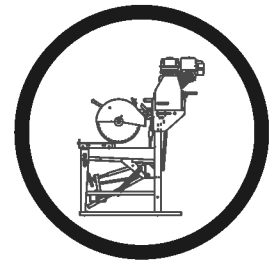




**GB** Operator's manual (Page 1 - 24)

Read these instructions carefully and make sure you understand them before using the machine.

**TS 510 G**



**BEFORE YOU BEGIN:** Read and understand all warnings and instructions before operating the Machine described in this manual. **WARNINGS AND CAUTIONS IN THIS MANUAL MUST BE UNDERSTOOD AND FOLLOWED! FAILURE TO OBEY WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH. IT IS YOUR RESPONSIBILITY** to make sure persons who use this machine have read this manual.

If you have any questions about this machine and/or the operating instructions, **DO NOT** use the machine until you have contacted Target and we have advised you!

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**Reference Information:**

**Model No.:** \_\_\_\_\_

**Serial No.:** \_\_\_\_\_

**Date Purchased:** \_\_\_\_\_

**NOTES / NOTAS:**

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## Symbol Definitions

### Definición De Los Simbolos



- Please read the instructions for use prior to operating the machine for the first time.
- Antes de la puesta en marcha, lea detenidamente las instrucciones y familiarícese con la máquina.



- Mandatory
- Obligatorio



- Indication
- Indicación



- Prohibition
- Prohibición



- Warning Triangle
- Triángulo De Advertencia



- Wear Eye Protection
- Usar Gafas De Protección



- Wear a Hard Hat
- Usar Casco Duro



- Wear Breathing Protection
- Usar Máscara De Protección



- The Use Of Ear Protection Is Mandatory
- Es Obligatorio El Uso De Protección Auditiva



- Wear Safety Shoes
- Usar Zapatos De Seguridad



- Wear Appropriate Clothing
- Usar Ropa Adecuada



- Motor Off
- Parar El Motor



- Use In Well Ventilated Area
- Usar En Una Área Bien Ventilada



- Do Not Use In Flammable Areas
- No Usar In Áreas Inflamables



- Machinery Hazard, Keep Hands And Feet Clear.
- Máquina Peligrosa - Mantenga Manos Y Pies Alejados De La Máquina



- Danger, Poison Exhaust Gas
- Peligro, Gases De Escape Tóxicos



- No Non-working Personnel In Area
- Prohibido Para Personas Ajenas A La Obra



- No Smoking
- No Fumar



- Water Supply On.
- Suministro De Agua Conectado.



- Water Supply Off
- Suministro De Agua Desconectado



- Water Supply
- Suministro De Agua



- Water Safety Switch-Press to Reset if Water Supply Interrupted
- Si Se Ha Interrumpido El Suministro De Agua, Pulsar El Conmutador De Seguridad De Agua Para Reposicionarlo.



- Coolant Temperature
- Temperatura Del Líquido Refrigerante



- Keep Work Area Clean/Well Lit, Remove All Safety Hazards
- Mantenga Limpio El Sitio De Trabajo/Bien Iluminado, Elimine Todos Los Riesgos De Seguridad



- Dangerously High Noise Level
- Nivel De Ruido Elevadamente Peligroso



- Pay Extreme Attention To The Care And Protection Of The Machine Before Starting Up
- Ponga Extrema Atención Al Cuidado Y Preparación De La Máquina Antes De Ponerla En Marcha



- Remove Tools From Area and Machine
- Elimine Las Herramientas Del Área Y De La Máquina



- Oil Pressure
- Presion De Aceite



- Oil Required
- Necesita Aceite



- Dipstick, Maintain Proper Oil Level
- Varilla De Control, Mantenga El Nivel De Aceite Correcto



- Lubrication Point
- Punto De Lubrication



- Always Keep the Blade Guards In Place
- Mantenga Siempre Las Protecciones De La Hoja En Su Sitio



- High Range Travel Speed
- Alta Velocidad De Avance



- Low Range Travel Speed
- Baja Velocidad De Avance



- Do Not Operate Without All Guards In Place
- No Operar Sin Todas Las Protecciones In Su Sitio



- Headlight
- Luz De Cruce



- Diamond Blade
- Sierra Diamantada



- Blade Diameter
- Diámetro De La Hoja



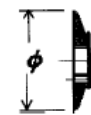
- Blade Engagement
- Acoplamiento De La Hoja



- Pulley Diameter
- Diámetro De La Correa



- Number of Revolutions Per Minute, Rotational Speed
- N° De Revoluciones Por Minuto, Velocidad De Rotación



- Blade Flange Diameter
- Diámetro De La Brida De La Hoja



- Blade Depth Stop
- Tope De Profundidad De La Hoja



- Blade Cutting Depth
- Profundidad De Corte De La Hoja



- Parking Brake
- Freno De Estacionamiento



- Parking Brake Applied
- Freno De Estacionamiento Aplicado



- Parking Brake Released
- Freno De Estacionamiento Suelto



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



- Positive Battery Terminal
- Terminal Positivo De Batería



- Blade Indicator -Zero
- Indicador De Cero De La Hoja



- Engine
- Motor



- Engine Speed Revolutions/Minute
- Velocidad Del Motor En Revoluciones Por Minuto (RPM)



- Engine Start
- Arranque Del Motor



- Repairs Are To Be Done By An Authorized Dealer Only
- Las Reparaciones Deben Ser Efectuadas Únicamente Por Un Distribuidor Autorizado

## WARNING

### HEARING HAZARD

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



## DUST WARNING

**Cutting, especially when DRY cutting, generates dust that comes from the material being cut, which frequently contains silica.** Silica is a basic component of sand, quartz, brick clay, granite and numerous other minerals and rocks. Exposure to excessive amount of such dust can cause:

- Respiratory diseases (affecting your ability to breath), including chronic bronchitis, silicosis and pulmonary fibrosis from exposure to silica. These diseases may be fatal;
  - Skin irritation and rash; and
  - Cancer according to NTP\* and IARC\*
- \* National Toxicology Program, International Agency for Research on Cancer

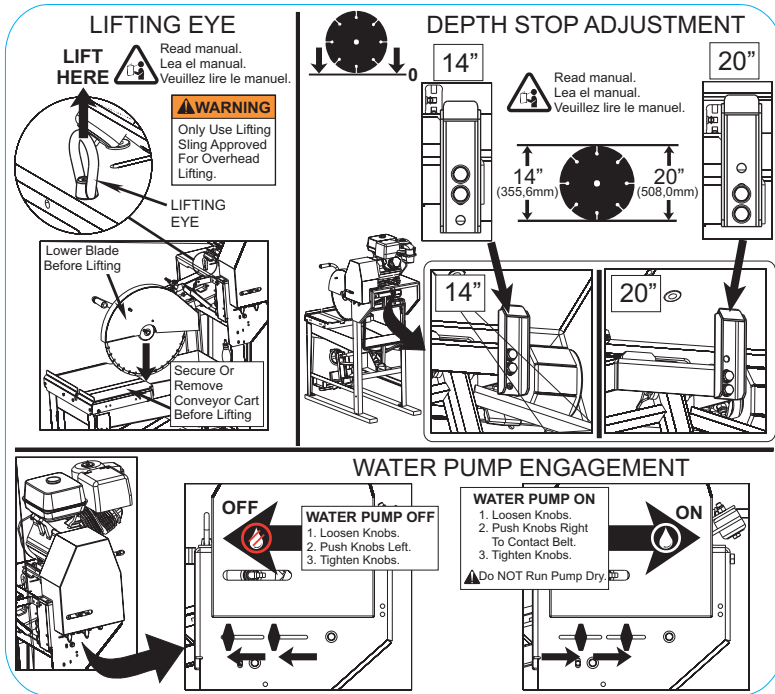
Take precautionary steps

- Avoid inhalation of and skin contact with dust, mist and fumes;
- Wet cut when feasible, to minimize dust;
- Wear and ensure that all bystanders wear appropriate respiratory protection such as dust masks designed to filter out microscopic particles. (See OSHA 29 CFR Part 1910.1200)

### California Prop 65 Warning:

Use of this product can cause exposure to materials known to the State of California to cause cancer and/or birth defects or other reproductive harm.

