

# **POWERMATIC®**

## **Operating Instructions and Parts Manual Straight Line Rip Saw Model SLR12**



**Powermatic**  
427 New Sanford Road  
LaVergne, TN 37086  
Ph.: 800-274-6848  
[www.powermatic.com](http://www.powermatic.com)

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# IMPORTANT SAFETY INSTRUCTIONS



## **WARNING – To reduce risk of injury:**

1. Read and understand the entire owner's manual before attempting assembly or operation.
2. Read and understand the warnings posted on the machine and in this manual. Failure to comply with all of these warnings may cause serious injury.
3. Replace the warning labels if they become obscured or removed.
4. This rip saw is designed and intended for use by properly trained and experienced personnel only. If you are not familiar with the proper and safe operation of a rip saw, do not use until proper training and knowledge have been obtained.
5. Do not use this rip saw for other than its intended use. If used for other purposes, Powermatic disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use. Your rip saw is provided with a 15HP main motor; do not equip your rip saw with a motor of higher horsepower.
6. Always wear approved safety glasses/face shields while using this rip saw. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
7. Before operating the rip saw, remove tie, rings, watches and other jewelry, and roll sleeves up past the elbows. Remove all loose clothing and confine long hair. Non-slip footwear or anti-skid floor strips are recommended. Do **not** wear gloves.
8. Keep hands outside the machine. Never reach under the guards to try to clear stock that stops feeding.
9. Wear ear protectors (plugs or muffs) during extended periods of operation.
10. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
11. Make certain the switch is in the **OFF** position before connecting the machine to the power supply.
12. Make certain the machine is properly grounded.
13. Make all machine adjustments or maintenance with the machine unplugged from the power source. A machine under repair should be red tagged to show that it should not be used until maintenance is complete.
14. Remove adjusting keys and wrenches. Form a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
15. Keep safety guards in place at all times when the machine is in use. If removed for maintenance purposes, use extreme caution and replace the guards immediately.
16. Check damaged parts. Before further use of the machine, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
17. Provide for adequate space surrounding work area and non-glare, overhead lighting.
18. Keep the floor around the machine clean and free of scrap material, oil and grease.
19. Keep visitors a safe distance from the work area. **Keep children away.**
20. Make your workshop child proof with padlocks, master switches or by removing starter keys.
21. Give your work undivided attention. Looking around, carrying on a conversation and "horse-play" are careless acts that can result in serious injury.
22. Maintain a balanced stance at all times so that you do not fall or lean against moving parts. Do not overreach or use excessive force to perform any machine operation.
23. Be sure the blade rotates under power in a counterclockwise direction when viewed from the front of rip saw (see page 6 for orientation of machine sides).

24. Use the right tool at the correct speed and feed rate. Do not force a tool or attachment to do a job for which it was not designed. The right tool will do the job better and safer.
25. Use recommended accessories; improper accessories may be hazardous.
26. Maintain tools with care. Keep blades sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
27. Turn off the machine and disconnect from power before cleaning. Use a brush or compressed air to remove chips or debris — do not use your hands.
28. Do not stand on the machine. Serious injury could occur if the machine tips over.
29. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
30. Remove loose items and unnecessary work pieces from the area before starting the machine.

**⚠ WARNING:** This product can expose you to chemicals including lead and cadmium which are known to the State of California to cause cancer, and phthalates which are known to the State of California to cause birth defects or other reproductive harm. For more information go to <http://www.p65warnings.ca.gov>.

**⚠ WARNING:** Drilling, sawing, sanding or machining wood products generates wood dust and other substances known to the State of California to cause cancer. Avoid inhaling dust generated from wood products or use a dust mask or other safeguards for personal protection.

Wood products emit chemicals known to the State of California to cause birth defects or other reproductive harm. For more information go to <http://www.p65warnings.ca.gov/wood>.

**Familiarize yourself with the following safety notices used in this manual:**

**⚠ CAUTION** This means that if precautions are not heeded, it may result in minor injury and/or possible machine damage.

**⚠ WARNING** This means that if precautions are not heeded, it may result in serious injury or possibly even death.

**- - SAVE THESE INSTRUCTIONS - -**

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# Introduction

This manual is provided by Powermatic covering the safe operation and maintenance procedures for a Powermatic Model SLR12 Rip Saw. This manual contains instructions on installation, safety precautions, general operating procedures, maintenance instructions and parts breakdown. This machine has been designed and constructed to provide consistent, long-term operation if used in accordance with instructions set forth in this manual. If there are any questions or comments, please contact either your local supplier or Powermatic. Powermatic can also be reached at our web site: [www.powermatic.com](http://www.powermatic.com).

# Specifications

Stock number .....	1791285
Main motor .....	15HP, 3Ph, 230/460V* (pre-wired 230V)
Feed motor .....	2HP, 3Ph, 230/460V* (pre-wired 230V)
Controls .....	220V Magnetic
Blade speed .....	4500 RPM
Feed speeds .....	30-120 FPM variable
Arbor size .....	1" (25.4 mm)
Provided Blade size .....	Dia. 12" (305 mm) x 4.0mm x 48T
Cutting depth .....	3-7/8" (98 mm)
Maximum ripping width .....	18" (460 mm)
Minimum thickness .....	3/8" (10 mm)
Pressure rollers .....	5
Anti-kickback devices .....	2
V-belts .....	4
Table size .....	35" x 55" (890 mm x 1397 mm)
Table height .....	32" (813 mm)
Dust Collection Port .....	4" (102 mm)
Minimum CFM required .....	600
Shipping weight .....	2530 lbs.
Net weight .....	2090 lbs.
Overall dimensions (LxWxH) .....	62" x 56" x 41" (1575 x 1422 x 1041 mm)
Shipping dimensions (LxWxH) .....	62 x 45-1/2 x 66" (1575 x 1156x 1676.4 mm)

*\*Conversion to 460V power requires additional purchase and installation of 460V overload relays.*

The above specifications were current at the time this manual was published, but because of our policy of continuous improvement, Powermatic reserves the right to change specifications at any time and without prior notice, without incurring obligations.

