

## *Tile Master Plus*

*TM1-HT*



### **Operator's manual**

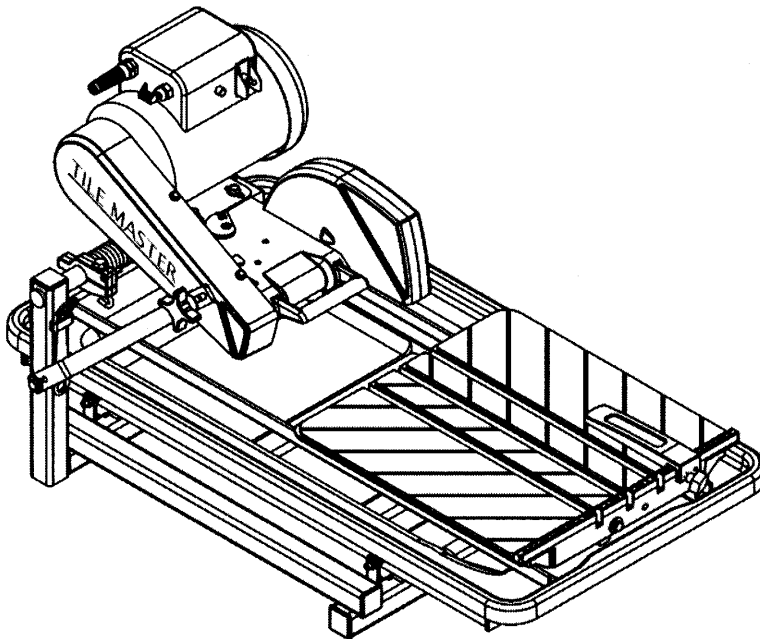
Read these instructions carefully and make sure you understand them before using the Tile Master Plus.

### **Manual de Instrucciones**

Antes de utilizar Tile Master Plus lea bien el manual de instrucciones hasta comprender su contenido.

### **Manuel d'utilisation**

Lire attentivement et bien assimiler le manuel d'utilisation avant de se servir Tile Master Plus.





EVERY MACHINE IS THOROUGHLY TESTED BEFORE LEAVING THE FACTORY. EACH MACHINE IS SUPPLIED WITH A COPY OF THIS MANUAL. OPERATORS OF THIS EQUIPMENT MUST READ AND BE FAMILIAR WITH THE SAFETY WARNINGS. FAILURE TO OBEY WARNINGS MAY RESULT IN INJURY OR DEATH. FOLLOW INSTRUCTIONS STRICTLY TO ENSURE LONG SERVICE IN NORMAL OPERATION.

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## NOTE:

**Part Numbers that have an ASTERISK (\*) suffix may not be active 9-digit numbers. The '542' prefix have been added to current 6-digit part numbers and '0' to 8-digit part numbers.**

# Symbol Definitions

## Symboles

### Definición De Los Simbolos

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- Please read the instructions for use prior to operating the machine for the first time.
- Avant toute mise en service, lire attentivement la notice et se familiariser avec la machine.
- Antes de la puesta en marcha, lea detenidamente las instrucciones y familiarícese con la máquina.



- Mandatory
- Obligatoire
- Obligatorio



- Indication
- Indicazione
- Indicación



- Prohibition
- Interdiction
- Prohibición



- Warning Triangle
- Triangle d'avertissement
- Triángulo De Advertencia



- Wear Eye Protection
- Port obligatoire des lunettes de protection
- Usar Gafas De Protección



- Wear Head Protection
- Port Obligatoire Du Casque Et Des Écouteurs
- Usar Casco De Protección



- Wear Breathing Protection
- Port obligatoire d'un masque respiratoire protecteur
- Usar Máscara De Protección



- The Use Of Ear Protection Is Mandatory
- Port obligatoire da casque antibruit
- Es Obligatorio El Uso De Protección Auditiva



- Wear a Hard Hat
- Port Obligatoire Da Casque Antibruit
- Usar Casco Duro



- Wear Safety Shoes
- Port obligatoire des chaussures de sécurité
- Usar Zapatos De Seguridad



- Wear Appropriate Clothing
- Port obligatoire de la tenue appropriée
- Usar Ropa Adecuada



- Remove The Blade Prior To Hoisting, Loading, Unloading And Transporting The Machine On Jobsite.
- Démontage Obligatoire Du Disque En Cas D'élingage, De Chargement, De Déchargement Et DeTransport Sur Le Chantier.
- Desmontar El Disco Antes De Desplazar, Cargar, Descargar O Transportar La Máquina En La Obra.



- Motor Off
- Arrêt Du Moteur
- Parar El Motor



- Use In Well Ventilated Area
- A Utiliser Dans Un Endroit Bien Ventilé
- Usar En Una Área Bien Ventilada



- Do Not Use In Flammable Areas
- Ne Pas Utiliser Dans Des Ambiances Comportant Un Risque D'incendie
- No Usar In Áreas Inflamables



- Machinery Hazard, Keep Hands And Feet Clear.
- Danger! Rester À Distance De La Machine
- Máquina Peligrosa - Mantenga Manos Y Pies Alejados De La Máquina



- No Non-working Personnel In Area
- Zone Interdite Au Personnel Non-Ouvrier
- Prohibido Para Personas Ajenas A La Obra



- No Smoking
- Défense De Fumer
- No Fumar



- Do Not Operate Without All Guards In Place
- Ne Pas Utiliser Avant D'avoir Installé Toutes Les Protections
- No Operar Sin Todas Las Protecciones In Su Sitio



- Always Keep the Blade Guards In Place
- Toujours Vérifier Que Les Protections De Disque Sont Bien En Place
- Mantenga Siempre Las Protecciones De La Hoja En Su Sitio



- Keep Work Area Clean/Well Lit, Remove All Safety Hazards
- La Zone De Travail Doit Toujours Être Propre, Bien Éclairée Et Ne Présenter Aucun Risque
- Mantenga Limpio El Sitio De Trabajo/Bien Iluminado, Elimine Todos Los Riesgos De Seguridad



- Dangerously High Noise Level
- Niveau De Bruit Dangereux
- Nivel De Ruido Elevadamente Peligroso



- Pay Extreme Attention To The Care And Protection Of The Machine Before Starting Up
- Accorder Une Très Grande Attention À La Sécurité Et À La Préparation De La Machine Avant De Commencer À Travailler
- Ponga Extrema Atención Al Cuidado Y Preparación De La Máquina Antes De Ponerla En Marcha



- Remove Tools From Area and Machine
- Enlever Les Outils De La Zone De Travail Et De La Machine
- Elimine Las Herramientas Del Área Y De La Máquina



- Electrical Switch - OFF
- Interrupteur électrique-arrêt
- Conmutador De Apagado Eléctrico



- Electrical Switch - ON
- Interrupteur électrique-marche
- Conmutador De Encendido Eléctrico



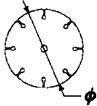
- Electrical Switch - Start
- Interrupteur électrique-démarrage
- Conmutador De Arranque Eléctrico



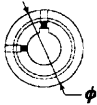
- Repairs Are To Be Done By An Authorized Dealer Only
- Les réparations ne peuvent être exécutées que par un distributeur agréé
- Las Reparaciones Deben Ser Efectuadas Únicamente Por Un Distribuidor Autorizado



- Diamond Blade
- Disque diamanté
- Sierra Diamantada



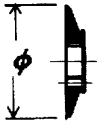
- Blade Diameter
- Diamètre De Disque
- Diámetro De La Hoja