# DECAL DESCRIPTIONS AND LOCATIONS DESCRIPCIÓN DE CALCAMONIAS Y UBICACIONES



P/N 542190415

Location: Left Side of Engine Platform



P/N 169065

Location: Rear of Engine Belt Guard



P/N 046128

Warning Logo

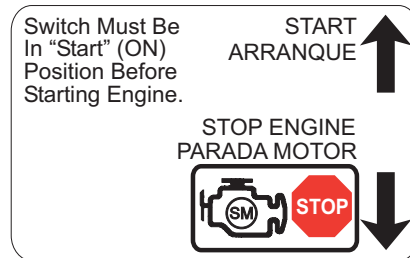
Location: Front of Bladeguard



P/N 177588

Warning Logo, Large

Location: Side of Bladeguard



P/N 542195324

Stop Switch Decal

Location:

Near Stop Switch on Cutting Head



P/N 542190733 (2X)

Location: Front of Belt Guard, Front of Water Pan



**TARGET GUARDMATIC TS510G**

P/N 542190725 (2X)

Location: Side of Water Pan

## SAFETY WARNINGS FOR OPERATION OF THIS MACHINE

### **WARNING!**

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

### **WARNING!**

#### **DO's and DO NOT's**

- 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** shut off the engine and allow it to cool before refueling.
- 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 reinforced abrasive blades or steel center diamond blades manufactured for use on concrete saws.
- 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 engine is running.
- DO** make sure the blade is not contacting anything before starting the engine.
- 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 power cords are the proper size and in good condition.
- DO** verify the blade arbor hole matches the machine spindle before mounting the blade.
- DO** always check for buried electrical cables before sawing. If unsure, contact the local utilities.
- DO** move the machine at least 10 feet (3 meters) from the fueling point before starting the engine and make sure the gas cap on the machine and the fuel can is properly tightened.
- DO** lift only from the lift bail.
- DO** clean the machine after each day's use.
- DO** follow all electrical codes in your area.
- 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** 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** use the proper blade flange size for each blade size. Never use damaged or worn blade flanges.
- DO** use caution when handling fuel.



