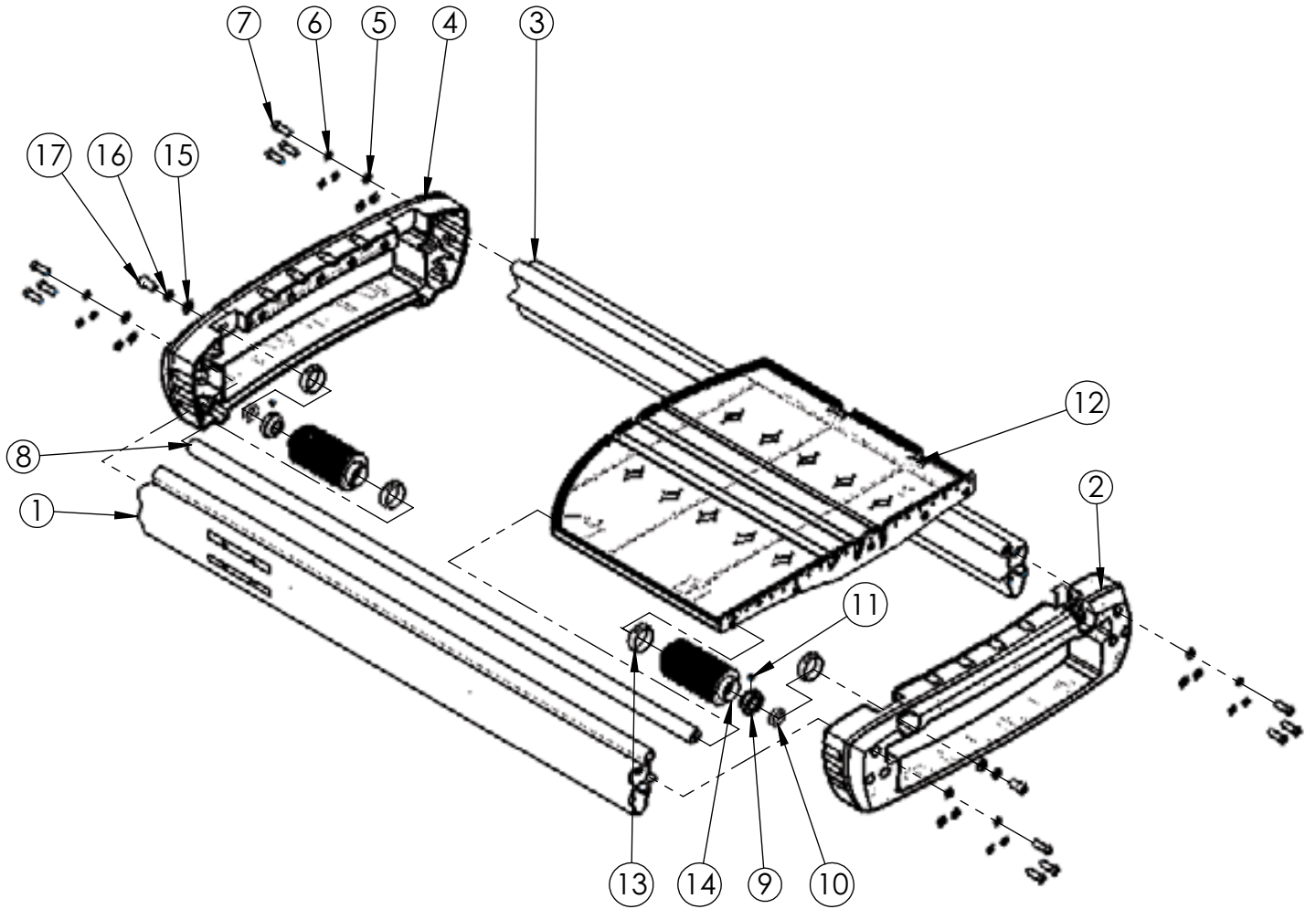
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	HOLDER, MISTING NOZZLE	166665	1
2	FITTING, END	166667	1
3	FITTING, 90-DEG ELBOW	166666	1
4	HOSE, PVC, 1/4 X 3/16	165314	1
5	NOZZLE, 0.3mm, 10-24 THREAD	164699-030	2

PARTS LIST - STOP, BLADE DEPTH - P/N 167135



ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	LEVER, PLUNGE LOCK	164848	1
2	SCREW, THD CUTTING, #4 X 1/4	165305	2
3	PLATE, PLUNGE LOCK	165306	1
4	SPACER, PLUNGE LOCK	165307	2
5	SCREW, SOCKET HD CAP, M4 X 14	165309	2