- Pulley Diameter
- Diamètre De Poulie
- Diámetro De La Correa



- Number of Revolutions Per Minute, Rotational Speed
- Nombre De Tours/Minutes, Vitesse De Rotation
- N° De Revoluciones Por Minuto, Velocidad De Rotación



- Blade Flange Diameter
- Diamètre Du Flaque De Disque
- Diámetro De La Brida De La Hoja



- Blade Cutting Depth
- Profondeur De Coupe Du Disque
- Profundidad De Corte De La Hoja



- Machine Mass (lbs)
- Poids De La Machine (en lbs)
- Masa De La Máquina (lbs)



- Electric Motor
- Moteur Électrique
- Motor eléctrico

## WARNING

### HEARING HAZARD

DURING NORMAL USE OF THIS MACHINE, OPERATOR MAY BE EXPOSED TO A NOISE LEVEL EQUAL OR SUPERIOR TO **85 dB (A)**

## ATTENZIONE!!!

RISCHIO DE LESIONE ALL'APPARATO Uditivo  
NELLE NORMALI CONDIZIONI DI UTILIZZO,  
QUESTA MACCHINA PUÒ COMPORTARE PER L'OPERATORE ADDETTO UN ESPOSIZIONE  
ACUSTICA DI LIVELLO PARI O SUPERIORE A

**85 dB (A)**

## ATENCION

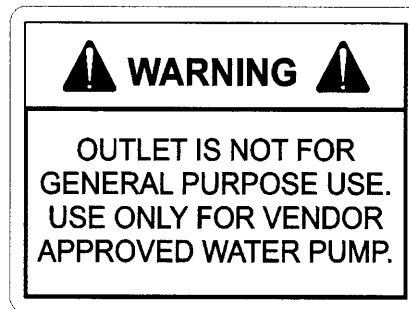
### RIESGO DE DAÑO AUDITIVO

EN CONDICIONES NORMALES DE UTILIZACIÓN, EL OPERADOR DE ESTA MÁQUINA PUEDE  
ESTAR EXPUESTO A UN NIVEL DE RUIDO IGUAL O SUPERIOR A **85 dB (A)**

# DECAL DESCRIPTIONS & LOCATION



542 18 70-43\*  
 Location: Top of Belt Guard



542 18 92-47\*  
 Location: Elec. Motor



542 04 63-26\*  
 Location: Motor Assembly

**GOOD MOTOR PERFORMANCE DEPENDS  
 ON PROPER VOLTAGE. EXTENSION  
 CORDS THAT ARE TOO LONG AND/OR  
 SMALL REDUCE VOLTAGE TO MOTOR  
 UNDER LOAD. USE EXTENSION CORDS  
 NO SMALLER THAN INDICATED BELOW.**

MOTOR HP	50' CORD		75' CORD		100' CORD	
	115V	230V	115V	230V	115V	230V
1	#12	#14	#10	#14	# 8	#14
1 ½	#10	#14	#10	#14	# 8	#14
2	#10	#12	# 8	#12	# 8	#12
3	# 8	#10	# 8	#10	# 8	#10
5		# 8		# 8		# 8

046327

542 04 63-27\*  
 Location: Motor Assembly

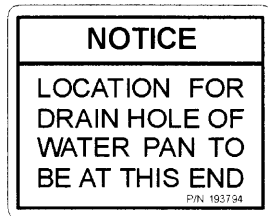
# DECAL DESCRIPTIONS & LOCATION



542 18 90-24  
Location: Front of Pan

# TILE MASTER

542 17 10-26\*  
Location: Blade Guard & Belt Guard Sides (x2)



542 19 37-94\*  
Location: On Drain Plug End of Frame



542 18 90-27\*  
Location: Belt Guard - Top



542 18 90-25\*  
Location: Blade Guard - Outer



542 18 90-26\*  
Location: Blade Guard - Inner

## SAFETY FIRST!



**WARNING: FAILURE TO COMPLY WITH THESE WARNINGS AND OPERATING INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS BODILY INJURY.**

### DO

- DO read this entire operator's manual before operating this machine. Understand all warnings, instructions, and controls.
- DO keep all guards in place and in good condition.
- DO wear safety approved hearing, eye, head and respiratory protection.
- DO read and understand all warnings and instructions on the machine.
- DO read and understand the symbol definitions contained in this manual.
- DO keep all parts of your body away from the blade and all other moving parts.
- DO know how to stop the machine quickly in case of emergency.
- DO turn the "ON/OFF" switch to the "OFF" position prior to connecting the machine to the power source.
- DO inspect the blade, flanges and shafts for damage before installing the blade.
- DO use the blade flange size shown for each blade size.
- DO use only the blade flanges supplied with the saw. Never use damaged or worn blade flanges.
- DO use only blades marked with a maximum operating speed greater than the blade shaft speed. Verify speed by checking blade shaft rpm and pulley diameters and blade flange diameters.
- DO verify saw drive configuration by checking blade shaft RPM, pulley diameters, and blade flange diameter.
- DO read all safety materials and instructions that accompany any blade used with this machine.
- DO inspect each blade carefully before using it. If there are any signs of damage or unusual wear, **DO NOT USE THE BLADE.**
- DO mount the blade solidly and firmly. Wrench tighten the arbor nut.
- DO make sure the blade and flanges are clean and free of dirt and debris before mounting the blade on the saw.
- DO use the correct blade for the type of work being done. Check with blade manufacturer if you do not know if blade is correct.
- DO use caution and follow the instructions when loading and unloading the machine.
- DO operate this machine only in well ventilated areas.
- DO instruct bystanders on where to stand while the machine is in operation.
- DO establish a training program for all operators of this machine.
- DO clear the work area of unnecessary people. Never allow anyone to stand in front of or behind the blade while the motor is running.
- DO make sure the blade is not contacting anything before starting the motor.
- DO use caution when lifting and transporting this machine.
- DO always tie down the machine when transporting.
- DO use caution and follow instructions when setting up or transporting the machine.
- DO have all service performed by competent service personnel.
- DO make sure electric powered machines are plugged into a properly grounded circuit.
- DO make sure power cords are the proper size and in good condition.
- DO maintain a secure grip on the material being cut.
- DO clean the water tray frequently.
- DO verify the blade arbor hole matches the machine spindle before mounting the blade.
- DO clean the machine after each day's use.
- DO follow all electrical codes in your area.
- DO consider work area environment. Don't expose power tools to rain. Don't use power tools in wet locations.
- DO use caution to guard against electric shock. Prevent body contact with grounded surfaces (i.e., pipes, radiators, ranges, refrigerators).
- DO use correct voltage and proper extension cords. Never carry tool by cord or yank it to disconnect it from receptacle. Keep cord away from heat, oil and sharp edges.
- DO always carry the machine with the motor stopped.
- DO disconnect tools from power source when not in use, before servicing and when changing accessories.
- DO carefully maintain and clean for better and safer performance. Follow instructions for changing accessories. Inspect tool cords periodically and, if damaged, have repaired by authorized service facility.
- DO only cut in a straight line.
- DO only saw as deep as the job specifications require.
- DO always give a copy of this manual to the equipment user. If you need extra copies, call TOLL FREE 1-800-288-4003.