## SAFETY WARNINGS FOR OPERATION OF THIS MACHINE

### **WARNING!**

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

### **WARNING!**

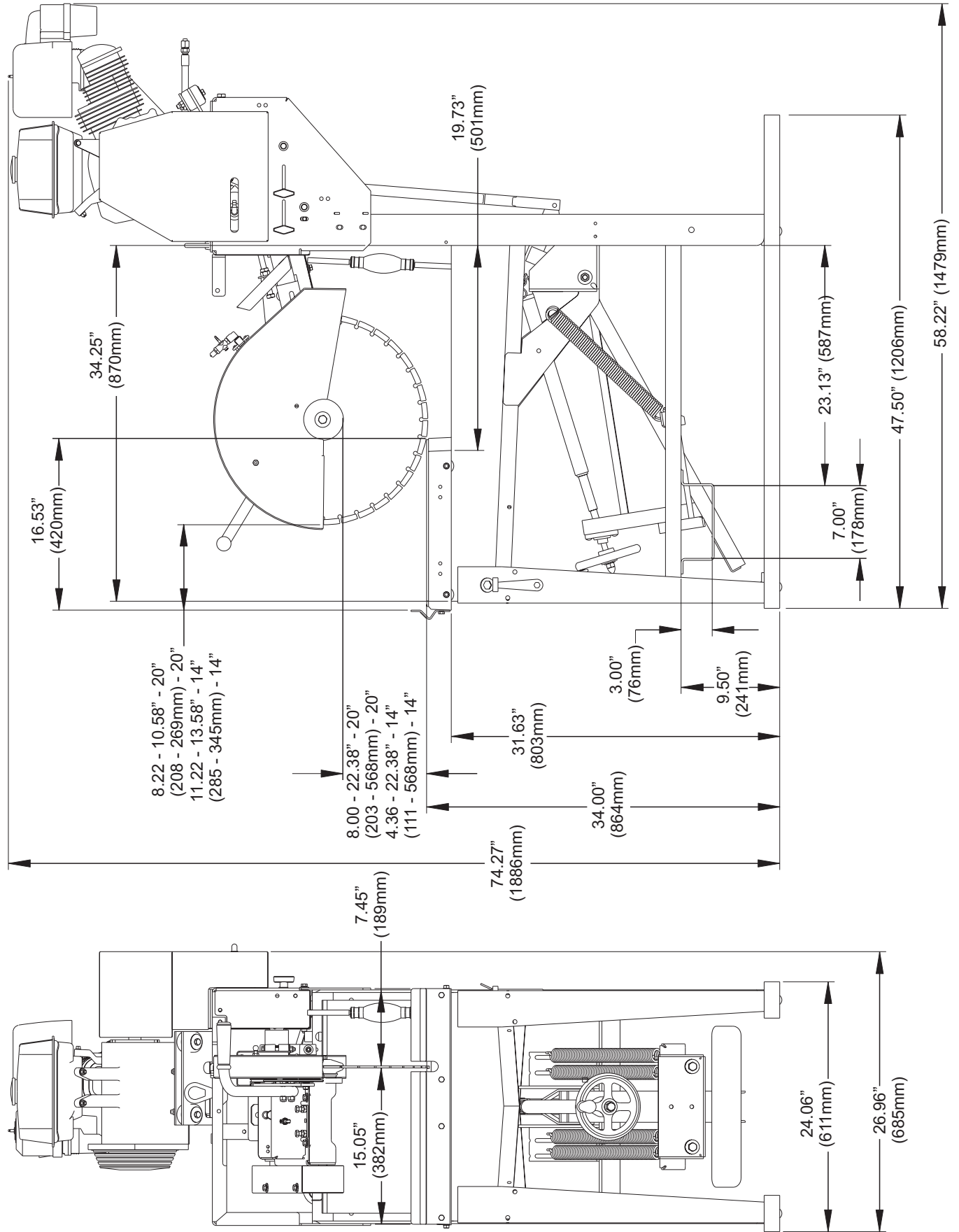
#### **DO's and DO NOT's**

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

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

**Husqvarna Construction Products**  
17400 West 119th Street  
Olathe, Kansas 66061, USA

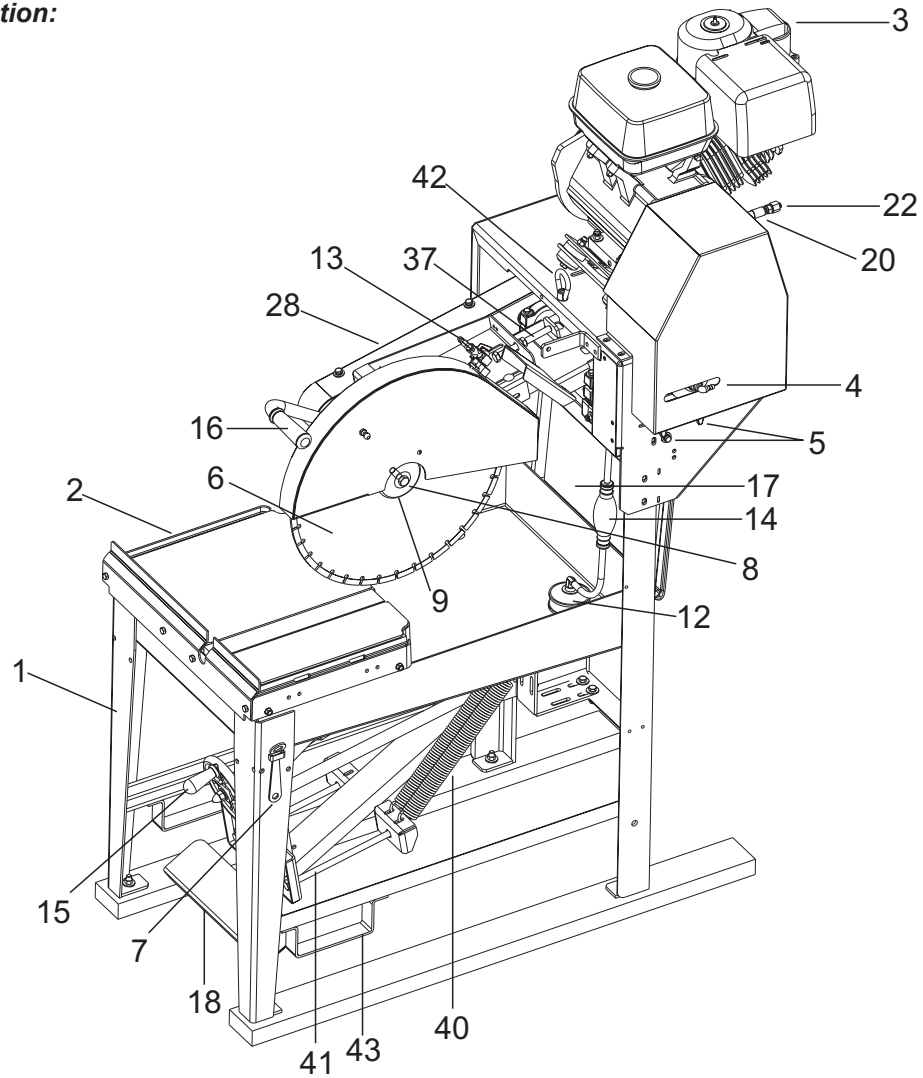
# Guardmatic Dimensions



<b>Specifications</b>				
<b>MODEL</b>	<b>9 HP</b>	<b>9 HP w/ Clutch</b>	<b>13 HP</b>	<b>13 HP w/ Clutch</b>
<b>TYPE</b>	Gasoline Engine	Gasoline Engine	Gasoline Engine	Gasoline Engine
<b>Blade Guard Capacity</b>	14 - 20" (350 - 500 mm)	14 - 20" (350 - 500 mm)	14 - 20" (350 - 500 mm)	14 - 20" (350 - 500 mm)
<b>Blade Shaft RPM:</b>	2300	2300	2300	2300
<b>Max. Depth of Cut:</b>	8.0" (203 mm)			
<b>Blade Arbor Size:</b>	1.00" (25.4 mm)			
<b>Blade Shaft:</b>	Sealed Ball Bearings			
<b>Blade Shaft Drive:</b>	Two 3VX475 V-Belts			
<b>Blade Guard:</b>	One Piece Steel, Sta-Level™ Design, 20" (500 mm) Maximum Capacity			
<b>Blade Coolant:</b>	Water			
<b>Water Pan:</b>	21.73 x 36.73 x 3.50 Inch (552x933x88.9 mm), 13.1 Gallon (49.6 Liter) Capacity [1" (25.4 mm) From Top]			
<b>Conveyor Cart:</b>	Cast Aluminum w/ Vulcanized Rubber Top, Adjustable Measuring Rule, 45° / 90° Cutting Guide			
<b>Water Pump:</b> <b>Electric Models:</b> <b>Gasoline Model:</b>	300 Gallons / Hour, Submersible, Totally Epoxy Sealed, Thermal Over Load Protected 8 GPM, Belt Drive, Solid Bronze, With Strainer & Built-In Priming Pump with Check Valve			
<b>Frame:</b>	Heavy duty, Jig Welded "X" Braced Steel, Open Throat Design For Unlimited Ripping			
<b>Weight Pounds (kg):</b>				
<b>Saw Crated:</b>	488 (221.3)	492.5 (223.3)	501.3 (227.4)	505.8 (229.4)
<b>Saw Uncrated:</b>	468 (212.3)	472.5 (214.3)	481.3 (218.3)	485.8 (220.3)
<b>Saw Operating (Water in Pan):</b>	577 (261.7)	602 (273.1)	611 (277.1)	615 (279)

<b>Power Source</b>				
<b>MODEL</b>	<b>9 HP</b>	<b>9 HP w/ Clutch</b>	<b>13 HP</b>	<b>13 HP w/ Clutch</b>
<b>TYPE:</b>	Gasoline	Gasoline	Gasoline	Gasoline
<b>Engine / Motor:</b>	Honda	Honda	Honda	Honda
<b>Horsepower (kw):</b>	9 (6.7)	9 (6.7)	13 (9.7)	13 (9.7)
<b>RPM:</b>	3750	3750	3750	3750
<b>Displacement:</b>	14.8 cu. Inch (270 cc)	14.8 cu. Inch (270 cc)	23.7 cu. Inch (389 cc)	23.7 cu. Inch (389 cc)
<b>Bore:</b>	3.0 inch (77mm)	3.0 inch (77mm)	3.5 inch (88mm)	3.5 inch (88mm)
<b>Stroke:</b>	2.3 inch (58mm)	2.3 inch (58mm)	2.5 inch (64mm)	2.5 inch (64mm)
<b>Cylinders / Cycle:</b>	1/4	1/4	1/4	1/4
<b>Fuel Capacity:</b>	1.59 U.S. Gallon (6.0 liter)	1.59 U.S. Gallon (6.0 liter)	1.72 U.S. Gallon (6.5 liter)	1.72 U.S. Gallon (6.5 liter)
<b>Air Filter:</b>	Dry Type Dual Element with Pre-cleaner	Dry Type Dual Element with Pre-cleaner	Dry Type Dual Element with Pre-cleaner	Dry Type Dual Element with Pre-cleaner
<b>Starter:</b>	Recoil	Recoil	Recoil	Recoil
<b>Cooling System:</b>	Air			

**Parts Identification:**



1	Frame Assembly	26	Shims
2	Conveyor Cart Assembly	27	Adjustment Screws
3	Engine Air Cleaner Cover	28	Cutting Head Assembly
4	Water Pump	29	Blade Shaft Housing
5	Water Pump Knobs	30	Square
6	Blade	31	Capscrew (Blade Shaft)
7	Wrench	32	Bladeshaft Housing Attaching Capscrews
8	Capscrew (for Blade)	33	Capscrew & Jam Nut
9	Outer Flange	34	Bladeshaft Belt Tensioning Jam Nut
10	Inner Flange	35	Engine Belt Tensioning Jam Nut
11	Arbor Shaft	36	Engine Belt Tensioning Bolt
12	Strainer (for Water Pump)	37	Bladeshaft Belt Tensioning Bolt
13	Water Valve (on Blade Guard)	38	Engine Base Capscrews
14	Primer Pump (for Water Pump)	39	Carnage Bolts
15	Height Adjustment Handle	40	Springs (Cutting Head Raise/Lower)
16	Hand Grip	41	Drawbolt, Spring
17	Water Splash Curtain	42	Lifting Eye
18	Foot Pedal	43	Lift Truck Brackets
19	Stop Switch	42	Lifting Eye
20	Oil Drain Hose	43	Lift Truck Brackets
21	Top Wheel	44	Wing Nut (Engine Air Cleaner)
22	Oil Drain Plug	45	Depth Stop
23	Nut (Top Wheel)	46	Engine V-Belt
24	Setscrew (Top Wheel)	47	Bladeshaft V-Belts
25	Track Bar	48	Slot (Belt Tension Check)



•Mandatory  
•Obligatorio



•Prohibition  
•Prohibición



•Indication  
•Indicación



•Warning Triangle  
•Triángulo De Advertencia

**These signs will give advice for your safety.**



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

*Follow our instructions strictly and your machine will give you long service in normal operating conditions.*

## 1. Features

**Use:** Wet or Dry sawing of masonry and refractory.

**Tools:** Diamond blades -- dry or water cooled, Ø: 14" (350 mm), and 20" (500 mm) with Arbor Ø 1" (25.4 mm).

**Depths of Cut (Maximum):**  
8.00" (127 mm) with Ø 20" (500 mm) blade

**Maximum material Size:**  
8 x 8 x 16" (20,3 x 20,3 x 40,6 cm) block

**Nominal Weight:** See "Specifications"  
**Operating Weight:** See "Specifications"  
**Dimensions:** See "Saw Dimensions"

**Blade Guard Capacity:**  
14" (350 mm), 18" (450 mm), and 20" (500 mm) Ø.  
Smaller Blade Diameter not recommended because blade will not contact the conveyor cart. Head tilt is limited by the depth stop, which also prevents cutting through the conveyor cart when the blade is in the lowest position.