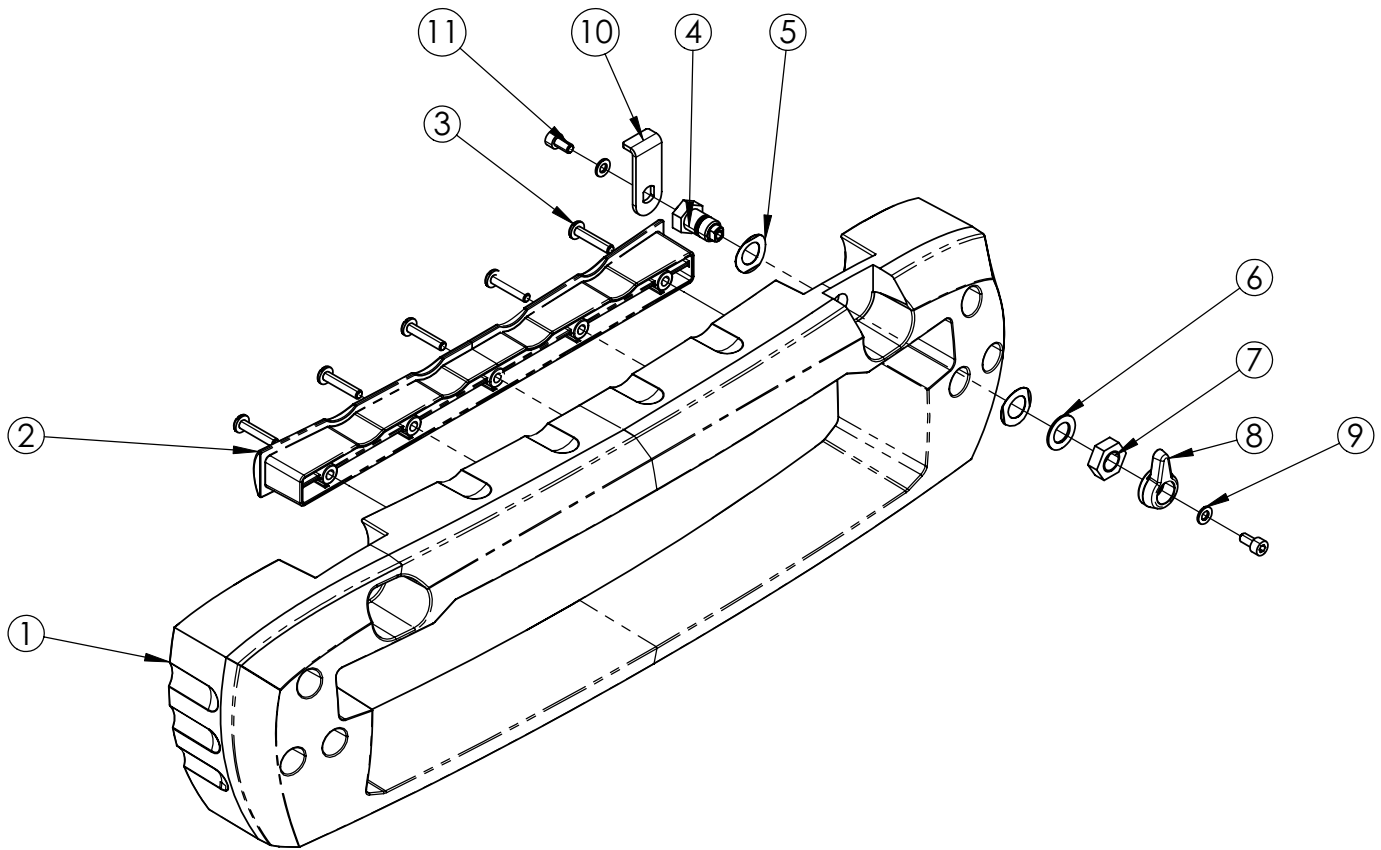
PARTS LIST - ASSY, LOWER FRAME - P/N 165294