# SAFETY FIRST!



**WARNING: FAILURE TO COMPLY WITH THESE WARNINGS AND OPERATING INSTRUCTIONS COULD RESULT IN DEATH OR SERIOUS BODILY INJURY.**

## DO NOT

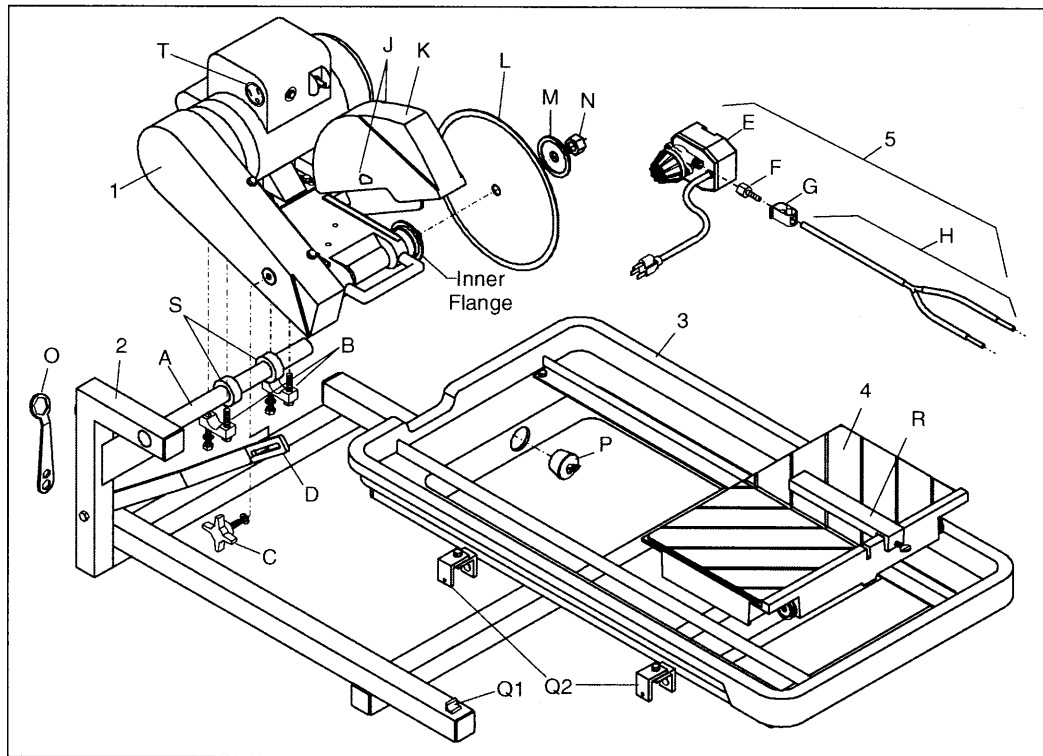
- DO NOT operate this machine unless you have read and understood this operator's manual.
- DO NOT operate this machine without the blade guard, or other protective guards in place.
- DO NOT stand behind or in front of the blade path while the motor is running.
- DO NOT leave this machine unattended while the motor is running.
- DO NOT operate this machine when you are tired or fatigued.
- DO NOT use a wet blade without adequate water supply to the blade.
- DO NOT exceed maximum blade speed shown for each blade size. Excessive speed could result in blade breakage.
- DO NOT operate the machine if you are uncertain of how to run the machine.
- DO NOT use damaged equipment or blades.
- DO NOT touch or try to stop a moving blade with your hand.
- DO NOT cock, jam, wedge or twist the blade in a cut.
- DO NOT transport a cutting machine with the blade mounted on the machine.
- DO NOT use a blade that has been dropped or damaged.
- DO NOT use carbide tipped blades.
- DO NOT use abrasive blades.
- DO NOT use conventional abrasive blades with water.
- DO NOT touch a dry cutting diamond blade immediately after use. These blades require several minutes to cool after each cut.
- DO NOT use damaged or worn blade flanges.
- DO NOT allow other persons to be near the machine when starting or when the machine is in operation.
- DO NOT operate this machine in an enclosed area unless it is properly vented.
- DO NOT operate this machine in the vicinity of anything that is flammable. Sparks could cause a fire or an explosion.
- DO NOT allow blade exposure from the guard to be more than 180 degrees.
- DO NOT operate this machine with the belt guard or blade guard removed.
- DO NOT operate this machine unless you are specifically trained to do so.
- DO NOT use a blade that has been over heated (Core has a bluish color).
- DO NOT jam material into the blade.
- DO NOT grind on the side of the blade.
- DO NOT lay power cords in or near the water.
- DO NOT replace the motor with any motor that does not have a special grounding connection.
- DO NOT cut deeper than 1" per pass with a dry blade. Step out to achieve deeper cuts.
- DO NOT start cutting with a saw until you have a clear work area and secure footing.
- DO NOT operate this machine while using drugs or alcohol.

\*\*\*\*\*

This saw was designed for certain applications only. DO NOT modify this saw or use for any application other than for which is it was designed. If you have any questions relative to its application, DO NOT use the saw until you have written Electrolux Construction Products and we have advised you.

Electrolux Construction Products  
17400 West 119th Street  
Olathe, Kansas 66061  
In USA 1-800-288-4003

# FIGURE 1

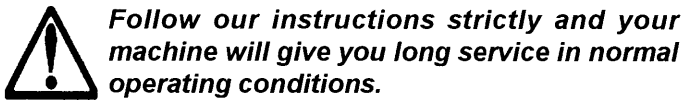


- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>A. Pivot Bar</li> <li>B. Bearing Caps &amp; Fasteners</li> <li>C. Locking Knob</li> <li>D. Lockbar</li> <li>E. Water Pump</li> <li>F. Hose Barb</li> <li>G. Water Valve</li> <li>H. Water Tube Assembly</li> <li>J. Water Tube Ports</li> <li>K. Blade Guard</li> <li>L. Blade</li> <li>M. Blade Flange, Outer</li> <li>N. Nut, B/S</li> <li>O. Wrench, B/S</li> <li>P. Drain Plug</li> <li>Q1. Sliding Pan Stop</li> <li>Q2. Water Pan Assembly Guides</li> <li>R. Rip Guide</li> <li>S. Set Collars</li> <li>T. Electrical Receptacle<br/>(For Water Pump Only)</li> </ul> | <ul style="list-style-type: none"> <li>1. Cutting Head Assembly: Includes water tube assembly (H)}</li> <li>2. Frame Assembly</li> <li>3. Water Pan Assembly</li> <li>4. Conveyor Cart Assembly Carton {Cart Assembly (4) and Rip Guide (R)}</li> <li>5. Water Pump and Accessory Carton: Includes Water Pump (E), Hose Barb (F), Water Valve (G), 15/16" Wrench (O), Drain Plug (P), Locking Knob (C) with 5/16" Flatwashers, and Bearing Caps (B) with 5/16" Cap Screws and Lockwashers.</li> <li>6. Literature Assembly Envelope: (Not shown) Includes Operation Instructions and Parts List, Warranty Card, and Electric Motor Service Center Booklet.</li> </ul> |
|---|---|



These signs will give advice for your safety

**Before leaving our factory every machine is thoroughly tested.**



## 1 Features

**Use:** Sawing of any kind of tile, up to 24" (610mm).  
Diagonal on 16" x 16" (406 x 406mm) tile.  
**Tools:** Rip Guide comes standard on all tile saws.  
See **Tile Cutting Accessories** on page 19.

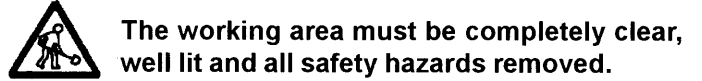
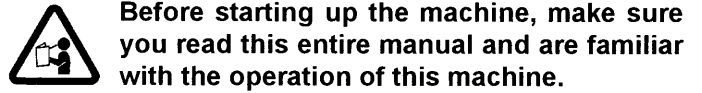
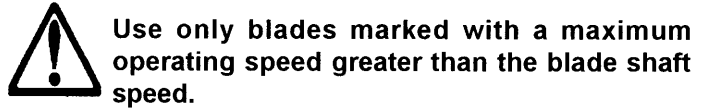
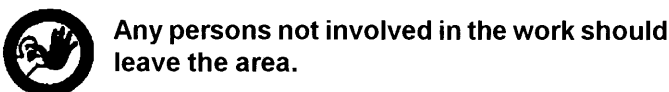
*(For information or availability of other accessories contact your Target supplier.)*

**Blade Capacity:** Rim Ø 10" (254mm) - bore 5/8" (15,9mm).  
**Profile Wheel:** Rim Ø 6" (152mm) - bore 5/8" (15,9mm).  
**Blade Rotation:** Counter-Clockwise (CCW).  
**Depth of Cut:** 3-3/4" (95mm) with 10" (254mm) blade.