# Features

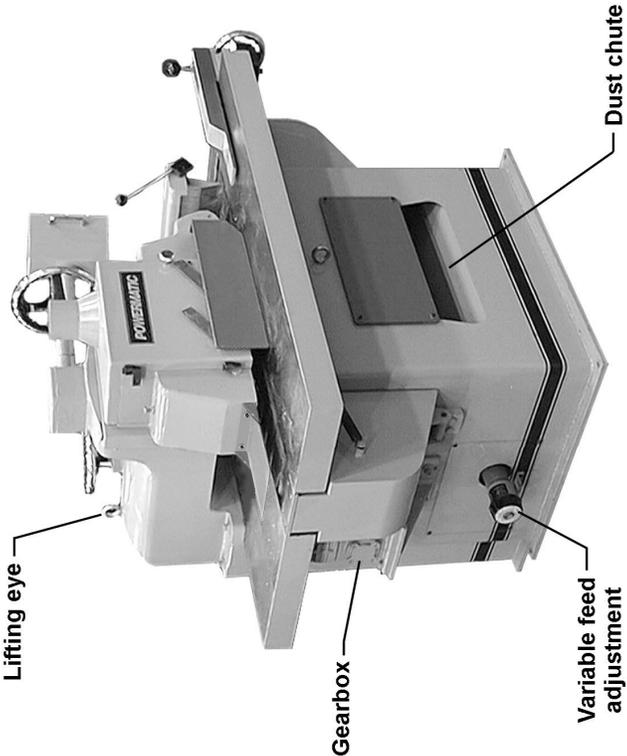
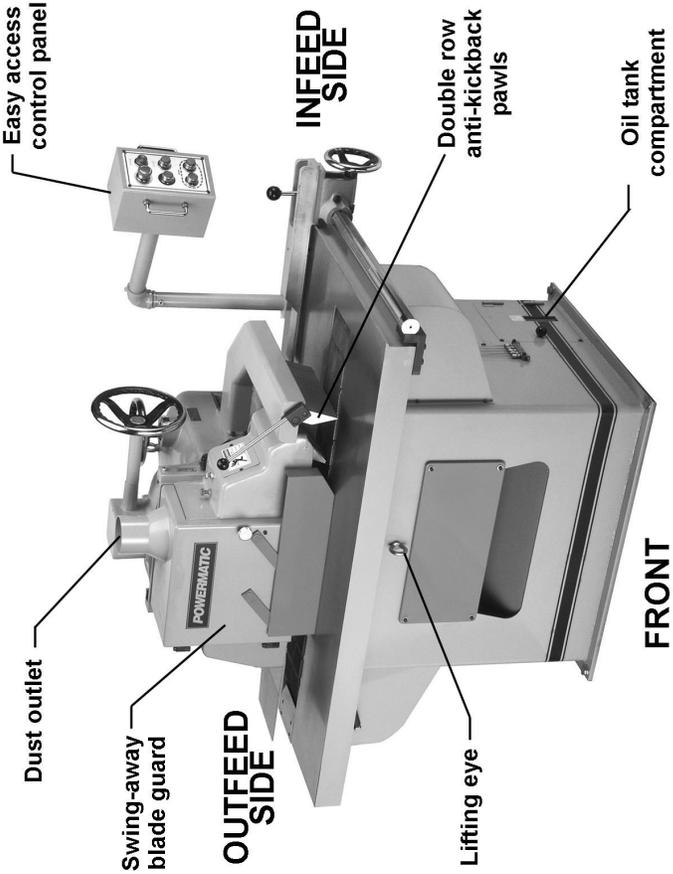


Figure 1

## Receiving

Open shipping container and check for shipping damage. Report any damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Rip Saw is installed and running properly.

Compare the contents of your container with the following parts list to make sure all parts are intact. Missing parts, if any, should be reported to your distributor. Read the instruction manual thoroughly for assembly, maintenance and safety instructions.

### Contents of crate:

- 1 Rip saw body
- 1 Rip fence
- 1 Blade
- 1 Toolbox containing (shown in Figure 2):
  - A – 1 grease gun
  - B – 1 set open-end wrenches
  - C – 1 set hex wrenches
  - D – 4 cast iron foot pads
  - E – 4 M16x80 leveling screws
  - E – 4 M16 hex nuts
  - F – 1 arbor wrench
  - G – 1 T-wrench
- 1 Instruction manual
- 1 Warranty card

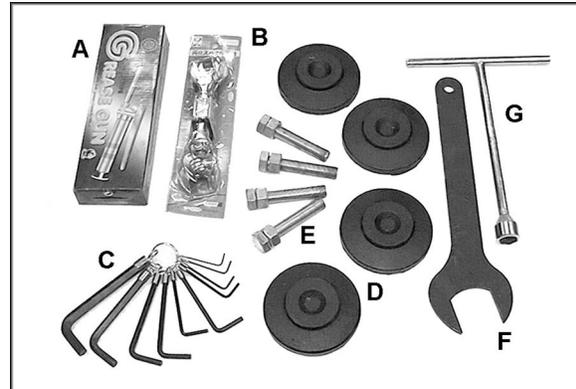


Figure 2

## Installation

### Tools required for assembly:

- forklift or hoist, with slings
- open-end wrenches (provided)
- hex wrenches (provided)
- arbor wrench (provided)
- T-wrench (provided)

NOTE: The terms “front”, “back”, “infeed side” and “outfeed side” are explained on page 7.

1. Lift the machine with a hoist or forklift, using slings through the lifting eyes on the machine. Make sure the capacity of the lifting unit is sufficient to lift this size machine.
2. The rip saw should be located in an area that is well-lit, with a sturdy, level floor and enough space for loading and off-loading stock and general servicing of the machine.
3. The rip saw can be bolted to the floor through the holes at the four corners. If it will not be bolted to the floor, the four cast iron foot pads should be placed beneath the corners, with the four M16 x 80 leveling screws and four M16 nuts. See Figure 3.