PARTS LIST - ASSY, LOWER FRAME - P/N 165294

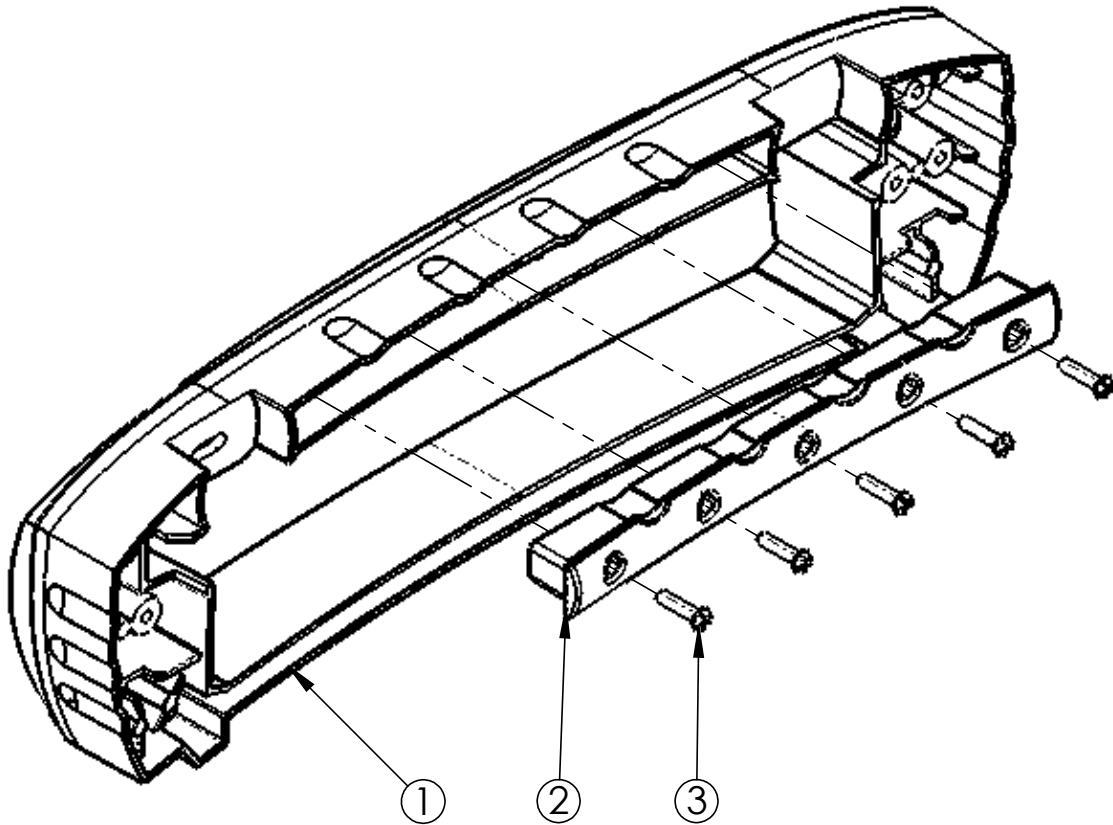
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	RAIL, LEFT	166689	1
2	ASSY, FRONT ENDCAP	164854	1
3	RAIL, RIGHT	166690	1
4	ASSY, REAR ENDCAP	165353	1
5	WASHER, FLAT, M6	160215	12
6	WASHER, SPLIT LOCK, M6	158159	12
7	SCREW, SOCKET HD CAP, M6 X 26 MM	158268	12
8	BAR, GUIDE	164793	1
9	COLLAR, BELLOW	162064	2
10	O-RING, BUNA-N, 20 X 2.5 MM	165295	2
11	SCREW, SOCKET HD SET, M5 X 6 MM	165350	2
12	ASSY, TABLE	165293	1
13	CLAMP, HOSE, 1 1/16 TO 1- 1/4 X 1/2	162065	4
14	BELLOW, RUBBER	162066	2
15	WASHER, FLAT, M8	164855	2
16	WASHER, SPLIT LOCK, M8	164860	2
17	SCREW, SOCKET HD CAP, M8 X 20 MM	160229	2

PARTS LIST - ASSY, FRONT ENDCAP - P/N 164854



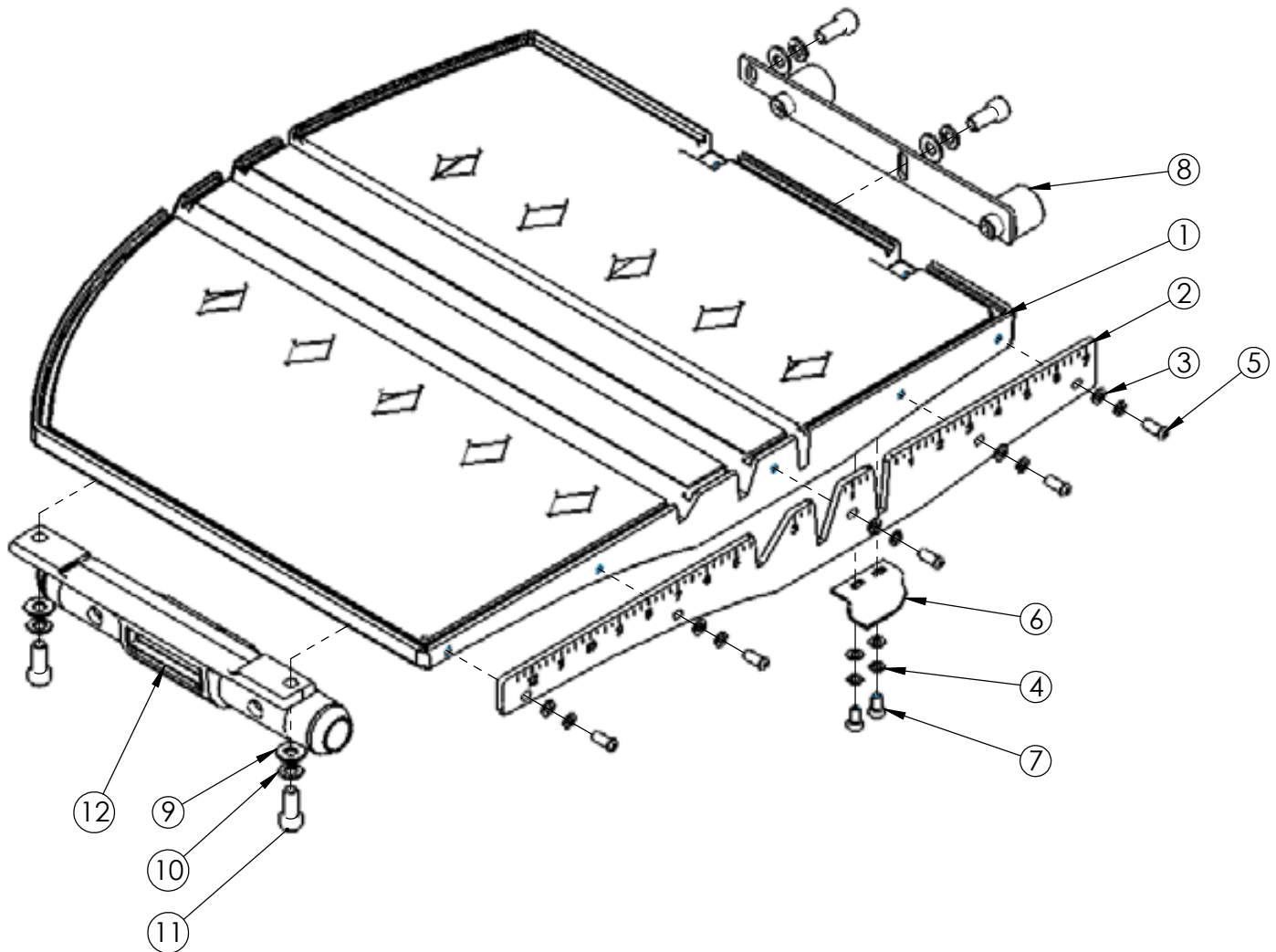
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	ENDCAP, FRONT	164802	1
2	COVER, ENDCAP	164846	1
3	SCREW, PAN HD PHILLIP, M5 X 25 MM	160557	5
4	CYLINDER, TABLE LOCK	164836	1
5	WASHER, WAVE, M12	164856	2
6	WASHER, FLAT, M12	166678	1
7	NUT, JAM, M12	164857	1
8	KNOB, TABLE LOCK	164835	1
9	WASHER, FLAT, M5	164858	2
10	LOCK, TABLE	164834	1
11	SCREW, SOCKET HD CAP, M5 X 10 MM	160567	2