<b>Horsepower:</b>	1-1/2	1-1/2
<b>Voltage:</b>	115	115/230
<b>Hertz:</b>	60	60
<b>F.L. Amperages:</b>	14.6	17.2/8.6

<b>Blade Shaft RPM:</b>	2760	3880
<b>Weight: lb. (kg.)</b>	105 (48)	110 (50)
<b>Dimensions - L x W x H:</b>	in 38" x 23-1/2" x 22"	
	(mm) (965 x 579 x 559)	

**Conveyor Cart - L x W:** in (mm) 16-1/2" x 16" (419 x 406)  
**Pan Holding Capacity:** 6.5 gallons (24.7 liters)  
**Water Pump Output:** 100 gal/hr. (378 l/hr.) Standard  
300 gal/hr. (1135 i/hr.) Optional



## 2 Benefits

- The new, improved blade guard offers simplified blade installation and removal - maximum 10" (254mm) blade capacity. The external water tube assembly (H) is removable for easy maintenance.
- 1-1/2 HP, High Torque (HT) 115V/60/1 motor on standard saw.
- The dependable, high volume, submersible coolant pump features a screened intake.
- The motor and pump power cords are securely mounted directly into the Motor Housing (O).
- The removable Drain Plug (P) at the front end of the pan permits easy coolant draining and quick sludge clean out. The Water Pan (3) is removable for easy cleaning.
- The free-rolling Conveyor Cart (4) is aligned for straight, smooth cuts. The Backstop with ruler allows fast mounting and adjustment of the Rip Fence (R) and optional accessories. The Cart comes standard with a 5-1/4" end Extension for supporting longer tile.
- Makes diagonal cuts on 16" x 16" (406 x 406 mm) tile. Can make 24" (610mm) rip cuts.
- Full-size belt shield and belt protection.
- The adjustable pan allows the operator to cut tile comfortably with a full view and control of work with minimum stretching.

## 3 Machine Set-Up

See Figure 1

- Remove all items from the shipping carton and identify:
  1. Cutting Head Assembly (1): Includes Water Tube Assembly (H)
  2. Frame Assembly (2)
  3. Water Pan Assembly (3)
  4. Conveyor Cart Assembly {Cart Assembly (4) and Rip Guide (R)}

5. Water Pump and Accessory Carton: Includes Water Pump (E), Hose Barb (F), Water Valve (G), 15/16" Wrench (N), Drain Plug (P), Locking Knob (C) with 5/16" flatwasher, Bearing Caps with 5/16" Capscrews & Flatwashers.
6. Literature Assembly Envelope

**NOTE:** Check the carton and all packing filler for loose parts and optional accessories (if ordered).

**IF ANY PARTS ARE MISSING OR DAMAGED, PLEASE CONTACT YOUR TARGET CUSTOMER SERVICE FOR INSTRUCTIONS. CALL 1-800-288-5040**

- Set the Frame Assembly (2) on a flat surface or on a **FELKER®** folding stand.
- Install the Water Pan Assembly (3) between the four Guides (Q) on the Frame Assembly (2). Locate the Pan with the Drain Plug (P) at the operating end with the two Stops located on the bottom of the Pan (3) straddling the front leg of the Frame. The Water Pan Assembly (3) should slide freely back and forth on the Guides (Q) with little lateral movement. Adjust if needed.

### **Install the Cutting Head Assembly (1):**

1. Set the Cutting Head Assembly (1) on the pivot bar up between the two Set Collars (A). The set collars have been pre-set at the factory to align the blade with the slot in the center of the cart; it can be adjusted if needed.
2. Using the 5/16" Capscrews and Lockwashers provided, install the two Bearing Caps (B) to the bottom of the Cutting Head. Next, tighten the Capscrews with the wrench provided to securely hold the Cutting Head (1) onto the pivot bar, but loose enough so it can be moved up or down.
3. Insert the Locking Knob (C) with 5/16" flatwasher through the slotted Lockbar (D) into the tapped hole in the belt guard. This is used to set the cutting depth of the blade. See section 5.

### **Water Pump Assembly (5) Set-up:**

1. Remove the Water Pump (E), Hose Barb (F), the Water Control Valve (G) and Water Tube Assembly (H) from their carton. Thread the Hose Barb (F) on the water pump outlet, hand tighten.
2. Slide the Control Valve (G) onto the flexible plastic tubing and push the open end onto the Hose Barb (F).
3. Set the Water Pump Assembly (5) in the deep end of the pan beneath the belt guard. **Note: The water pump inlet screen must be submerged in order to properly pick up water.**
4. Place the Water Tube Assembly (H) to the back of the Blade Guard (J) and insert the two 1/4" plastic nozzles into the two Ports (I) on the side of the Blade Guard (J). To prevent interference with the full movement of the cart, it is recom-

mended that the tubing and electrical cord exit out the back through the indented area of the pan.

5. Insert the male plug into the Receptacle (O) on the motor. The Water Pump (E) will start when the motor is turned on. For dry cutting, the water pump should be unplugged or removed to prevent damage to the pump.

**NOTE: THE MOTOR WATER PUMP OUTLET IS NOT TO BE USED AS A GENERAL PURPOSE CONVENIENCE OUTLET. USE FOR CONNECTION OF THE SUPPLIED WATER PUMP ONLY.**

### **WATER PUMP SAFETY GUIDELINES**



**Always plug the saw power cord into a GFCI outlet when using. If a GFCI type outlet is not available, use a plug-in type GFCI plugged into a properly grounded outlet. Do not use any temporary plug adapters.**

- The water pump is equipped with a ground electrical plug, to reduce the risk of possible shock. Be sure to connect to a properly grounded type receptacle.
- Never pick the water pump up out of the water when it is plugged in.
- **DO NOT EVER** use the water pump to pump anything but water.
- Never service the pump when it is still plugged in.
- Never let the pump operate dry. It is self-cooled by pumping water. Dry use will cause the pump to fail.
- Maintain regularly and clean out debris from intake screen.
- Check the power cord for nicks or frays and never try to alter the power cord in any way.

### **Install the Cutting Blade:**



**Always set the Motor Switch to OFF prior to mounting the blade.**

1. Be sure you are using the correct blade for the material being cut. For example, blades are available for cutting materials such as wall tile, quarry tile, marble, slate and similarly hard materials. For the best results, always use genuine **FELKER®** diamond blades. Contact your nearest dealer to select the correct blade for your specific cutting needs.
2. Rotate the Blade Guard (J) fully up, tightening the wing nut if needed to hold it in the fully raised position.
3. Remove the Blade Shaft Nut (L) and the Outer Blade Flange (M2).
4. Check the blade for Counter Clockwise rotation (CCW) and install on the spindle shaft.



**Rotation direction is indicated by an arrow on one side of the blade. Make sure the blade contact surfaces are clean.**

5. Install the Outer Flange (M2) with the large diameter against the Blade (K). Tighten the Blade Shaft Nut (L) with the 15/16" Wrench (N) provided.
6. Lower the Blade Guard (J) and retighten the wing nut to securely hold the guard in place.