**Blade Shaft RPM:** See "Specifications"



**Before starting up machine make sure you read these instructions and are familiar with the operation of this machine.**



**The working area must be completely clear, well lit and all safety hazards removed (no water or dangerous objects in the vicinity).**



**The operator must wear protective clothing appropriate to the work he is doing. We recommend hearing, respiratory and eye protection.**



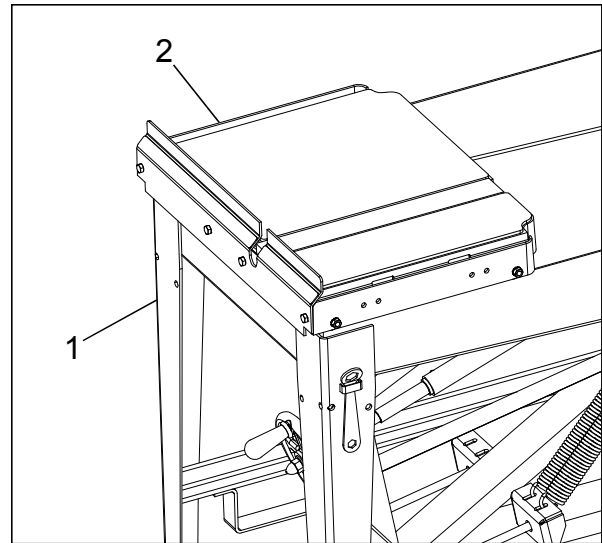
**Any persons not involved in the work, should leave the area.**

## WARNING!

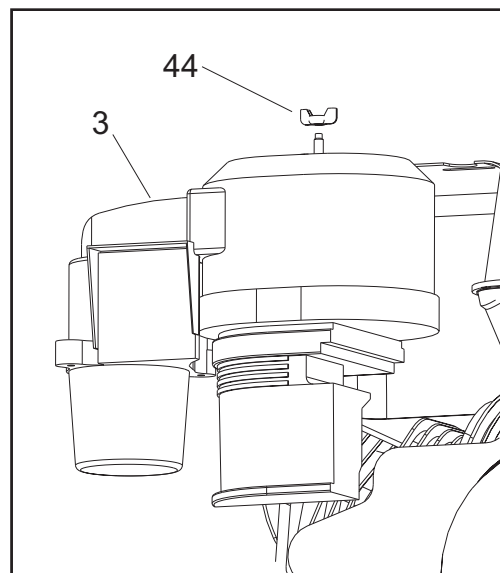
Use only blades marked with a maximum operating speed greater than the blade shaft speed.

## 2. Assembly

When unpacked, this unit consists of three (3) parts: Frame Assembly (1), Conveyor Cart Assembly (2), Engine Air Cleaner Cover (3).




Remove the Conveyor Cart Assembly (2) from its shipping carton. Set it onto the Frame Assembly (1) so that the wheels of the Conveyor Cart Assembly (2) roll along the sides of the Frame Assembly (1).



Remove the Engine Air Cleaner Cover (3) and install it onto the engine using the Wing Nut (44) that is loosely installed above the engine air cleaner element.

### 3. Check Before Operating

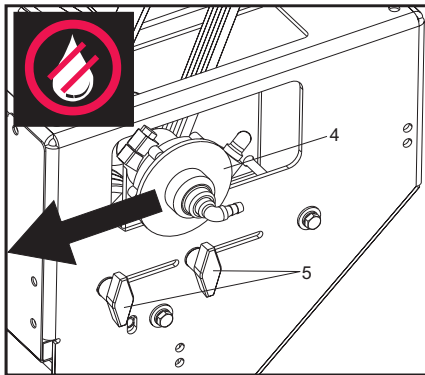
 **Take into account the working conditions from a health and safety point of view.**



#### CAUTION!

Engine inclination angles greater than 20 degrees could cause severe engine damage and void your engine warranty!

- Engine Fuel: Check the engine operation manual. Unleaded gasoline is recommended.
- Engine Oil: With the Frame Assembly (1) positioned so that the engine is in a horizontal position, check that the engine oil level is correct. Check the oil level frequently to ensure that the level never falls below that specified in the engine operation manual. If the oil level is low, add SAE 10W30, service classification SF or SG oil (for normal conditions) as recommended in the engine operation manual. DO NOT overfill engine with oil!



Make sure that the Water Pump (4) is disengaged before starting the engine. If it is not in the position shown above, loosen the Water Pump Knobs (5) and push all the way to the left (belt Guard moved for clarity purposes only).

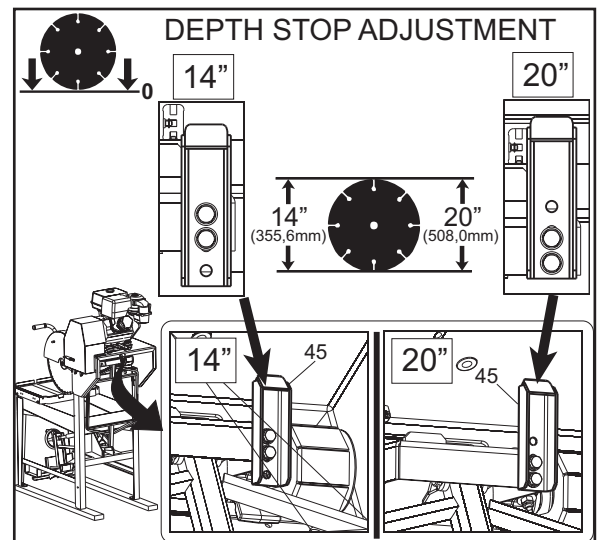
#### CAUTION!

DO NOT run Water Pump (4) for extended periods of time without water! Water Pump (4) could be damaged!

#### Blade Depth Stop:

This machine is equipped with an adjustable stop that prevents the Blade (6) from cutting into the Conveyor Cart Assembly (2). The Depth Stop (45)

blades are to be used, the depth stop must be set for 14" (350mm) blades. The depth stop will not function properly for 18" (450mm) blades because the blade will cut into the Conveyor Cart Assembly if the operator does not take care.

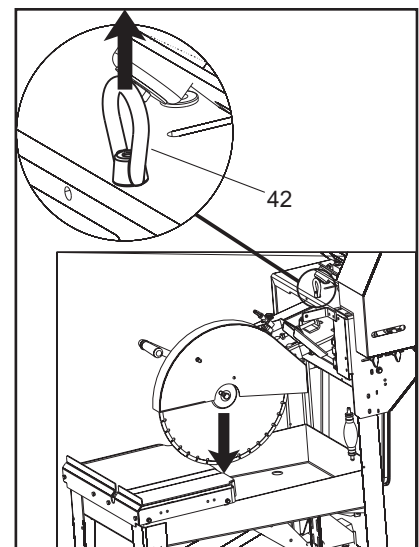


To adjust the depth stop for a new blade diameter, remove the attaching hardware, move the Depth Stop (45) to the desired position, as shown above, then re-install the attaching hardware.

#### Moving the machine:

The machine can be moved two ways:

1. By using the Lift Truck Brackets (43), a fork truck can be used to lift the machine. Simply slip one fork through the brackets on the front lower part of the Frame Assembly (1).



2. By using the Lifting Eye (42), a lifting sling can slipped through the Eye, and along with a lift truck or a crane, the machine can be easily moved. The Cutting Head Assembly (28) should be lowered as much as possible to avoid hitting the lifting sling when the machine is lifted.

## **⚠ WARNING!**

Only use Lifting Sling approved for overhead lifting. Using Improper Lifting Sling can result in injury or death of operator or persons in work area!

### **4. Fitting The Blade**

- The blade rotates in a “down-cut” direction. This means that the front of the blade is moving downward while the rear of the blade is moving upward. Mount the Blade (6) so that the arrow on the blade rotates in this “down-cut” direction. The Blade (6) can be installed or removed by using the 3/4” (19 mm) end of the Wrench (7) provided.
- After mounting the Blade (6), it should align over the top of the wooden insert in the Conveyor Cart (2). During operation of this unit, the blade should pass into the wooden insert, but NOT into the cast aluminum part of the Conveyor Cart (2).