PARTS LIST - ASSY, REAR ENDCAP - P/N 165353



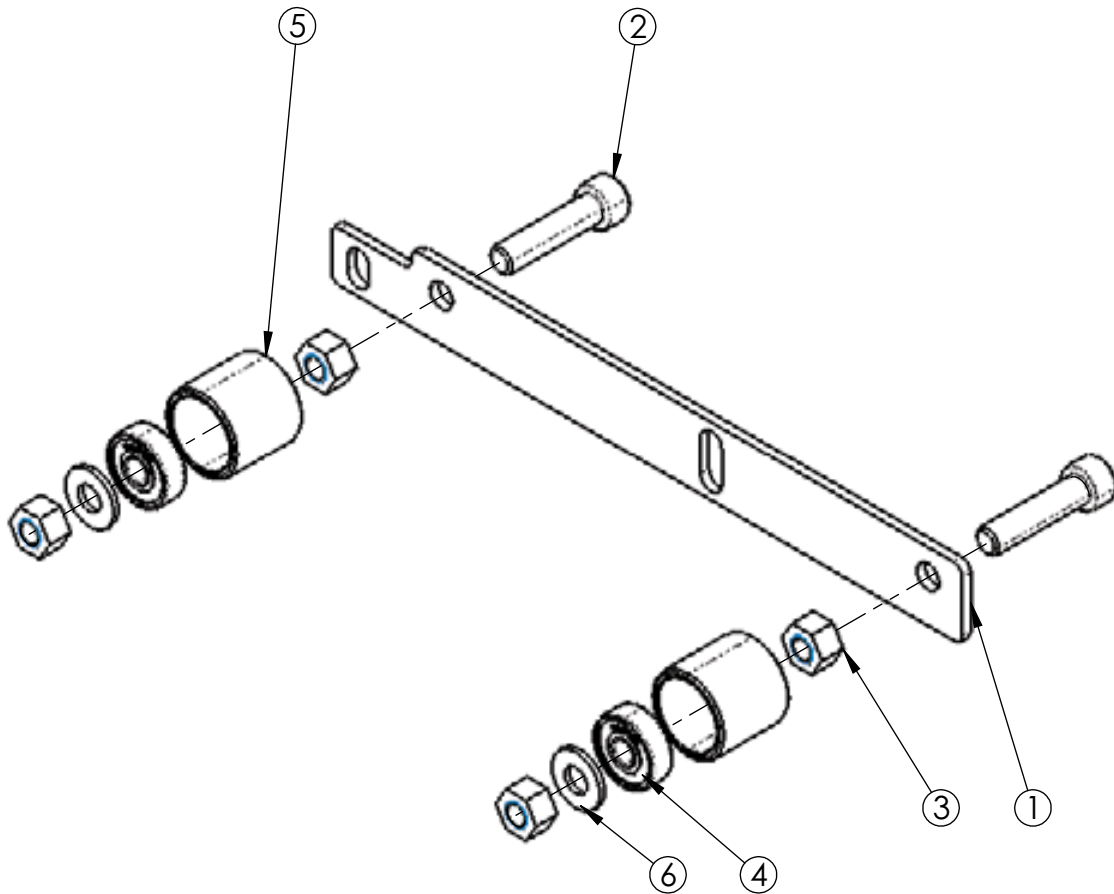
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	ENDCAP, REAR	164833	1
2	COVER, ENDCAP	164846	1
3	SCREW, PAN HD PHILLIP, M5 X 25 MM	160557	5