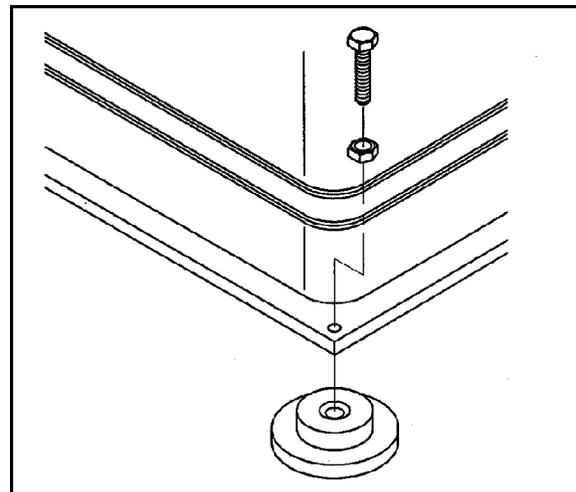


Figure 3

- Place a level upon the machine table, and adjust the screws over the foot pads as necessary. When the machine is level, tighten all four hex nuts against the machine's base.

Unpainted surfaces, such as the work table and fence, have been given a protective coating at the factory. This should be removed with a soft rag moistened with a good commercial solvent. Do not use acetone, lacquer thinner, gasoline or any flammable solvents. Do not use an abrasive pad.

### Control Box

Swing out the control box (Figure 4). Use the set screws to control the tightness of the mounting arm.

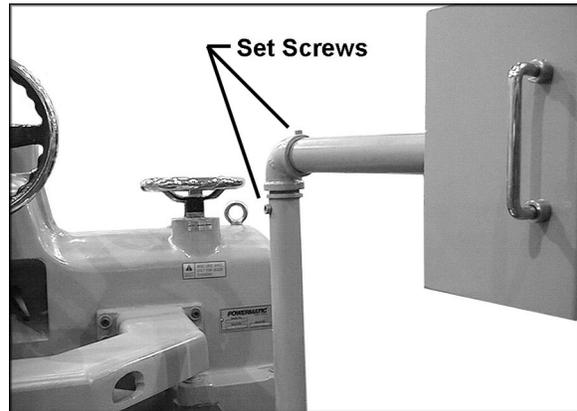


Figure 4

### Grounding Instructions

**⚠️WARNING** Electrical connections must be made by a qualified electrician in compliance with state and local codes. The machine must be properly grounded to help prevent electrical shock and possible death.

A power plug is not provided with the SLR12. You may either connect one, or "hard-wire" the saw directly to your electrical panel provided there is a disconnect near the machine for the operator. Consult electrical schematic on pages 30 and 31 for further clarification of wiring setup.

This machine must be grounded. Grounding provides a path of least resistance to help divert current away from the operator in case of electrical malfunction.

Make sure the voltage of your power supply matches the specifications on the motor plate of the machine.

### Voltage conversion

The Rip Saw is prewired 230V, but may be converted to 460V as follows. Connection diagrams are located inside the motor junction boxes. Similar diagrams can be found at the back of this manual. *Note: In case of discrepancies, diagram on machine takes precedence.*

- Arbor motor: Open junction box and reconnect wires according to diagram.
- Conveyor motor: Open junction box and reconnect wires according to diagram.
- Reconnect wire to transformer from 230V to 460V terminal.

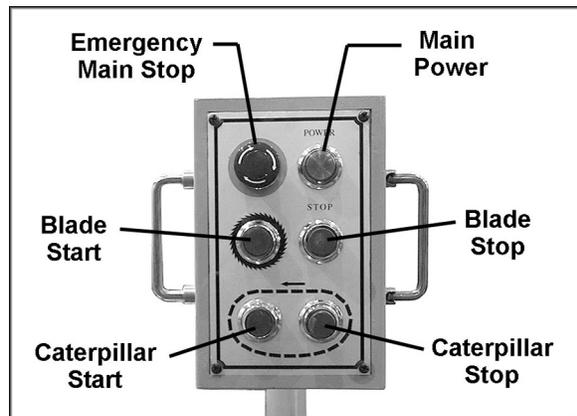


Figure 5

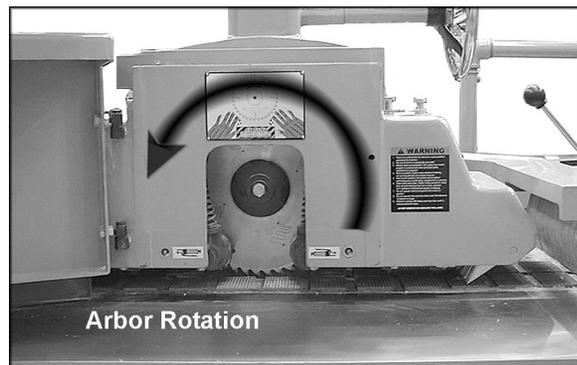


Figure 6

4. Replace 230V overload relay for *main motor* with 460V overload relay (separate purchase, p/n SLR12-611A). Set relay to 9A.
5. Replace 230V overload relay for *conveyor motor* with 460V overload relay (separate purchase SLR12-609AA). Set relay to 3A.
6. If using plug, replace with proper 460V plug.

## Operating Controls

The buttons on the control panel are explained in Figure 5. After making electrical connections, the machine should be turned on to verify the direction of rotation. The blade arbor should rotate counterclockwise when viewed from front of machine (Figure 6). If rotation is wrong, turn off the machine, disconnect power and switch any two of the three electrical leads.

**IMPORTANT:** The emergency stop button (Figure 5) shuts down all operations on the machine simultaneously. To release the emergency stop button, twist it clockwise.