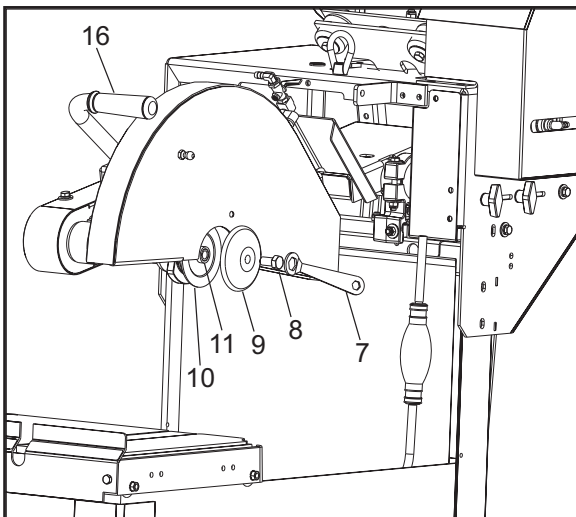
## **⚠ WARNING!**

Use only Abrasive blades of a reinforced type. Never use an abrasive blade with water.

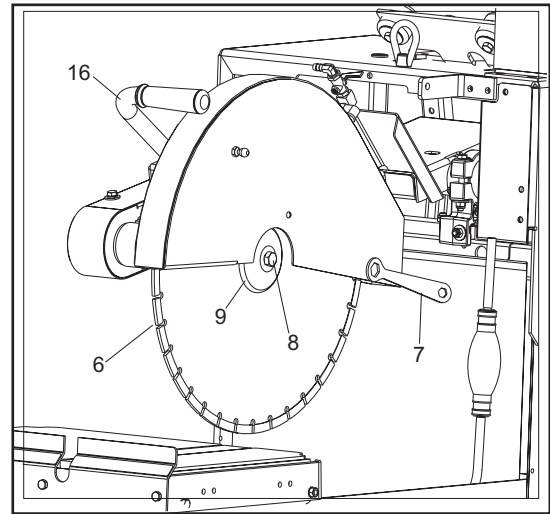
Conventional “Wet” diamond blades MUST be used with water.

DO NOT use conventional “Wet” diamond blades without water. Using conventional “wet” diamond blades without water can result in injury or death of the operator or persons in the work area!

#### **Mounting the Blade (6):**



1. Using the Wrench (7) provided (or one of your own) loosen the Capscrew (8) by turning it Counter-Clockwise.
2. Remove the Outer Flange (9) and make sure the Outer Flange (9), the Inner Flange (10), and Arbor Shaft (11) are clean and not damaged.



3. Mount the Blade (6) to the Arbor Shaft (11) and install the Outer Flange (9). Install and tighten Capscrew (8) by turning it in a Clockwise direction (Right Hand Thread). Use the Wrench (7) to firmly tighten the Capscrew (8) to the arbor shaft.

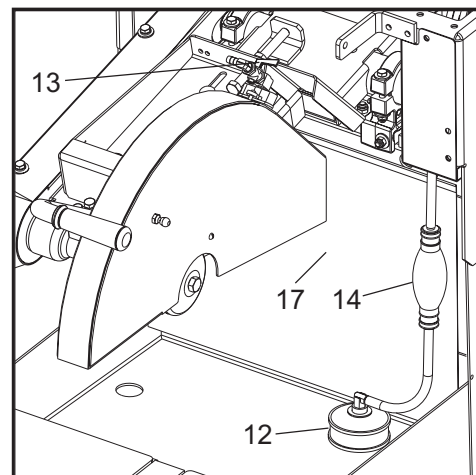
### **5. Operating Instructions**

Configure the saw for wet or dry operation. Note that the saw is factory assembled for dry operation.

#### **Wet Operation:**

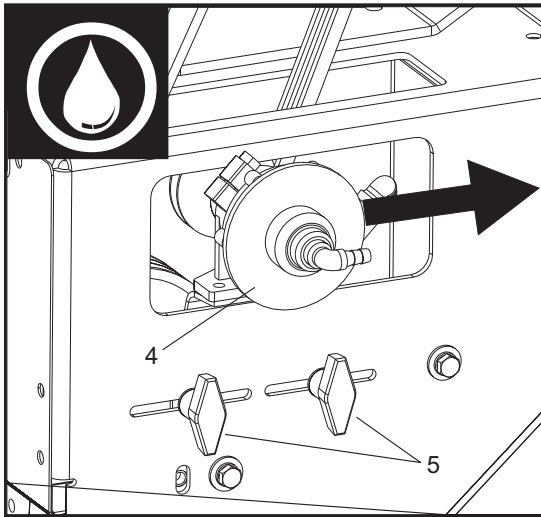
## **⚠ WARNING!**

Use only Abrasive blades of a reinforced type. Never use an abrasive blade with water.



Fill the water reservoir pan [of the Frame Assembly (1)] with water to within 1 inch (25 mm) of the top. Be sure that the water pump intake Strainer (12) is fully immersed in water at all times. Keep the intake screen clean and free of sludge, slurry, or other foreign material.

Make sure the Water Valve (13) on the blade guard is in the open position (Lever parallel with valve body). Squeeze the Primer Pump (14) until water flows out of the blade guard water tubes. Adjust the water flow with the Water Valve (13), and check the water flow before cutting.



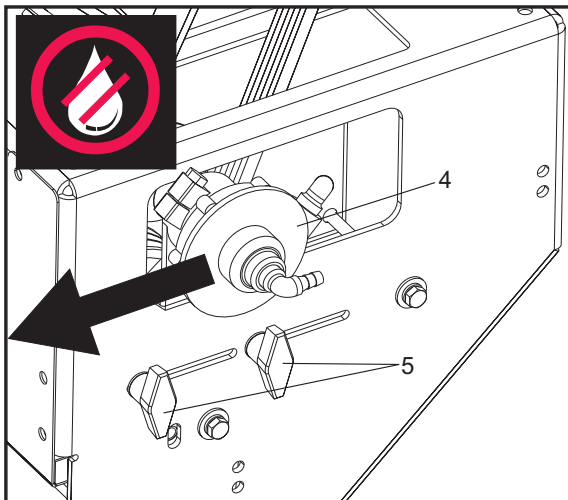
Make sure that the Water Pump (4) is engaged before cutting material. If the Water Pump (4) is not in the position shown above, loosen the Water Pump Knobs (5) and push all the way to the right.

**Dry Operation:**

**⚠ WARNING!**

Conventional “Wet” diamond blades **MUST** be used with water. **DO NOT** use conventional “Wet” diamond blades without water. Using conventional “wet” diamond blades without water can result in injury or death of the operator or persons in the work area!

When cutting without water use only diamond blades that are intended to be used dry (without water). Conventional “Wet” diamond blades **MUST** be used with water.

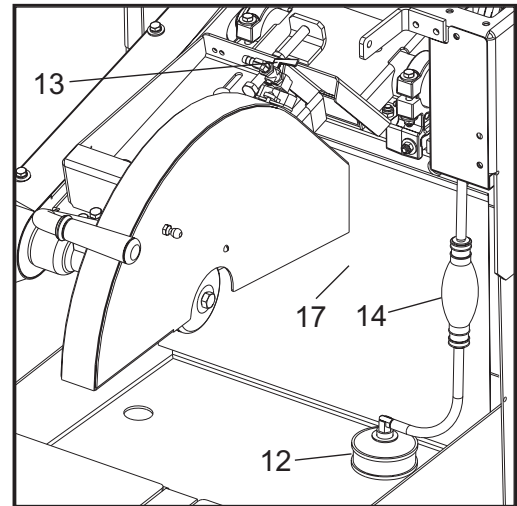


Make sure that the Water Pump (4) is disengaged before starting the engine. If it is not in the position shown above, loosen the Water Pump Knobs (5) and push all the way to the left.

**⚠ CAUTION!**

**DO NOT** run the WATER PUMP (4) for extended periods of time without water! The WATER PUMP (4) could be damaged!

- **Hint:** To reduce vibration of the saw, the water reservoir pan [of the Frame Assemble (1)] can be filled with sand. Be sure to remove the water pump intake Strainer (12) to avoid contaminating it with dirt or sand.