PARTS LIST - ASSY, TABLE - P/N 165293



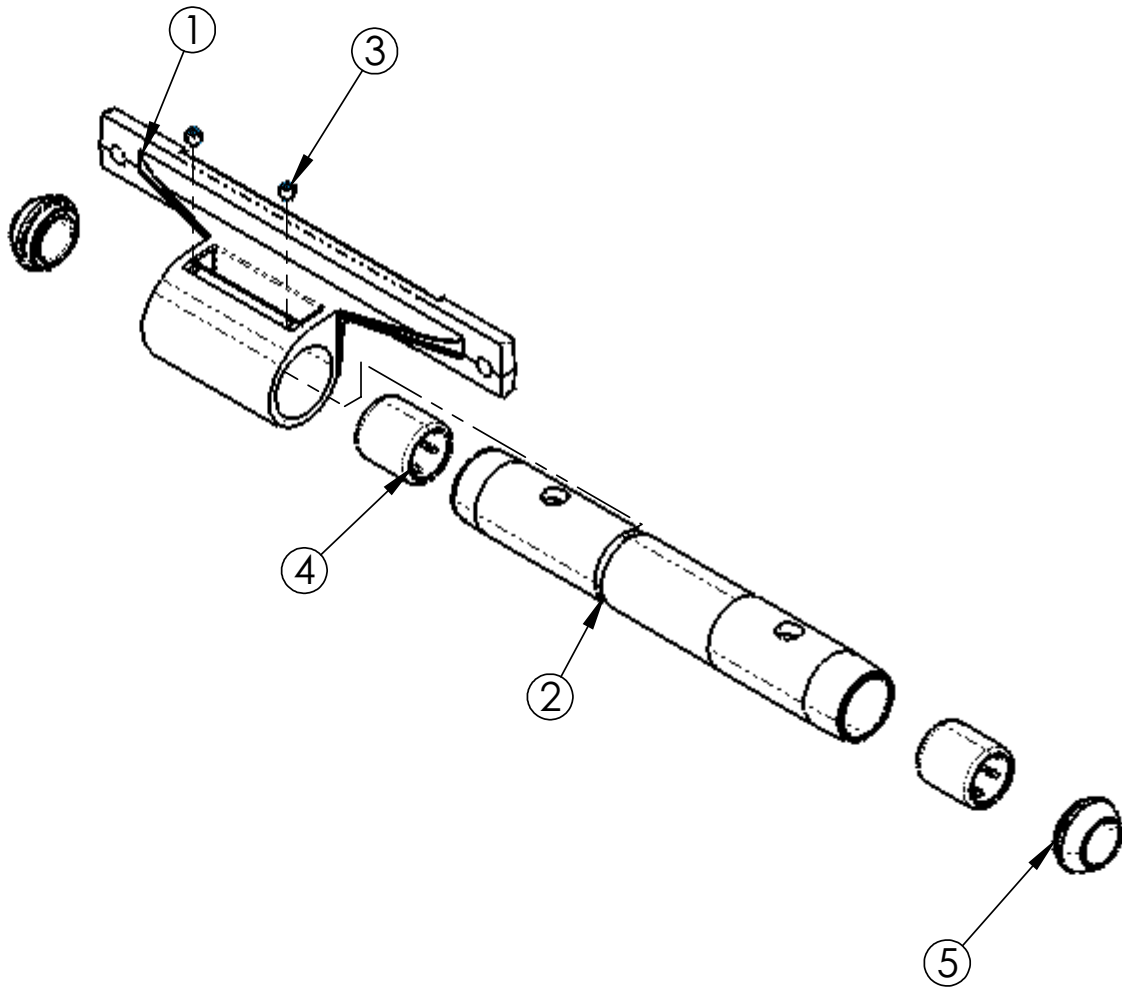
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	TABLE	166682	1
2	FENCE, TABLE	164729	1
3	WASHER, FLAT, M5	164858	7
4	WASHER, SPLIT LOCK, M5	164859	7
5	SCREW, SOCKET, BUTTON HEAD, M5 X 15 MM	165296	5
6	PLATE, GUIDE, TABLE LOCK	164837	1
7	SCREW, SOCKET HD CAP, M5 X 10 MM	160567	2
8	ASSY, ROLLER WHEEL BRACKET	165300	1
9	WASHER, FLAT, M8	164855	4
10	WASHER, SPLIT LOCK, M8	164860	4
11	SCREW, SOCKET HD CAP, M8 X 20 MM	160229	4
12	ASSY, LINEAR BEARING	165299	1