## Installing/Changing Blade

1. Disconnect machine from power source.
2. Unscrew knurled knob on blade guard and swing guard away, as shown in Figure 8.
3. Loosen the arbor lock lever (A, Figure 7) and raise the arbor with the handwheel (B, Figure 7) until the blade can slip on to the arbor without interference from the caterpillar.
4. Place the arbor wrench on the flat of the arbor shaft. Place the T-wrench on the screw head as shown (Figure 8). Hold the shaft stationary with the arbor wrench while loosening the screw.
5. Remove screw and flange and install new blade, making sure to orient it properly - the teeth at bottom of blade should face toward infeed side of machine (as shown in Figure 6).
6. Replace flange and screw, and tighten screw with the T-wrench while holding the arbor wrench stationary.
7. Lower the blade down into the inserts on the caterpillar track (blade teeth should be 0.5mm to 1.5mm lower than caterpillar surface).

**CAUTION** The blade teeth should not contact the bottom of the inserts.

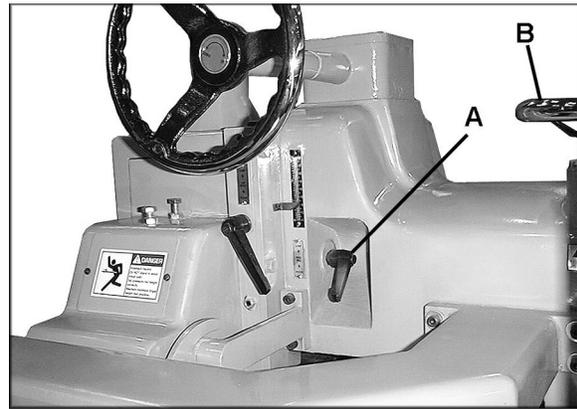


Figure 7

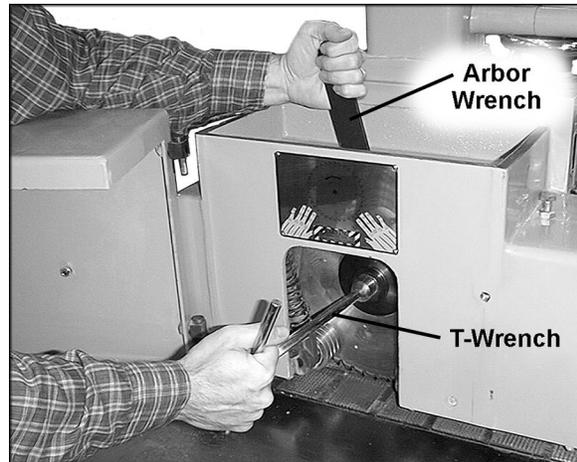


Figure 8

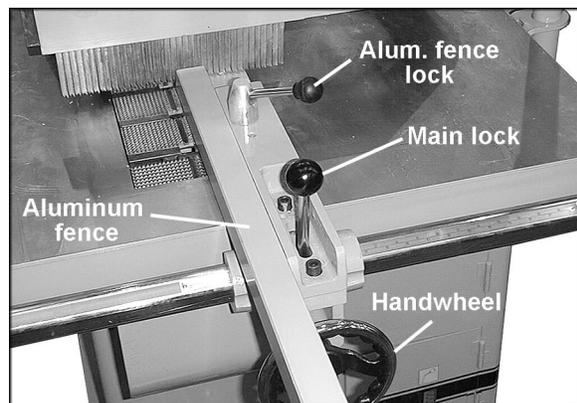


Figure 9

8. Close blade guard and tighten knurled knob.

## Mounting the Fence

1. Slide the fence casting onto the end of the guide bar while pulling back the main lock handle (Figure 9).
2. The fence is moved along the guide bar by rotating the handwheel. Use the main lock handle to secure the fence casting in place.
3. Loosen the other lock handle and slide the aluminum fence onto the casting. Tighten the handle.



Figure 10

## Adjustments

### Main Belt Tension

1. Disconnect machine from power source.
2. Open back panels to expose the motor, pulleys and belts, as shown in Figure 10. Loosen hex nut (Fig. 11) and turn the adjustment screw as needed to adjust the tension. Proper tension is achieved when there is a small amount of deflection by using moderate finger pressure on the belt midway between the pulleys.
3. Tighten hex nut (Fig. 11) and replace panels.

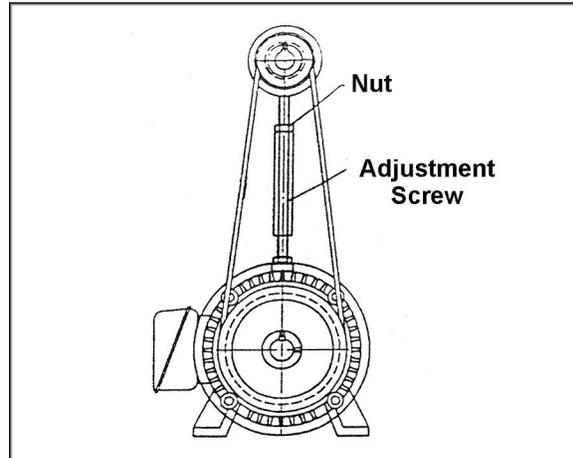


Figure 11

### Gearbox Belt Tension

1. Disconnect machine from power source.
2. Open lower back panel and loosen nuts on the motor base (Fig. 12). Adjust motor base up or down as needed, then tighten nuts. Proper tension is achieved when there is a small amount of deflection by using finger pressure on the belt midway between the pulleys.
3. Replace panels.