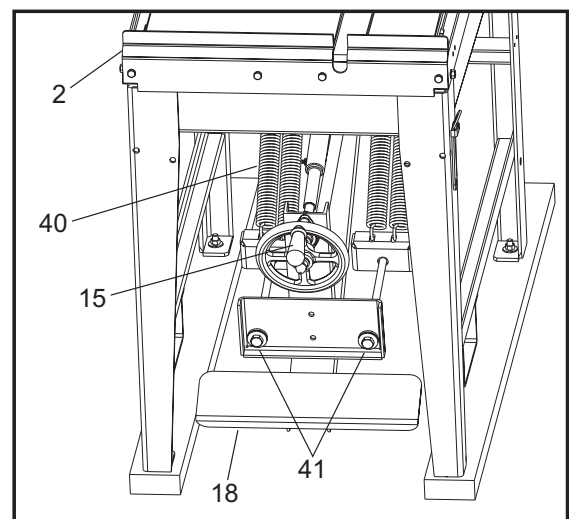


Remove the Water Splash Curtain (17) so that dust flow freely out the back of the saw. The saw is now ready for dry cutting.

**Cutting Operations:**

*Cutting Methods:* This unit allows three methods for the blade to contact the material:

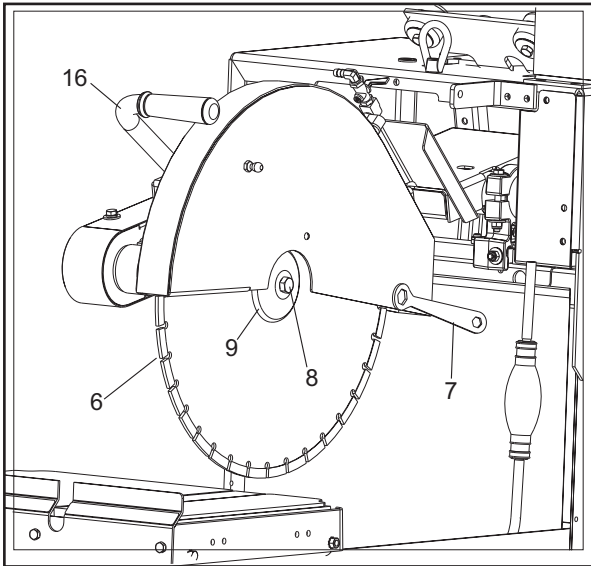
1. Fixed Head Cutting Method:



Position the head to the desired height by turning the Height Adjustment Handle (15). When the desired height is reached, stop turning the handle and the cutting head will remain in position.

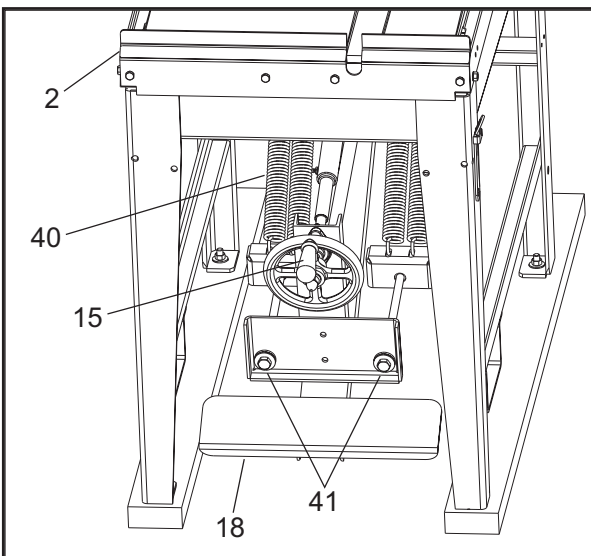


## 2. Hand Controlled Cutting Method:



Hold the Hand Grip (16) and lower the blade into the material. The blade will return to the upper position when force is released from the Hand Grip.

## 3. Foot Controlled Cutting Method:

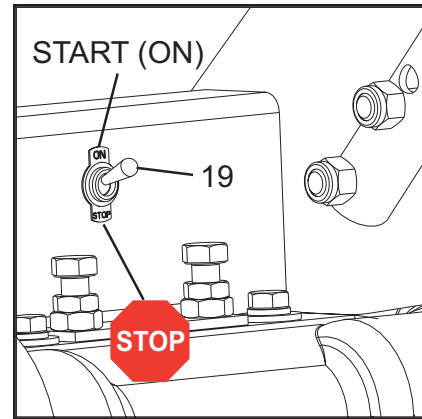


Push the Foot Pedal (18) using your foot, and the blade is lowered into the material. The blade will return to the upper position when force is released from the foot pedal.

After the Cutting Method has been determined, move Conveyor Cart (2) to the front of the saw so that the blade DOES NOT contact the material, then place material on Conveyor Cart Assembly (2).

### Starting and Stopping:

After determining if the material will be cut wet or dry, and the deciding on the cutting method, the engine can now be started.



Start the engine by using the procedure in the engine operation manual. Make sure that the Stop Switch (19) is in the "START" (On) Position before using the engine starting rope. Open the engine throttle full open. All sawing is done at full throttle. Do Not change the engine governor setting -- it is factory set for the correct speed. See the "Specifications" section of this document for proper engine & blade shaft RPM.

### **! WARNING!**

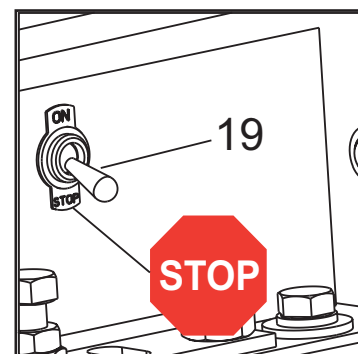
Keep hands clear of rotating blade during operation. READ ALL SAFETY WARNINGS before operating this machine.

Conventional "Wet" diamond blades MUST be used with water. DO NOT use conventional "Wet" diamond blades without water. Using conventional "wet" diamond blades without water can result in injury or death of the operator or persons in the work area!

When cutting without water use only diamond blades that are intended to be used dry (without water). Conventional "Wet" diamond blades MUST be used with water.

Cut the material using one of the Cutting Methods described in the above section. Gently push the material into the blade. When the material is completely cut, return the conveyor cart to the original position.

### Stopping the Unit:



Stop the unit by putting the Stop Switch (19) into the “Stop” (Off) position. Wait for all blade movement to stop before removing material from the machine.

**STOP** *Emergency: In an emergency situation turn the Stop Switch (19) to the STOP (OFF) position.*

## 6. Incidents During Operation

- If the engine or motor stops during sawing, check the following:
  1. Out of fuel: Check fuel level.
  2. Low Oil Level: This unit is equipped with a shut down system that stops the engine if a low oil level is encountered. Check the engine oil level while the engine is in a horizontal position.
- If the engine or blade stalls for any reason, raise the blade completely out of the cut, inspect the machine thoroughly before restarting. When lowering the blade into a partial cut, align the blade exactly with the cut to prevent damage to the blade.
- Excessively fast cutting will stall the engine.
- If the blade stops during sawing check that the drive belt tension is adequate.

## 7. Maintenance

### **! WARNING!**

Before performing any maintenance, ALWAYS locate the machine on a level surface with the engine OFF, and the Stop switch in the OFF position.

### Check Daily:

- Clean the reservoir pan [of Frame Assembly (1)] to remove sludge and slurry. This concrete slurry is an abrasive cutting compound and will shorten the life of the Water Pump (4) and the Diamond Blade (6). Clean the reservoir pan twice a day in heavy cutting. Then refill the water reservoir pan with clean water.
- At the end of each day clean the water reservoir pan [of Frame Assembly (1)] to remove sludge from the saw. Flush clean water through the Water Pump (4) and hoses.
- Check engine air cleaner daily! If cutting dry check engine air cleaner every four hours! Clean or replace air cleaner element as recommended by the engine manufacturer.

- Check engine oil daily. Change engine oil after every 50 hours of operation. Engine Oil capacity is shown below. See engine operation manual for proper care and maintenance.