PARTS LIST - ASSY, ROLLER WHEEL BRACKET - P/N 165300



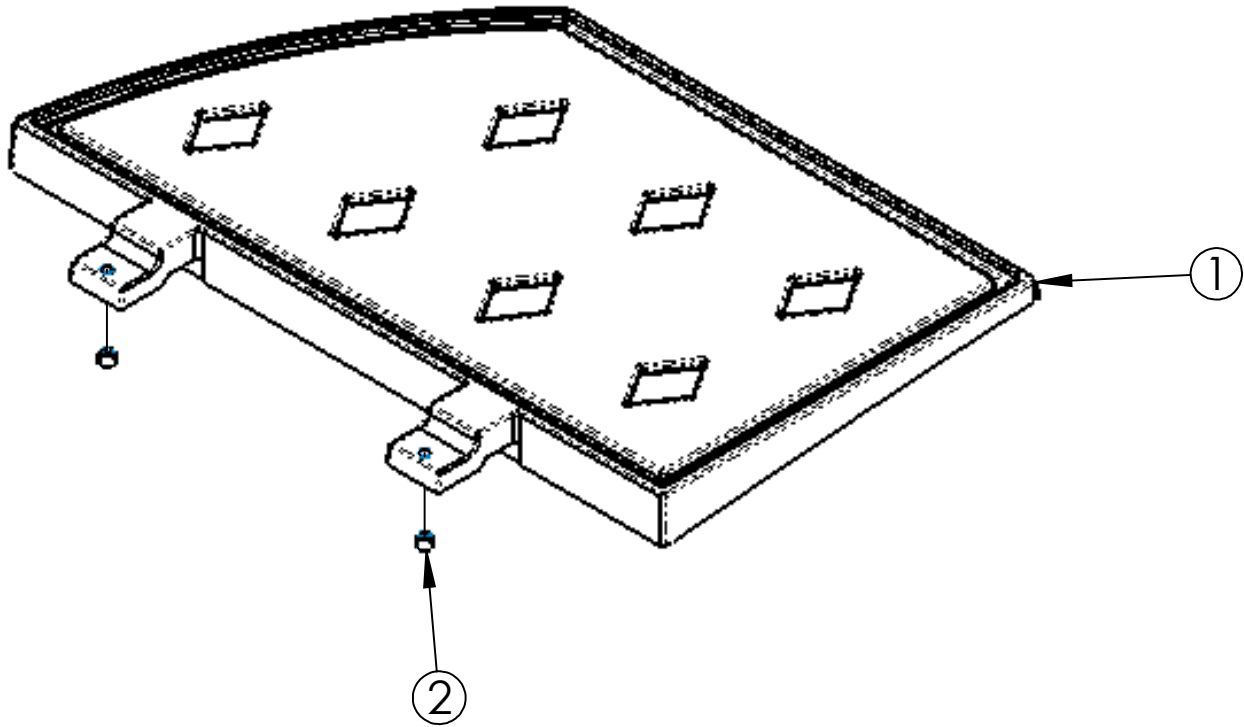
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	BRACKET, ROLLER WHEEL	164730	1
2	SCREW, SOCKET HD CAP, M5 X 35 MM	165311	2
3	NUT, HEX, M8	165030	4
4	BEARING, BALL, 608AS	166683	2
5	WHEEL, ROLLER	166672	2
6	WASHER, FLAT, M8	164855	2

PARTS LIST - ASSY, LINEAR BEARING - P/N 165299



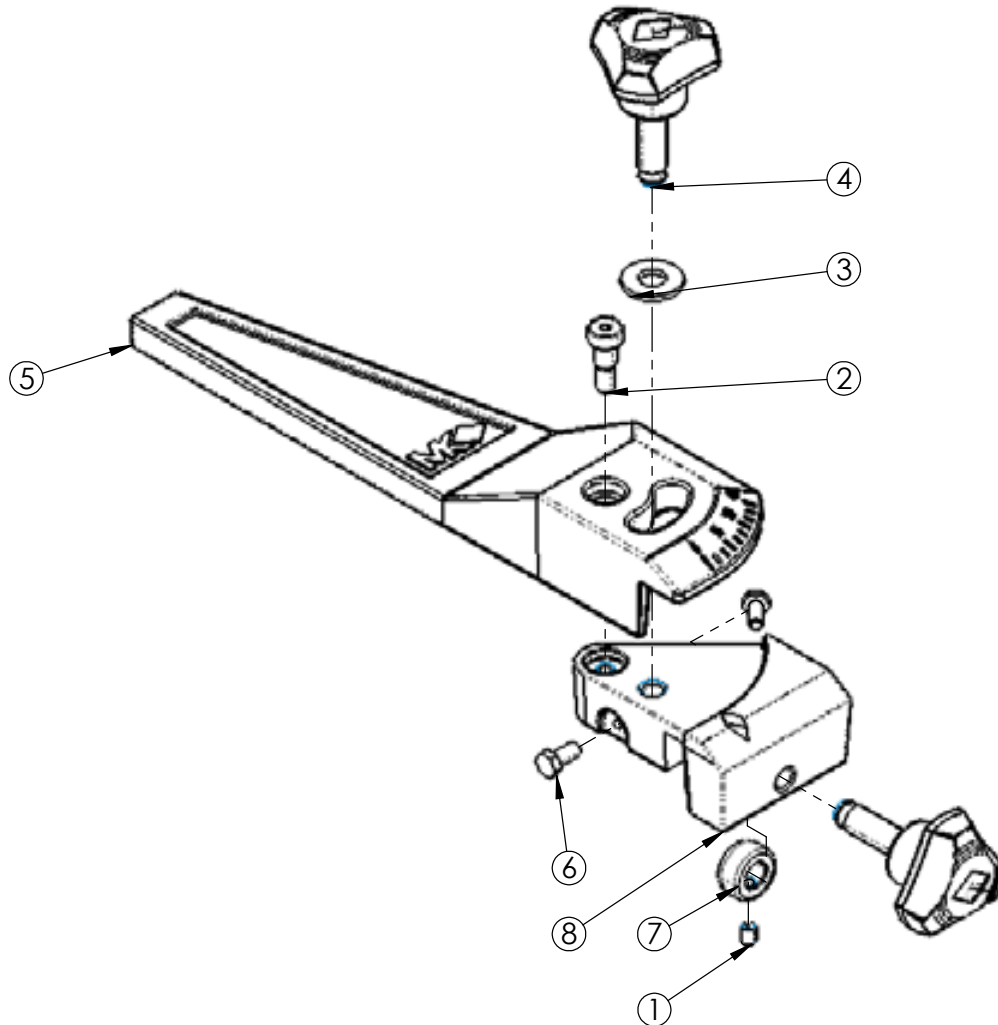
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	HOUSING, LINEAR BEARING	162062	1
2	BUSHING, LINEAR GUIDE	162063	1
3	SCREW, SOCKET HD SET, M5 X 6MM	165350	2
4	BEARING, SLEEVE	166671	2
5	CAP, GUIDE BUSHING	166673	2