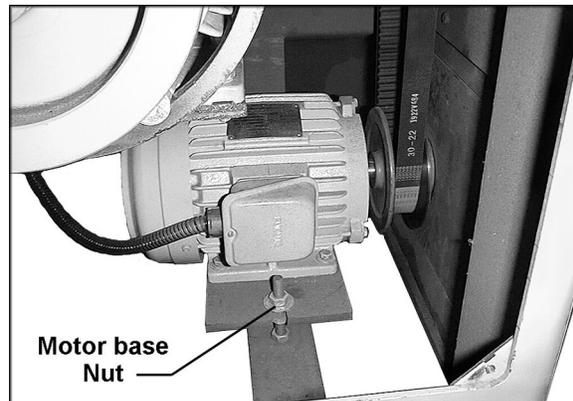


Figure 12

## Feed Speed

The feed speed adjuster is found below the gearbox (Figure 13). Feed speed should be adjusted while the machine is running and the caterpillar is in motion.

Turn adjuster clockwise to decrease feed speed, counterclockwise to increase.

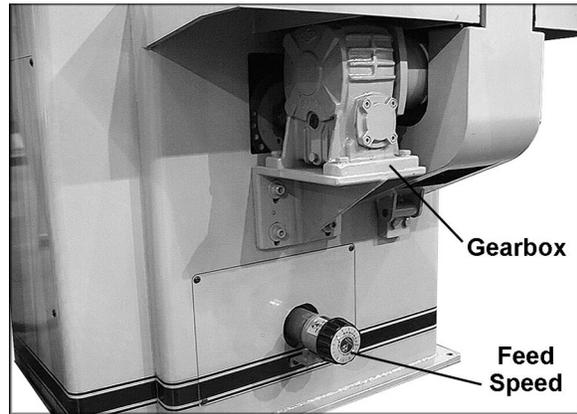


Figure 13

## Fence Alignment

For accurate cutting, the fence must be parallel to the line of cut:

1. Place a straight edge against the fence with its other side flush to the blade, and check that the fence is in line with the blade.
2. If adjustment is needed, loosen the socket head cap screws on one end of the bar (Figure 14). Move the bar in or out as needed until fence is in line with blade.
3. Retighten screws.



Figure 14

## Adjusting Blade and Roller Height

The small handwheel (A, Figure 15) raises or lowers the blade. This blade setting is then locked by tightening the lever (B, Figure 15).

The large handwheel (C, Figure 15) raises and lowers the entire head including the pressure rollers. The roller setting is then locked by tightening the lever (D, Figure 15). A scale near the lever displays the height.

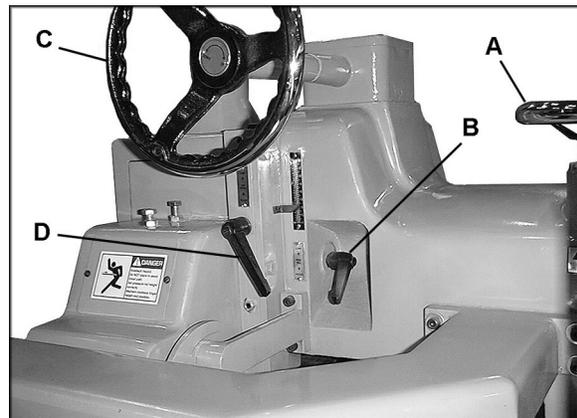


Figure 15

The maximum travel of the blade can be adjusted; for example, if a blade smaller than 12" is installed. To adjust:

1. Remove the back panels.
2. Loosen the socket head cap screw on the stop mechanism (Figure 16).
3. Rotate the stop mechanism as needed to allow more blade drop.
4. When finished adjusting, re-tighten socket head cap screw, and install back panels.

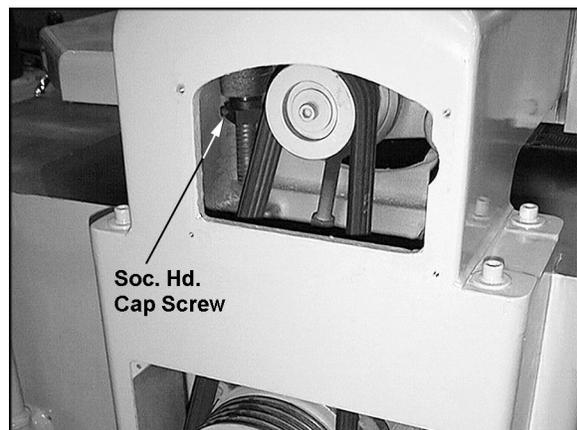


Figure 16

## Oiler Adjustment

1. Remove plastic cover.
2. Loosen set screw (Figure 17) and rotate knurled dial clockwise to increase oil output; counter-clockwise to decrease oil output. The scale is in cubic centimeters.
3. Retighten set screw, and install plastic cover.

## Operation

1. Check the oil tank at the infeed side of the machine (Figure 18). If it is not full, remove the cap and add light 20-weight oil through the fill hole. Replace cap when finished.

**IMPORTANT:** The lubricator has a safety device to ensure a longer service life. If the oil is below minimum level, the device will automatically shut off machine operations. The operator must fill the oil tank in order to re-start the machine. Use light 20-weight oil.

2. Set the head (rollers) at the proper height for the stock being used, and make sure the blade is approximately 0.5 to 1.5mm below the caterpillar surface.
3. Start the saw blade. Let it run for about 10 seconds and then start the caterpillar. Verify that the lubricating system feeding the caterpillar is operating properly.

**CAUTION** If the lubricating system is not operating properly, shut down machine operations immediately in order to prevent damage to the caterpillar.

4. Adjust the fence to the proper measurement on the scale, and feed the stock through the blade.

**WARNING** Anti-kickback pawls are provided to reduce the chance of kickback. However, to increase safety, never stand in path of workpiece while feeding stock and/or operating machine.

## Feeding Curved Wood

Excessively curved or warped stock should not be fed through the rip saw. If the stock has moderate curvature, it should be fed through the rip saw with the concave surface down (Figure 19).