### Every 50 Hours:

- Change Engine Oil:

**Change Engine Oil:** Change engine oil after every 50 hours of operation.

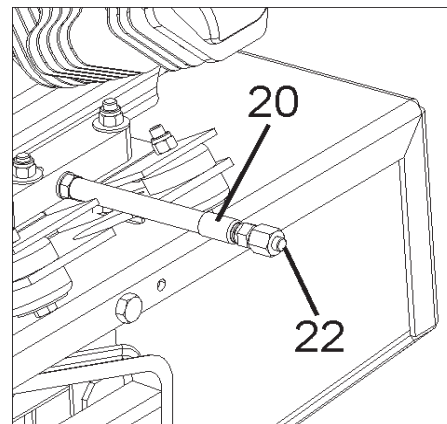
### Engine Oil Type:

Under normal operating conditions use SAE 10W30 API service classification SF or SG. See engine operation manual for other recommended oil types.

### Engine Oil Capacity (9hp & 13hp Honda):

1.16 U.S. Quarts, 1.1 Liters.

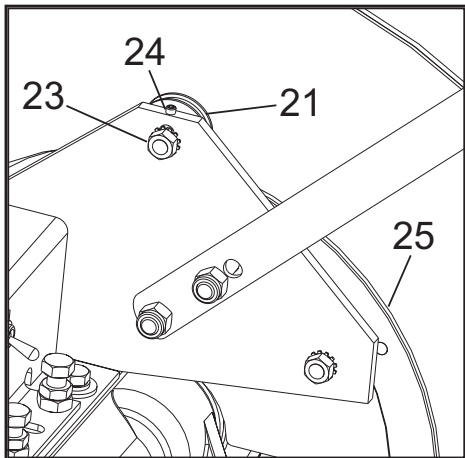
### Engine Oil Change Procedure:



1. Drain the oil while the engine is still warm to assure rapid and complete oil drain. Place a bucket under the Oil Drain Hose (20) to catch the used oil. Remove the Oil Drain Plug (22) on the end of the Oil Drain Hose (20) and wait for all of the used oil to be drained for the engine.
2. Re-install and securely tighten the Oil Drain Plug (22).
3. Re-fill engine with the recommended oil type. See the engine operation manual for the oil fill location and proper oil level. Note that the required oil capacity will be larger because of the volume of oil contained in the Oil Drain Hose (20).
4. Re-install the oil fill cap after filling engine with oil.
5. Dispose of the used oil in a proper container and in a manner that is compatible with the environment.

### When Required:

- “Sta-Level” Blade Guard: If the blade guard becomes loose and pivots too freely the blade guard rotation can be tightened. Adjust the Top Wheel (21) of the three (3) wheels behind the blade guard:



1. Loosen the NUT (23) holding the Top Wheel (21) in position.
2. Adjust the Setscrew (24) to force the Top Wheel (21) down against the Track Bar (25).
3. Re-tighten the Nut (23) holding the Top Wheel (21) in position.

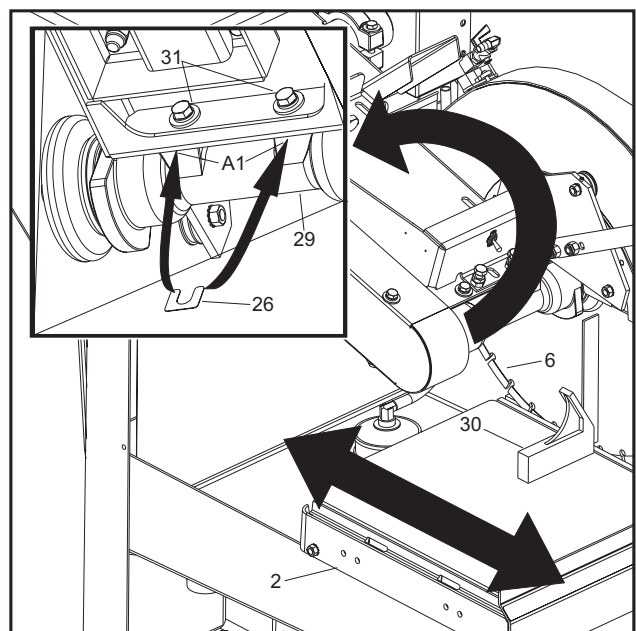
- Blade Shaft Housing Replacement and Blade Alignment: The blade shaft arbor on this machine is aligned at the factory so that a new blade will cut “square” with the material placed on the Conveyor Cart Assembly (2). There are two reasons that a blade could be out of alignment:

1. If the Blade Shaft Housing (29) or Blade Shaft Assembly needs to be replaced. If this is the case, take note of the position and quantity of Shims (26) behind the blade shaft Assembly before completely removing it from the saw. If the shims are placed back in position when the new Blade Housing Assembly (29) is installed there is normally no reason to re-align the blade. If this is not the case, follow the alignment procedure shown below.
2. If the saw is dropped or damaged, the blade could become mis-aligned so that it no longer cuts “squarely” through the material. If this occurs the blade shaft should be re-aligned so that the saw will produce “square” cuts. If the Blade is severely out of alignment [1/16” (1.5 mm) or more] parts of the Cutting Head assembly (28) may need to be replaced. Precise alignment can be achieved by using the Adjustment Screws (27) and/or Shims (26) and following the procedure.

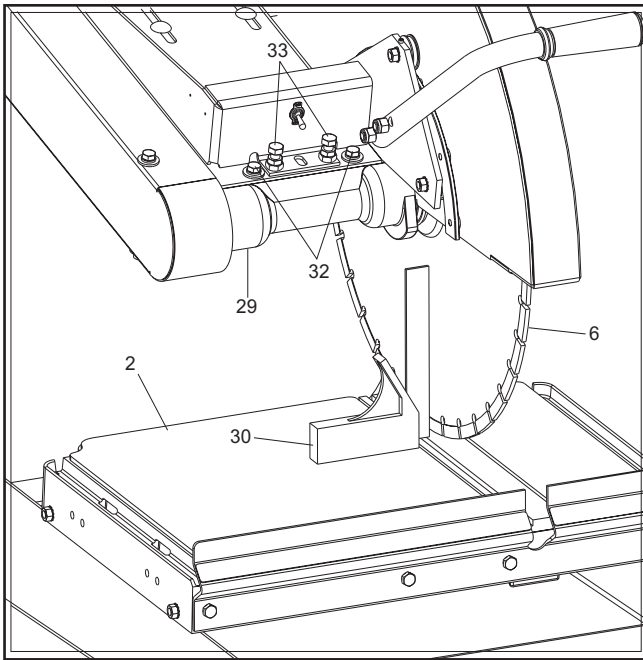
- **Note:** Before starting to align the head platform make sure the blade is flat and is NOT bent or damaged!
- **Note:** When aligning the blade against the square be sure to allow for the difference in thickness between the diamond segment and the center core of the blade!

### Blade Alignment:

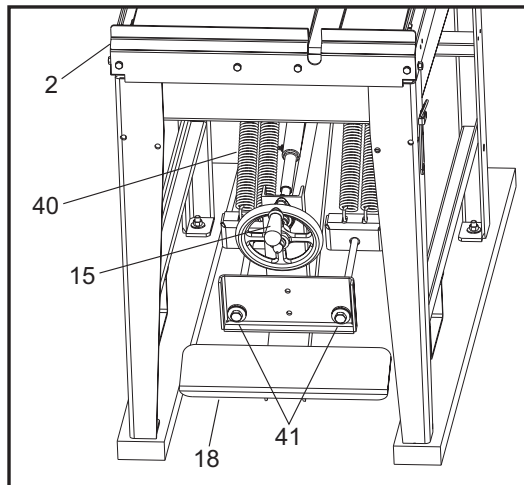
1. Make sure the Conveyor Cart Assembly (2) rolls freely along the pan. If the pan is damaged it must be repaired or replaced before the blade can be aligned. Adjust the Cutting Head Assembly (28) so that the Blade (6) is lowered to the Conveyor Cart (2).