PARTS LIST - ASSY, SIDE TABLE - P/N 165317



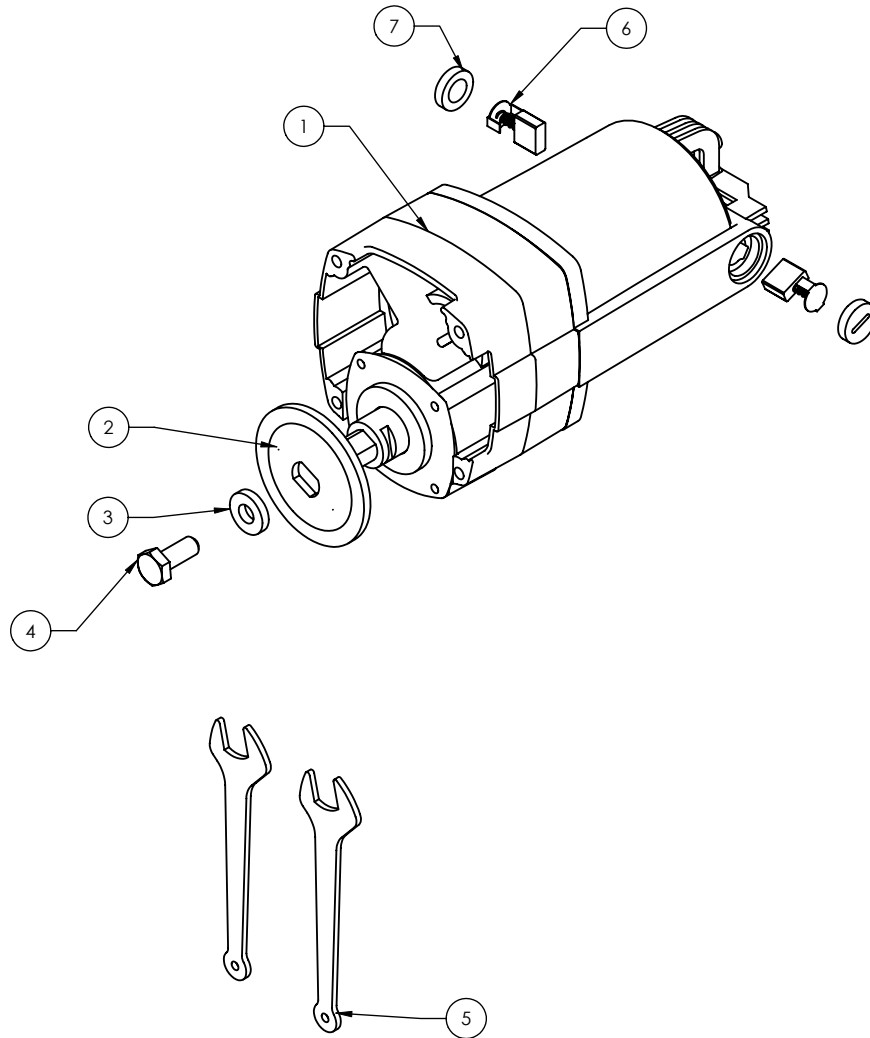
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	TABLE, SIDE	166676	1
2	SCREW, SOCKET HD SET, M5 X 6 MM	165350	2