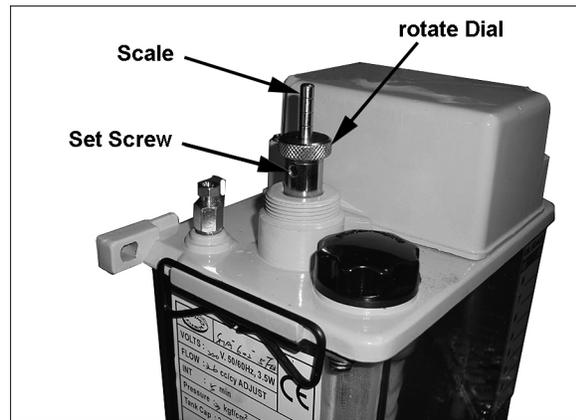


Figure 17

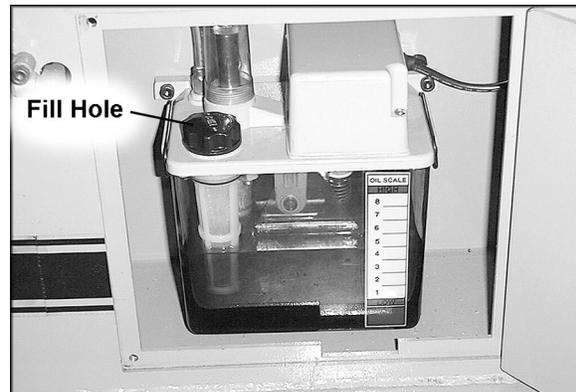


Figure 18

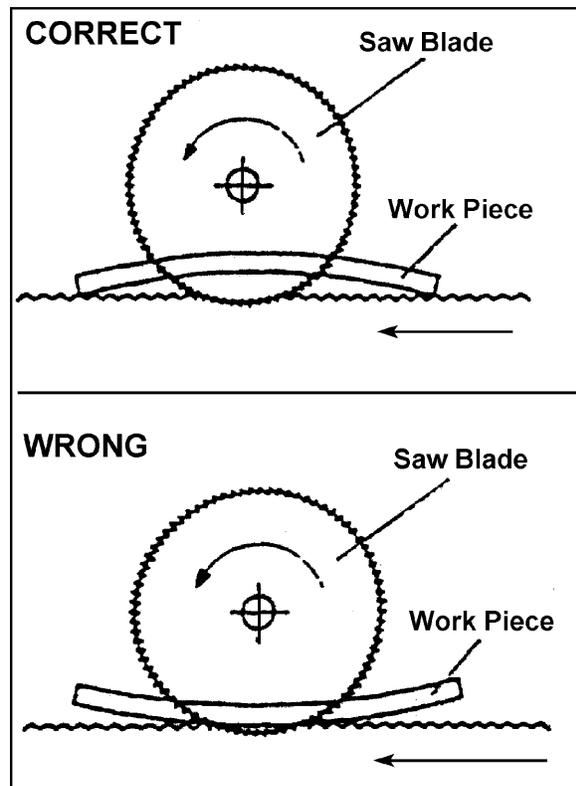


Figure 19

## Maintenance

**⚠WARNING** Before doing maintenance on the machine, disconnect it from the electrical supply by pulling out the plug or switching off the main switch! Failure to comply may cause serious injury.

Interior of oil tank must be kept clean at all times.

The track of caterpillar chain must be kept lubricated at all times by the machine's lubrication system.

Oil should be checked weekly, and more added if necessary. Use light 20-weight oil. Change the oil after 2000 hours of operation. Insufficient oil may cause fast wear of gears; excessive oil into the gear reducer may cause oil leakage. Never overfill the oil tank, and never use recycled oil.

Refill the oil in the gear reducer until the level reaches over half its full capacity.

Properly clean chips and sawdust from your machine after work operations are complete. Never use your hands, use a brush or compressed air.

## Optional Accessory

Part No.	Description
SLR12-700	Laser Assembly

## Troubleshooting (Electrical)

Trouble	Probable Cause	Remedy
Power light won't come on (no power).	Power source not functioning.	Check three phase power source.
	Motor overload relay tripped.	Reset overload relay.
	Fuse burned out.	Replace fuse.
Power light won't come on (lack of phase).	Power source is insufficient.	Check three phase power source.
	YL-60P wire is broken.	Replace YL-60.
	Poor connection on magnetic switch.	Replace magnetic switch.
	Poor connection on terminals.	Replace TB1, TB2.
	Screw loosened.	Tighten screw.
Motor runs abnormally.	Motor jammed.	Clean motor.
	Magnetic switch damaged.	Replace magnetic switch.
	Motor damaged.	Replace motor.
Motor won't run.	Magnetic switch damaged.	Replace magnetic switch.
	Motor burned out.	Replace motor.