2. Parallel Alignment: Supply a Square (30) and place it on the Conveyor Cart Assembly (2) as shown in the diagram above. Roll the Conveyor Cart Assembly (2) while the Square (30) rests against the blade. Adjust the Blade Shaft into Parallel Alignment (if required) by putting Shims (26) between the vertical surface behind the Blade Shaft Housing (29) and Head Platform Weldment at location “A1” shown on the diagram above. Loosen, but do not remove, the Capscrews (31) holding the blade shaft in position. Slide a Shim (26), of the proper thickness, upward and position around the thread of ONE of the capscrews. Tighten the hardware and check the blade alignment. Add more shims if required until the gap between the Blade (6) and the Square (30) is minimized, and consistent over the entire length that the Conveyor Cart (2) travels.



3. Perpendicular Alignment: Place the Square (30) on the Conveyor Cart Assembly (2) so that it is against the saw Blade (6) and is below the center of the blade shaft. If the Square (30) does NOT contact the Blade (6) along the entire height of the square, the blade shaft must be adjusted into Perpendicular Alignment. Adjust the Blade Shaft Housing (29) by adjusting the Capscrews And Jam Nuts (33) of the Horizontal surface of the Cutting Head Assembly. First loosen the Blade Shaft Housing Attaching Capscrews (32), then tighten ONE of the Capscrews (33) until the Square and the Blade (6) contact along the entire length of the Square. Tighten down the corresponding Jam Nut (33), then tighten the Blade Shaft Housing Attaching Capscrews (32). Next, gently tighten down the remaining Capscrew and Jam Nut (33) just firmly enough so that it does not loosen during use.



- Raise-Lower of the Cutting Head Assembly (2):

**Cutting Head Assembly Is Hard To Lower:**  
If excess force required to pivot the Cutting Head

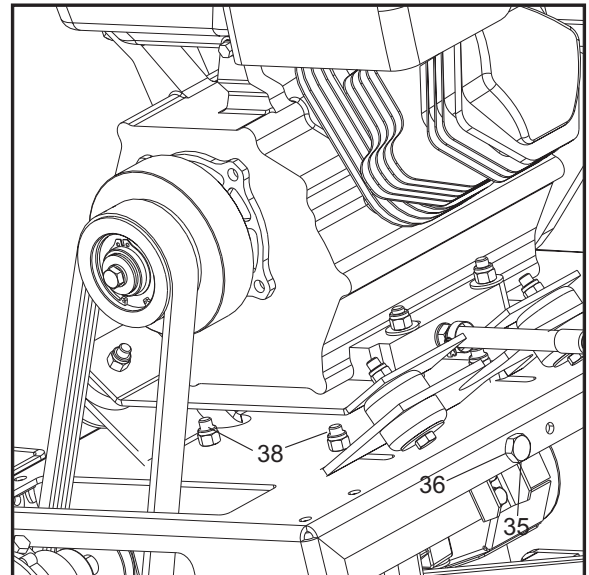
Assembly (2) downward, the Springs (40) should be loosened so that they become shorter in length. To do this, turn each of the Drawbolts (41) Counter-Clockwise until the desired pivot force is achieved.

**Cutting Head Assembly Does Not Raise Properly:** If the Cutting Head will not pivot to the maximum upper position, then the Springs (40) need to be tightened so that they become longer in length. This could be required a few days after using a new saw when it becomes covered in dirt and concrete slurry. To do this, turn each of the Drawbolts (41) Clockwise so the spring force increases until the desired force is achieved.

## 8. V-Belt Tension

- The saw is equipped with high tension V-Belts. The belts are properly tensioned at the factory, but after a few hours of operation they will stretch and become loose.

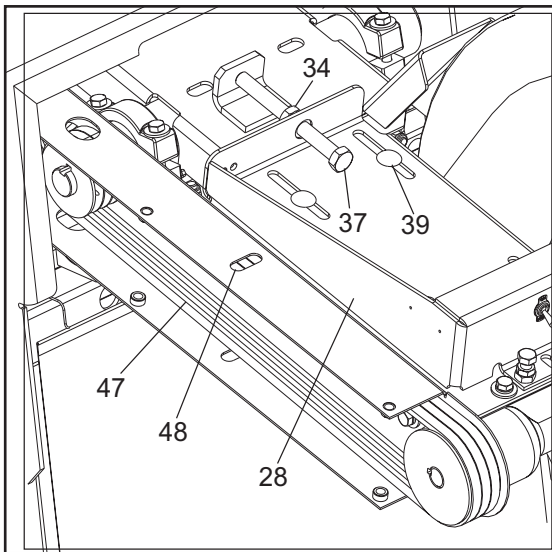
### Tensioning Engine V-Belts (46):



The Engine V-Belt (46) is a "Banded" type 3VX belt. Supplied with each replacement belt is "tension strip" that can be used to check the tension of this belt while installing on the saw.

1. If this belt needs to be tensioned, loosen, but do not remove, the four (4) Engine Base Capscrews (38) that hold the engine platform in place.
2. Loosen the Engine Belt Tensioning Jam Nut (35) on the rear underside edge of the engine platform.
3. Tighten the Engine Belt Tensioning Bolt (36) until the proper belt tension is achieved.
4. Re-tighten the Engine Belt Tensioning Jam Nut (35), and the four (4) Engine Base Capscrews (38).

## Tensioning Blade Shaft V-Belts:



The blade shaft V-Belts are standard “single groove” 3VX belts. Check the tension in these belts when the unit is new and never set the belt tension beyond this point. Belt tension can be checked with a standard belt tension gauge through the Slot (48) in the inner belt guard.

1. Remove Belt Guard.
2. If these belts need to be tensioned, loosen, but do not remove, the six (6) Carriage Bolts (39) that hold front of the Cutting Head Assembly (28) to the rear section of that same assembly.
3. Loosen the Bladeshaft Belt Tensioning Jam Nut (34) on the Top of the Cutting Head Assembly (28).
4. Tighten the Bladeshaft Belt Tensioning Bolt (37) until the proper belt tension is achieved.
5. Re-tighten the Bladeshaft Belt Tensioning Jam Nut (34), and the six (6) Carriage Bolts (39) on the Cutting Head Assembly (28).

### 9. Important Advice

- When storing for an extended period of time, use a wire brush to remove hard, caked sludge. Clean and thoroughly lubricate moving parts - so the next job the saw is ready for operation.
- Drive belts must be tight. When the belts are loose, power is lost. Replace worn belts without delay!
- The blade must fit the arbor snugly - especially diamond blades. Otherwise, pounding will occur and this will seriously damage the blades. If the arbor shoulder is grooved where the blade has bound in the cut as the shaft has continued to turn, the arbor must be replaced, or the blade life will be severely shortened.

- Blade flanges must be full diameter - minimum of 4” (101,6 mm). Replace worn flanges at once because undersized flanges shorten blade life and cause blade breakage.
- Check the conveyor cart condition on a regular basis. Replace the wheels and the wooden insert frequently.
- Be certain the cutting head is correctly aligned. Blade misalignment because of handling damage, or transporting the saw with the cutting head on the frame can seriously affect blade life.
- Replace noisy bearings immediately! Worn bearings will quickly destroy the blade.
- Flush clean water through the pump and spray the assembly after every job to prolong the pump and blade life.
- Diamond blades may need to be “sharpened”. Blades may be efficiently “dressed” with dressing sticks.

### **⚠ WARNING!**

Never use fire bricks to “sharpen” or dress diamond blades!

- Abrasive blades must be a reinforced type. Never use an abrasive blade with water. These products can be damaged by operator abuse such as jamming the material into the blade. This can also be hazardous!

### 10. Accessories

The following accessories and kits are available for this machine. See the Parts List for the part number. For additional information contact your local dealer or call our Toll free Customer Service Telephone number shown on the back cover:

- Wheel Kit, Conveyor Cart (Set of 4)
- Water Pump Repair Kit
- Conveyor Cart Kit, Complete
- Ruler Set, Conveyor Cart

### 11. Repairs

We carry out all repairs in the shortest possible time and at the most economical prices (see back page for our address and phone numbers). Contact your authorized dealer concerning maintenance and repairs.

### 12. Spare Parts

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







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