PARTS LIST - ASSY, RIP GUIDE - P/N 165356



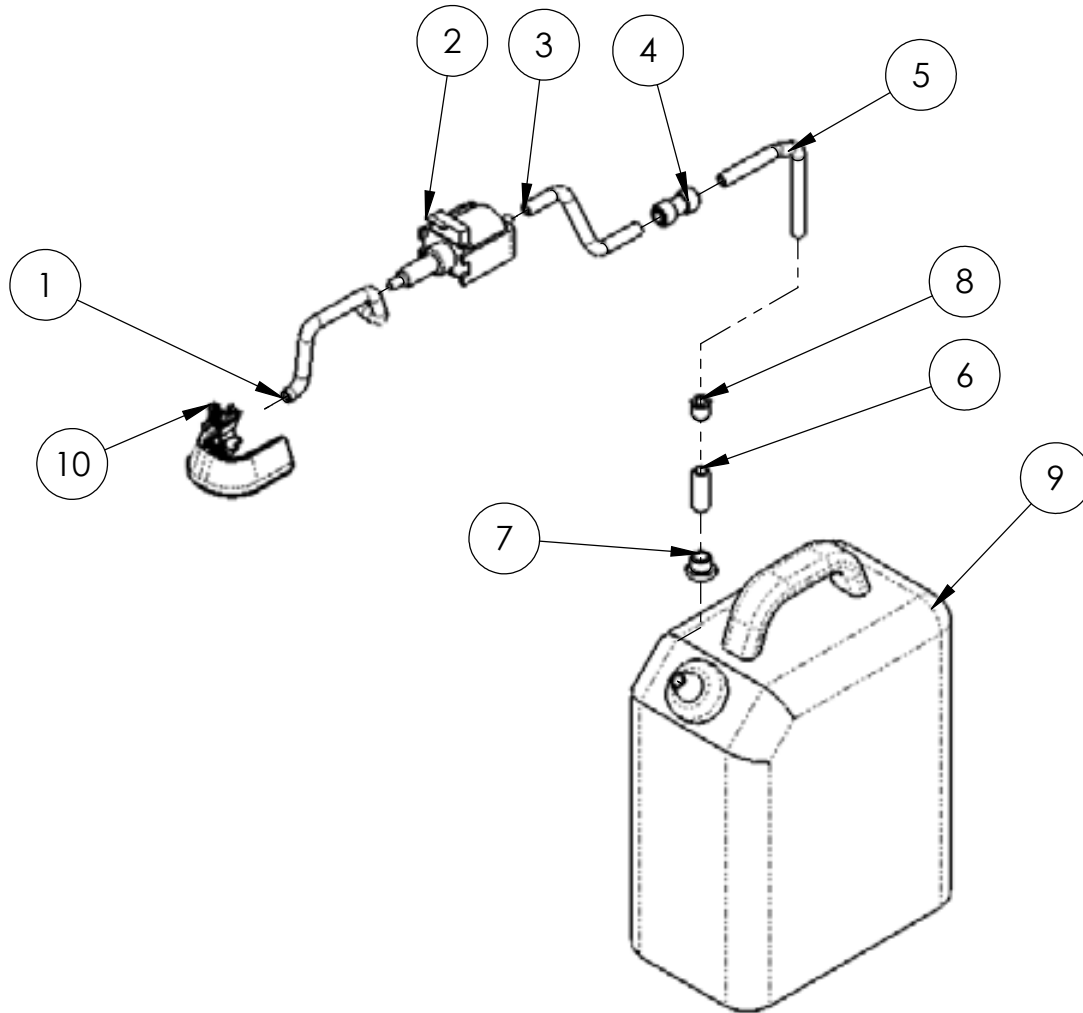
ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	SCREW, SOCKET HD SET, M4 X 6 MM	165313	1
2	SCREW, SHOULDER, SOCKET CAP, M6 X 8 MM	154363	1
3	WASHER, FLAT, M8	164855	1
4	KNOB	165360	2
5	GUIDE	165357	1
6	SCREW, HEX HD CAP, M4 X 10 MM	165362	2
7	SEAT, CLAMPING	165361	1
8	BASE	165359	1

PARTS LIST - MOTOR & ACCESSORIES - P/N 166232-C



ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	MOTOR	157801-C	1
2	FLANGE, OUTER	158105	1
3	WASHER, M10	166134	1
4	SCREW, HEX HD CAP, M10 X 20 MM	152272	1
5	WRENCH, 17 MM	158110	2
6	BRUSH, MOTOR	166228	2
7	CAP, MOTOR BRUSH	166229	2

PARTS LIST - MISTING KIT - P/N 166788



ITEM NO.	DESCRIPTION	PART OR IDENTIFYING NO.	QTY. REQ.
1	TUBING, POLYURETHANE, 3/8 X .245 X 19	165008	1
2	PUMP	164693	1
3	TUBING, POLYURETHANE, 3/8 X .245 X 24	165005	1
4	COUPLING, PUSH-TO-CONNECT, 3/8 X 3/8	165004	1
5	TUBING, PVC, 3/8 X 1/4 X 51"	164692	1
6	TUBING, PVC, 1/2 X 3/8 X 1-1/2	165001	1
7	FILTER	164691	1
8	GROMMET	165003	1
9	CONTAINER, WATER	165002	1
10	MODULE, MISTING	164782	1
11	CARTON, OUTER (NOT SHOWN)	152566	1
12	INSTRUCTION SHEET (NOT SHOWN)	166788-IS	1

ACCESSORIES, ORDERING AND RETURN INFORMATION

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 American Express, VISA or MasterCard.

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

- The Model Number of the machine
- The Serial Number of the machine
- Where the machine 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** or **(310) 257-2845**.

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 items, they must have been purchased within the previous twelve (12) months.

- Have the Model Number of the machine
- Have the Serial Number of the machine
- Have the location of where the machine was purchased and when
- Contact Customer Service for approval to return the item(s)
- 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 asking for Customer Service. For technical questions, call **(800) 474-5594** or **(310) 257-2845**.

Packaging Instructions

- Package the part in its original container or one of comparable size
- Ensure all parts are secured in the packaging to prevent moving

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. 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) 845-3729**

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

E-mail: **Customer_Service@MKDiamond.com**

Customer Service Hours: **Monday through Friday, 6AM-5PM 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.

TX-3 TILE SAW
OPERATION & PARTS MANUAL
DOCUMENT NO. I65808



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