## Troubleshooting (Mechanical)

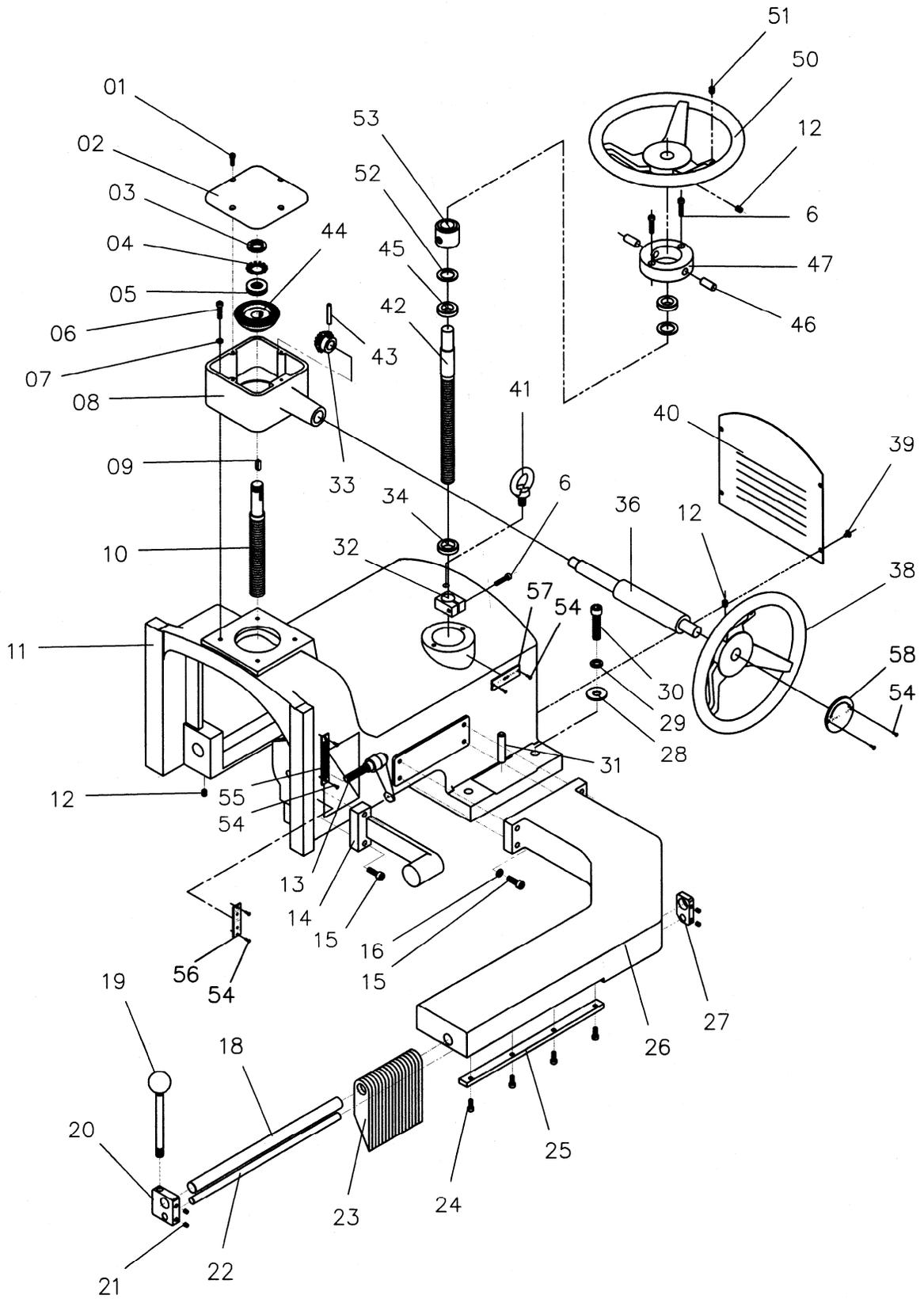
Trouble	Probable Cause	Remedy
Saw arbor won't run.	Saw arbor guard or rear guard not closed.	Check and close guards.
Caterpillar won't move.	Variable speed belt too loose, or dropped.	Adjust variable speed belt tension or replace belt. See page 11.
Workpiece slips.	Pressure roller too high.	Lower the pressure roller.
Convex cut causes jointing failure.	Saw blade too dull.	Replace blade (page 10).
	Fence is bumped.	Adjust fence (page 12).
Concave cut causes jointing failure.	Saw blade too dull.	Replace blade (page 10).
	Fence is bumped.	Adjust fence (page 12).
Uneven product thickness at front and rear end.	Saw blade too dull.	Replace blade (page 10).
	Fence is bumped.	Adjust fence (page 12).
Abnormal speed of link chain conveyor	No oil in lubricator.	Fill tank with oil (page 13).
	Oil distributor jammed.	Blow off dust with air gun.
	Variable speed belt loosened.	Adjust belt tension (page 11).
Wood is not cut off.	Saw blade position is too high to cut.	Lower saw blade 0.5 to 1.5mm below surface of caterpillar (page 12).
Insufficient power causes blade to stop.	Using same saw blade for trimming and cutting off.	Use correct saw blade.
	Saw arbor belt is loosened.	Adjust arbor belt tension.
Finished cut not square.	Fence not square.	Square fence (page 12).
	Damage caused by poor lubrication on chain rail and chain block.	Replace chain rail and chain block, and maintain proper oil level.
Power light on, but machine won't start.	Emergency stop button not released.	Check pushbutton (page 9).
	Safety door cover not closed.	Close door.
	Overload relay tripped.	Replace R1.
	Start switch not functioning.	Replace MS1, MS2.
Machine starts briefly then quits.	Stop pushbutton malfunctioning.	Check PB2, PB3. Replace pushbutton or replace magnetic switch.

## **Replacement Parts**

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

Non-proprietary parts, such as fasteners, can be found at local hardware stores, or may be ordered from Powermatic. Some parts are shown for reference only, and may not be available individually.