- Install the Drain Plug (P) into the front end of the pan and fill with clean water until inlet filter of water pump is covered; about 6.5 gal. (25 l).
- Adjust the Pan Assembly (3) to accommodate the size of the tile to be cut and to obtain the most comfortable position for the operator.
  1. When cutting smaller tile units, adjust the pan all the way to the rear. The operator has full view and control of the work with minimum stretching.
  2. For cutting intermediate sized units, such as 8" or 10" tile, the pan can be placed somewhere between the maximum forward and maximum rear positions.
  3. When cutting larger units, the pan should be moved to the maximum forward position, thus giving the operator the best and most comfortable position, even when cutting 12" x 12" or larger units.
  4. When cutting smaller tile, adjust cart stop to limit cart travel. When cutting larger tile, adjust cart stop to allow for extended travel.

#### 4 OPERATING PROCEDURE



**WARNING:** Read the Operating Procedure completely before operating your tile saw.



Take into account the working conditions from the health and safety point of view.



Always pay extreme care and attention to the preparation of the machine before starting.



Remove all wrenches and tools from the machine.



Always keeps blade guard in place.

- Fill the Pan (3) with enough water to fully submerge the water pump screen. It takes approximately 6-1/2 gallons (25 l) to fill the Pan.
- Before connecting the power cord:
  - \* Check the Blade Shaft Nut (L) to be sure it is tight and that the Blade (K) rotates freely.



**WARNING:** Check that the ON/OFF switch is in the OFF position. Then connect the power cord to a properly grounded outlet of the correct voltage. See the decal near the power cord for power requirements. If needed, use the correct size three (3) conductor extension cord to avoid excessive voltage drop. Never use lamp cord type extensions. Refer to the



#### **Recommended Extension Cords chart below.**

- Turn the switch to **ON**. The blade should turn counter-clockwise, when looking at the blade guard side. The water pump will start automatically when the motor starts. Adjustment of the water supply may be made by means of the Control Valve(G).
- Follow the blade manufacturer's recommendations for dry or wet cutting. Wet cutting blades can be damaged or destroyed without sufficient water. Only blades specifically designed for dry cutting can be used without coolant.

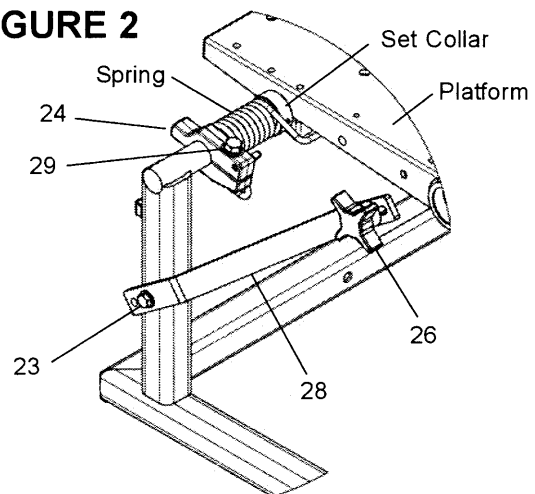


**The water supply should be adequate, with water flowing on both sides of the blade. Keep the water clean and make certain the WATER LEVER IS ALWAYS ABOVE THE PUMP INLET. Do not run the water pump dry!! Unplug for dry cutting.**

- For straight cuts, position the tile squarely against the back edge of the conveyor cart. Keep the cart clean and free of cuttings. The standard Rip Guide (R) is used.
- Move the conveyor cart slowly and carefully until the blade is in contact with the tile. The blade needs a chance to "break-in" or "wear-in" slightly. It may take about ten cuts to open a new blade for best cutting.

#### 5 ADJUSTABLE LOCKBAR WITH DEPTH LINKING PROTECTION

**FIGURE 2**



A Lockbar (28) is used to set the blade depth during cutting. The lockbar has three (3) holes at the lower end for use with 10", 8" and 6" blades.

These are used as depth-limiting settings that, if used with the correct blade diameter, will protect the rolling cart from being cut by the blade.

The three (3) holes in Lockbar:

- 10 - The lowest hole is for use with a 10" diameter blade.
- 8 - The middle hole is for use with an 8" diameter blade.
- 6 - The uppermost hole is for use with a 6" diameter blade or profile wheel.

The **Tile Master** is shipped standard set-up for a 10" diameter blade. To change the setting, locate the capscrew (23) used as the pivot, loosen and remove the Lock Nut. Set the Lockbar (28) at the proper hole for blade size. Tighten the fasteners so that the Lockbar (28) is free to pivot. Check the setting by loosening the Knob (26) and lowering the head fully down into the table slot. The blade segment should be below the table surface, but not cutting into the table. (See also Section 10, Plunge Cutting.)

## 6 MANUAL THERMAL OVERLOAD

The motor is equipped with a manual overload protection reset button. If the motors overheats, the red reset button will "pop out" to open the motor circuit; stopping the motor and water pump. If this occurs, the motor ON/OFF switch must be set to OFF. After the motor cools, push in the reset button. When it stays in, the motor can be restarted.

## 7 RECOMMENDED EXTENSION CORDS



Good motor performance depends on proper voltage. Extension cords that are too long and/or too small in wire gauge reduce the voltage to the motor under load. Use extension cords no smaller than indicated below.

MOTOR		F.L. AMPS		50' Cord		75' Cord		100' Cord	
HP	RPM	115V	230V	115V	230V	115V	230V	115V	230V
1-1/2	1725	14.6		#12		#10		#8	
1-1/2	3450	17.2	8.6	#10	#14	#10	#14	#8	#14

## 8 ALIGNMENT PROCEDURES

Your **Tile Master** tile saw is factory assembled and aligned prior to shipment to ensure accurate cuts when your saw is delivered. However, since **FELKER®** cannot control rough handling during shipping, it is suggested that the alignment be checked. If the saw is found in need of adjustment, refer to the appropriate section(s) below.

There are two basic alignment checks for the **Tile Master XL** and any adjustments made must follow these procedures to ensure that the unit functions freely.

Adjustment tools required: Carpenter's Square, two (2) 7/16" wrenches, and 5/32" hex key.

### 1. Check the Blade in Slot Alignment

- \* The Blade (K) should be centered in the Conveyor Cart (4) slot.
- \* Set-up your saw as described above and move the Conveyor Cart (4) back and forth from the front to the rear of the Pan (3). If the Blade (K) contacts either side of the slot, the Cutting Head Location Adjustment must be performed.

### Cutting Head Location Adjustment (See Figs 1 & 3)

- \* The Pivot Cutting Head Assembly (1) is located between the Set Collars (A-B). Using a 5/32"

hex key, loosen both Set Collars. Move the Head Assembly (1) along the Pivot Bar (S) until the Blade (K) no longer contacts the slot. Re-locate the Set Collars against the sides of the Pivot Cutting Head again and retighten the screws.

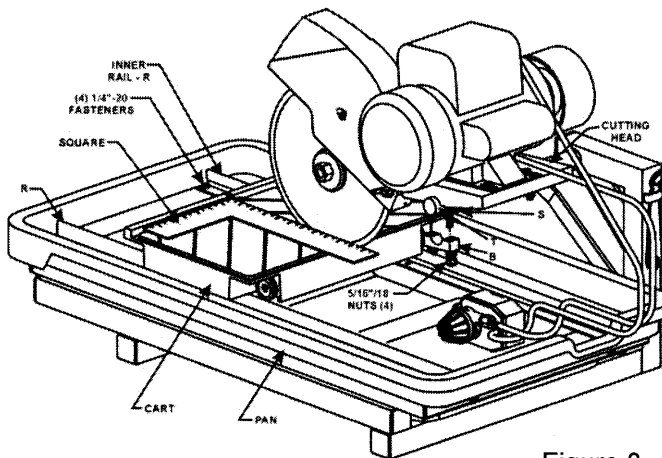


Figure 3

### 2. Check the Parallel Alignment (See Figure 3)

- \* The Conveyor Cart (4) should travel parallel to the plane of the Blade (K).
- \* Place a Square rule against the backstop, lightly in contact with the Blade (K). The blade surface should be parallel to the square; i.e., no gap between the blade and the square at either the front or back edge of the blade. Next, holding the square firmly, traverse the cart fore and aft. The blade should remain parallel to the square, staying slightly in contact with it throughout its full travel. If the blade does not stay in contact with the square, the Parallel alignment must be performed.

### Parallel Alignment

- \* The parallel tracking of the cart can be adjusted by moving the rails on which the cart travels. The mounting holes in the pan are slotted to accommodate this adjustment.
- \* Align the Inner Rail first. Loosen the four (6) 1/4"-20 fasteners (7/16" wrenches) locating the two (2) Rails (R) so that both rails are free to move. Move the end(s) of rail until the square is flush with the blade as described above. Tighten the fasteners of this rail and recheck the alignment. Once alignment has been made, move the cart fore and aft to locate the second rail parallel to the first. Tighten the remaining two fasteners.

## 9 PROFILE WHEEL SET-UP AND USE

See Figure 1

The **Tile Master** is designed for use with a **FELKER®** 6" Profile Wheel, such as P/N 542 62 10-81\* (3/8" Radius) or 542 62 10-82\* (1/2" Radius).

- Raise the blade guard. Remove the spindle nut and

outer flange. Remove the tile saw blade if one has been installed. (Refer to Section 5, Adjustable Lockbar, if needed)

- Install the profile wheel onto the spindle shaft up against the inner flange with the working surface to the outside.
- Secure into place by reversing the outer flange and tightening the spindle nut. Lower the Blade Guard (J) back down over the profile wheel.
- Locate the material for profiling:
  1. Set the edge of the part to be shaped parallel to the wheel.
  2. Locate the material under the wheel. Pull the Conveyor Cart (4) with the material from under the wheel to set proper cutting height.
  3. Loosen the Locking Knob (C) and lower the Cutting Head (1) so that the wheel just slightly makes contact with the material.
  4. Secure the Cutting Head (1) into position with the Locking Knob (C) for cutting.
  5. **Note:** Profiling usually takes several light passes to produce the best results. Set lower each time until the desire depth has been reached.

## 10 PLUNGE CUTTING

See Figure 2

Spring Force can be adjusted by rotating Spring Anchor (24). Loosen .375-16 NC Bolt (29) and rotate Spring Anchor (24) to increase or decrease Spring Force. Tighten Bolt to secure Anchor to Pivot Shaft. It may be necessary to slightly loosen the Bearing Caps for proper and smooth operation. By loosening Knob (26), Pivot Head can be raised or lowered with minimal effort, depending on Spring Force adjustment. A second Spring Anchor (24) is located on the underside of the Platform and is used as a set collar and as a stop for the Platform.

## 11 MAINTENANCE PROCEDURES



**Before performing any maintenance, ALWAYS place the machine on a level surface with the motor OFF and disconnect the electrical current. Let the machine cool down!!**

Your **FELKER®** tile saw is a ruggedly constructed machine, engineered to give long, satisfactory performance. Simple daily maintenance and care will add to the life and productivity of your saw. After each day's use: **CLEAN THE MACHINE!!**

- \* Turn off and unplug the saw before performing any maintenance.
- \* Keep the cart top clean and free for cuttings. To clean it, flush the top surface and grooves with water.
- \* Drain, clean and refill the pan frequently. Flush the coolant system with plenty of water, then drain and refill the pan.
- \* If the water flow stops, check the water pump to see if the shaft and impeller turn freely. See the

## WATER PUMP TROUBLE-SHOOTING PROCEDURE

- \* It is always good practice to clean your tile saw after each day's use. Drain the water and clean out the pan. Clean the rails. Before storing, it is good practice to wipe or spray rails with water-soluble oil (like, WD-40 or equivalent).



**Entrust all repairs to your authorized dealer only.**

## 12 WATER PUMP TROUBLE-SHOOTING PROCEDURE

**If Water Stops Flowing,**

1. **Stop Sawing,** then
2. **Disconnect Electrical Plug from Outlet,** then
3. **Remove the Pump,** then
4. **Back Flush.**

Back flushing is done by forcing water into the pump discharge and out through the screen. Most of the time this procedure works, and the pump can be put back into service. (See Figure below)

If the back flushing does not work, remove the screen and turn the impeller manually, looking for and rinsing out the impeller cavity of any dirt or foreign matter.

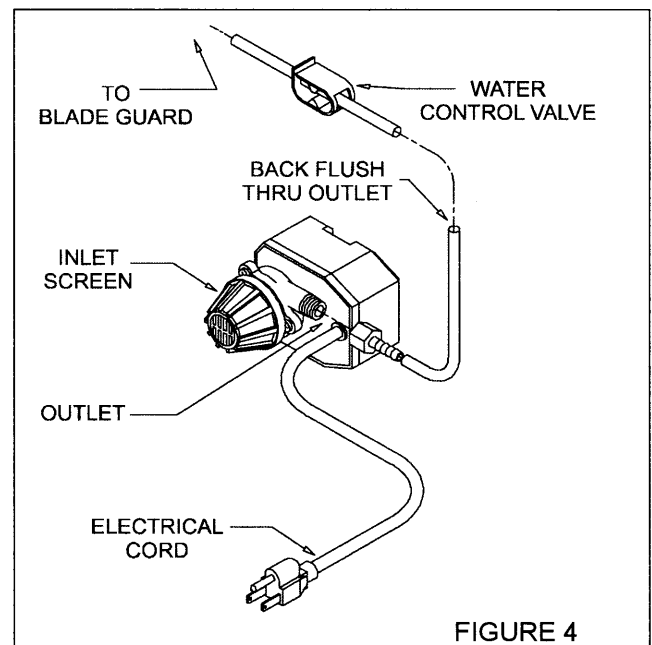


FIGURE 4

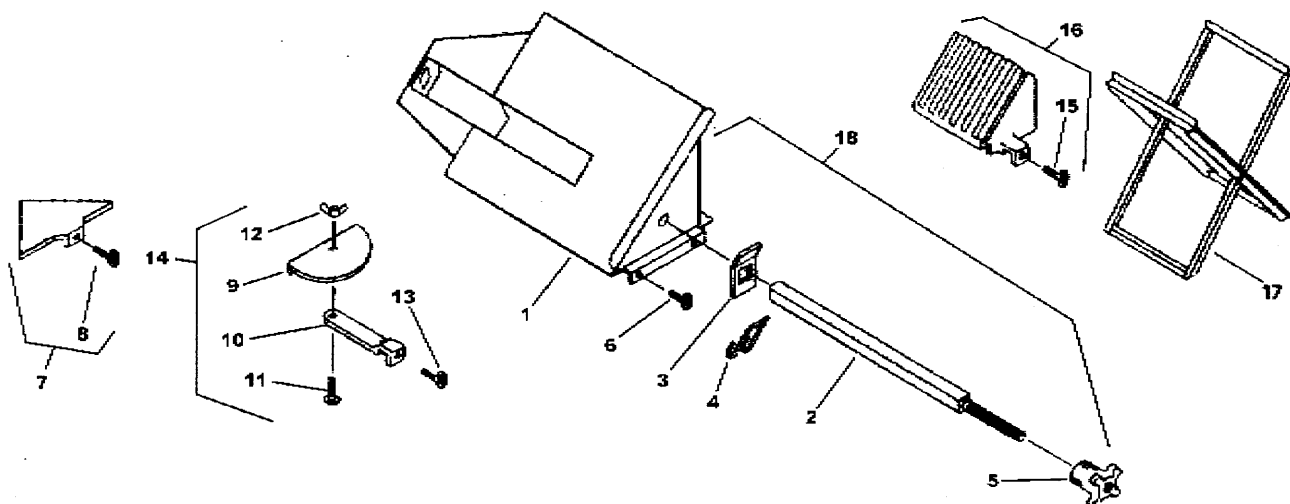
## 13 REPAIRS

We carry out all repairs in the shortest possible time and at the most economical prices. (See front page for address and phone numbers) Contact your authorized **FELKER®** dealer concerning maintenance and repairs.

## 14 SPARE PARTS

For quick supply of spare parts and to avoid any lost time, it is essential to quote the data on the manufacturers plate fixed to the machine and the part number(s) and description to be replaced with every order.

# 15 TILE CUTTING ACCESSORIES



**ANGLE GUIDE**

**PROTRACTOR**

**MITY MITRE GUIDE**

**BULLNOSE**

**FOLDING STAND**

**Parts List:**

Diag.	Part No.	Qty.	Description	Diag.	Part No.	Qty.	Description
1	542 05 01-04*	1	Frame, Miter	10	N/A	1	Arm, Protractor
2	542 05 01-07*	1	Bar, Locking	11	542 02 00-11*	1	Carriage Bolt, 1/4"-20 x 5/8"
3	542 05 01-05*	1	Clip, Stop	12	542 02 02-44*	1	Wing Nut, 1/4"-20 x 1"
4	542 05 01-06*	1	Spring	13	542 18 97-37*	1	Knob, 1/4"-20 x 1"
5	542 05 01-03*	1	Knob	14	542 05 10-10*	1	Protractor Assy
6	542 18 97-37*	2	Knob, 1/4"-20 x 1"	15	542 02 05-98*	1	Screw, Thumb, 1/4"-20 x 1"
7	542 05 10-20*	1	Miter Assy, 45°	16	542 05 10-30*	1	Holder Assy, Bullnose
8	542 18 97-37*	1	Knob, 1/4"-20 x 1"	17	542 05 10-41*	1	Stand, Tile Saw (for TA Models only)
9	N/A	1	Sector Plate	18	542 05 01-02*	1	Support Assy, Miter Frame

**RIP GUIDE:** P/N 542 05 10-00\* - The Rip Guide is a standard accessory supplied with every tile saw. It is used to provide a repeatable position for rip cuts until relocated. The Rip Guide clamps to the machined backstop of the conveyor cart.

**ADJUSTABLE PROTRACTOR:** P/N 542 05 10-10\* - The Protractor can be used to rip cut known angles. The protractor clamps to the backstop.

**ANGLE GUIDE :** P/N 542 05 10-20\* - This is a non-adjustable miter used to quickly position the tile at 45 degrees; either on the left or right side. It is often used for repeated diagonal rip cuts. The Angle Guide clamps to the backstop.

**BULLNOSE MITRE GUIDE:** P/N 542 05 10-30\* - This is a fixed guide that positions the tile for a 45 degree miter cut. The Mitring Guide clamps to the backstop.

**MITY MITRE GUIDE:** P/N 542 05 01-02\* - This is a 45 degree fixture that has an adjustable clamp to hold the tile while miter cutting. The Mitring Guide clamps to the backstop.

**FOLDING STAND:** P/N 542 05 10-41\* - This stable, one piece stand brings a Felker® tile saw to standing level for ease of work. The stand conveniently folds flat for storage and transporting.

*The instructions for use and spare parts found in this document are for information only and are not binding. As part of our product quality improvement policy, we reserve the right to make any and all technical modifications without prior notice.*

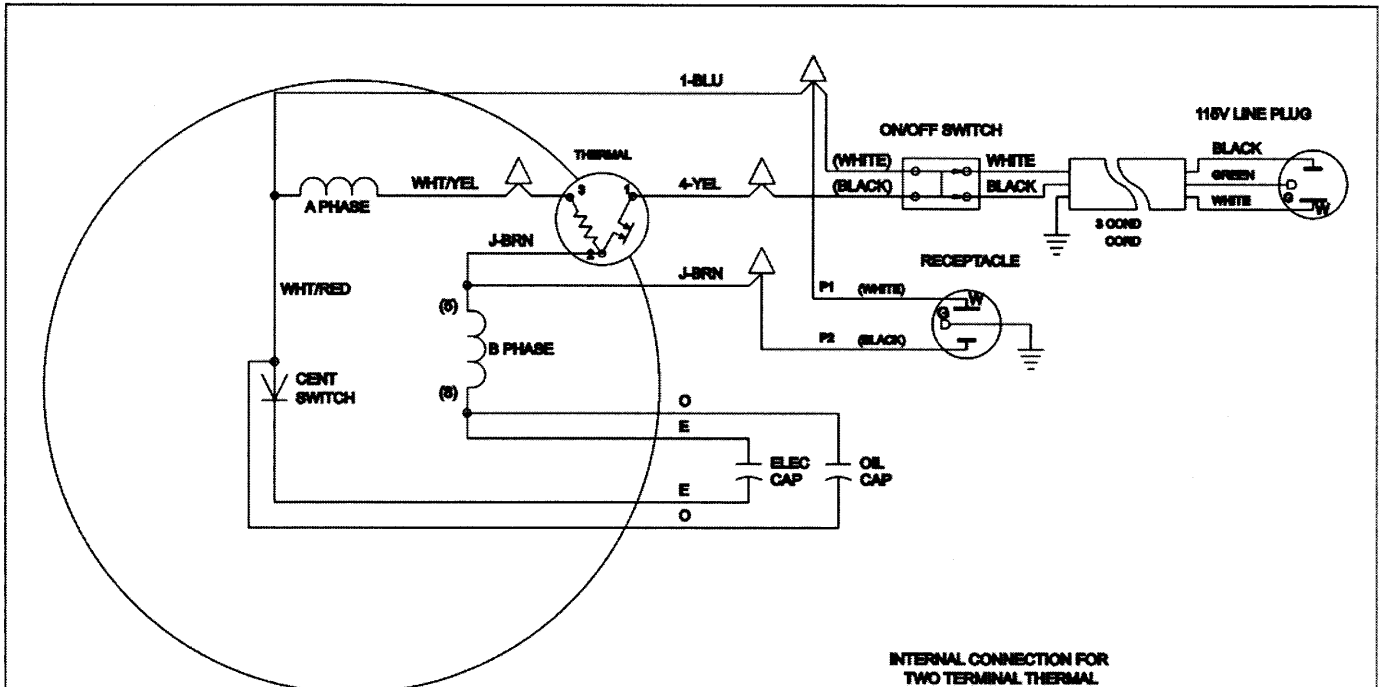


**The manufacturer accepts no responsibility caused by unsuitable use or modifications.**





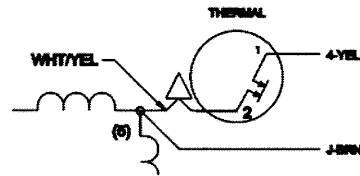
**Diagram 1: Wiring Diagram 542 20 30-79, 1.5HP, 115V/60/1**



**NOTES:**

1. CONNECTIONS ARE SHOWN FOR CCW ROTATION FACING END OPPOSITE SHAFT EXTENSION (STD). FOR CW ROTATION, INTERCHANGE (1) AND (2) INTERNALLY.
2. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

**INTERNAL CONNECTION FOR TWO TERMINAL THERMAL**

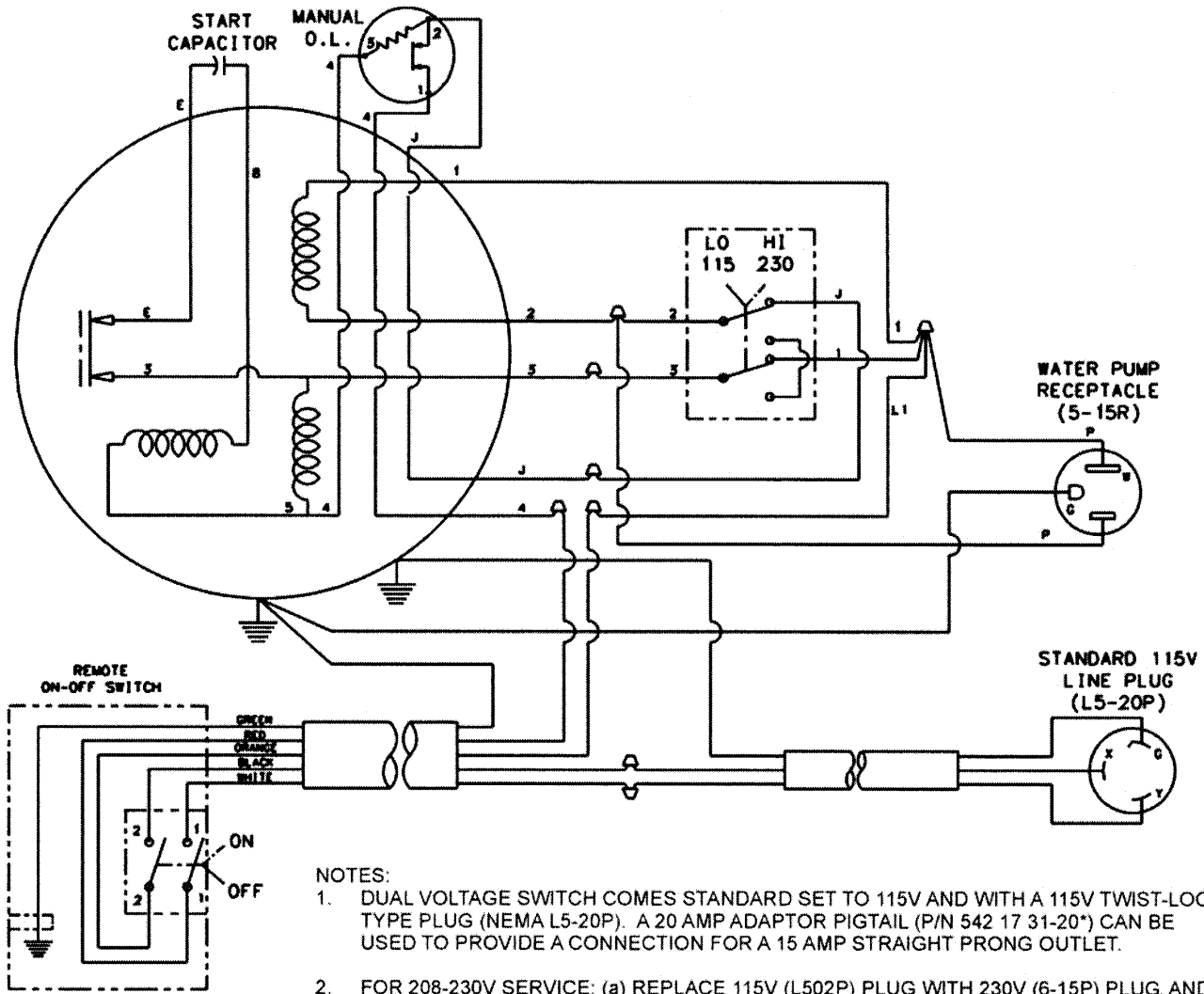


1.5 HP, 1725 RPM, T. E. F. C.  
 115V, 60 Hz, 1 PHASE  
 14.4 FULL LOAD AMPS  
 INS. CLASS: B  
 CODES: NEMA = L; KVA = J

PART NO.	SERVICE ITEMS
542 20 30-95	MANUAL O. L.
542 20 30-93	ON/OFF SWITCH
NONE	SWITCH, BOX & WIRING
NONE	V. C. SWITCH (INCLUDES GUARD)
542 20 30-96	START CAPACITOR {189-227 Mfd/125V}
542 20 30-94	RUN CAPACITOR {50 Mfd/240V}

PART NO.	HP	RPM	VOLT	HZ	PH	F. L. AMPS
542 20 30-79	1.5	1725	115	60	1	14.4

**Diagram 2: Wiring Diagram 542 00 06-05, 1.5 HP, 115V/208-230/60/1**



1.5 HP, 3450 RPM, T. E. F. C.  
 115V/208-230, 60 Hz, 1 PHASE  
 17.2/9-8.6 FULL LOAD AMPS  
 INS. CLASS: F  
 CODES: NEMA = -; KVA = J

PART NO.	SERVICE ITEMS
542 00 08-73*	MANUAL O. L.
542 16 15-81*	ON/OFF SWITCH
542 03 20-80*	SWITCH, BOX & WIRING
542 03 01-41*	V. C. SWITCH (INCLUDES GUARD)
542 18 91-17*	START CAPACITOR {460 Mfd/115V}
NONE	RUN CAPACITOR

PART NO.	HP	RPM	VOLT	HZ	PH	F. L. AMPS
542 00 06-05	1.5	3450	115/208-230	60	1	17.2/9-8.6

# FELKER's Equipment Warranty

Equipment manufactured by Felker is warranted to be free from manufacturing defects in normal service for a period of two (2) years from date of purchase by the original consumer purchaser.

**Component manufacturers offer separate warranty periods. Call Technical Services at 800-365-4003 for complete information.**

Our obligation under this warranty is expressly limited to the replacement or repair at Electrolux Construction Products North America, Olathe, Kansas 66061, or at a service facility designated by us, of such part or parts as inspection shall disclose to have been defective.

This warranty does not apply to defects caused by damage, unreasonable use, faulty repairs made by others (or defects caused by failure to provide reasonable maintenance, while in the possession of the consumer.) Further, the warranty is void if the product, or any of its components, are altered or modified by the consumer

Please record the Date of Purchase and the Serial Number, the Model Number of the equipment and the Date of Purchase of your equipment in the space below. When ordering service items, please have this information available.

Serial Number:	
Model Number:	
Date of Purchase:	
Where Purchased:	

## FELKER CUSTOMER SERVICE

Cust. Service Phone .... 1-800-365-4003

Cust. Service FAX ..... 1-800-825-0028

**Felker Corporate Office**  
17400 West 119th Street  
Olathe, Kansas 66061

Customer Service: 800-365-4003  
Customer Serv. Fax: 800-825-0028  
Corporate Office: 913-928-1000  
Corp. Office Fax: 913-438-7951

**Felker  
California**

Customer Service: 310-381-3100  
Customer Serv. Fax: 310-381-3194

**Felker  
International**

Customer Service: 913-928-1300  
Customer Serv. Fax: 913-438-7938

**Warning!**



*Some dust created by powered sanding, sawing, grinding, drilling and other construction activities contains 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.*

*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.*



 **From the Electrolux Group. The world's No. 1 choice.**