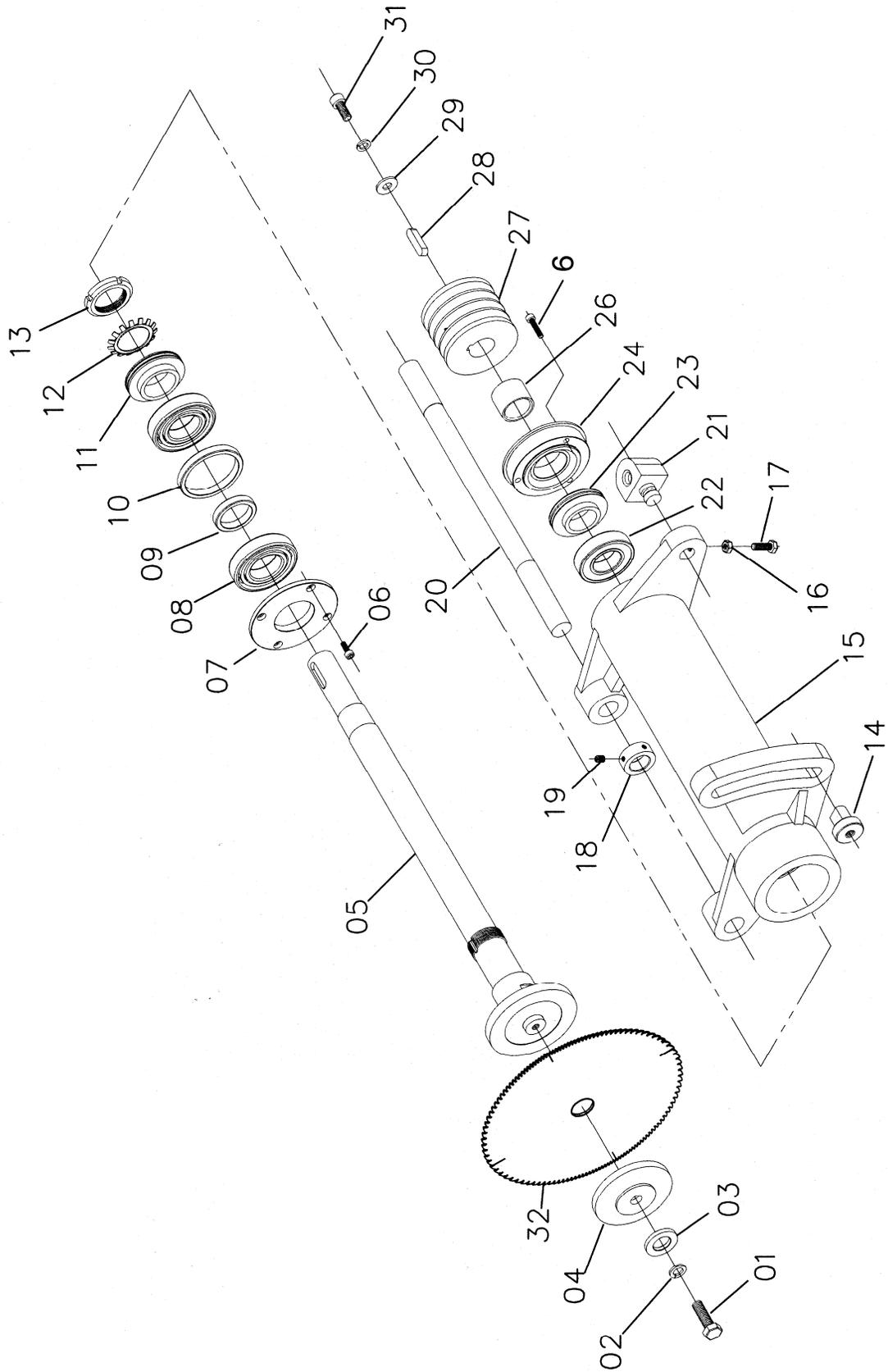
# Infeed Body Assembly – Exploded View



## Infeed Body Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
	SLR12-300	Cover Assembly (Items 1 thru 7)		1
	SLR12-100	Gear Box Assembly (Items 1 thru 10, 33, 36 and 43)		1
1	TS-1502041	Socket Head Cap Screw	M5x16	4
2	SLR12-101	Gear Box Cover		1
3	SLR12-102	Bearing Lock Nut	# AN04	1
4	SLR12-103	Bearing Lock Washer	# AW04	15
5	BB-51104	Thrust Bearing	# 51104	1
6	TS-1503071	Socket Head Cap Screw	M6x30	7
7	TS-2361061	Lock Washer	M6	4
8	SLR12-104	Gear Box Housing		1
9	SLR12-105	Key	7x7x18mm	1
10	SLR12-106	Lead Screw (Blade Raising)	TM25-5x160	1
11	SLR12-107	Infeed Body Housing		1
12	TS-1524021	Socket Set Screw	M8x10	6
13	SLR12-108	Locking Handle		1
14	SLR12-109	Bracket		1
15	TS-1504061	Socket Head Cap Screw	M8x30	6
16	TS-1551051	Lock Washer	M8	4
18	SLR12-110	Shaft		1
19	SLR12-111	Knob		1
20	SLR12-112	Handle Block		1
21	TS-1523031	Socket Set Screw	M6x10	4
22	SLR12-113	Shaft		1
23	SLR12-114	Anti-Kickback Finger		37
24	TS-1503061	Socket Head Cap Screw	M6x25	4
25	SLR12-115	Guide Plate		1
26	SLR12-116	Bracket		1
27	SLR12-117	Shaft Block		13
28	TS-2360121	Flat Washer	M12	4
29	TS-2361121	Lock Washer	M12	44
30	TS-1506091	Socket Head Cap Screw	M12x60	4
31	SLR12-118	Taper Pin	# 7	3
32	SLR12-119	Stop Block		1
33	SLR12-120	Small Bevel Gear		1
34	SLR12-121	Spacer		1
36	SLR12-122	Shaft		1
38	SLR12-123	Handwheel	# 250	1
39	TS-1533032	Pan Head Machine Screw	M5x10	4
40	SLR12-124	Cover		1
41	SLR12-125	Lifting Eye Bolt	M12	1
42	SLR12-126	Lead Screw (Tracking)		1
43	SLR12-127	Pin	Φ4x25mm	14
44	SLR12-128	Bevel Gear		1
45	SLR12-129	Spacer		29
46	SLR12-130	Bushing Pin		2
47	SLR12-131	Cover		1
50	SLR12-132	Handwheel	# 200	1
51	TS-0271031	Socket Set Screw	3/8-16x3/8"	1
52	SLR12-133	Collar		2
53	SLR12-134	Bushing		1
54	SLR12-135	Rivet	#3x5	8
55	SLR12-136	Scale		1
56	SLR12-137	Lock Handle Label (Saw Spindle)		1
57	SLR12-138	Handwheel Label (Saw Spindle)		1
58	SLR12-139	Handwheel Label (Press Roller)		1

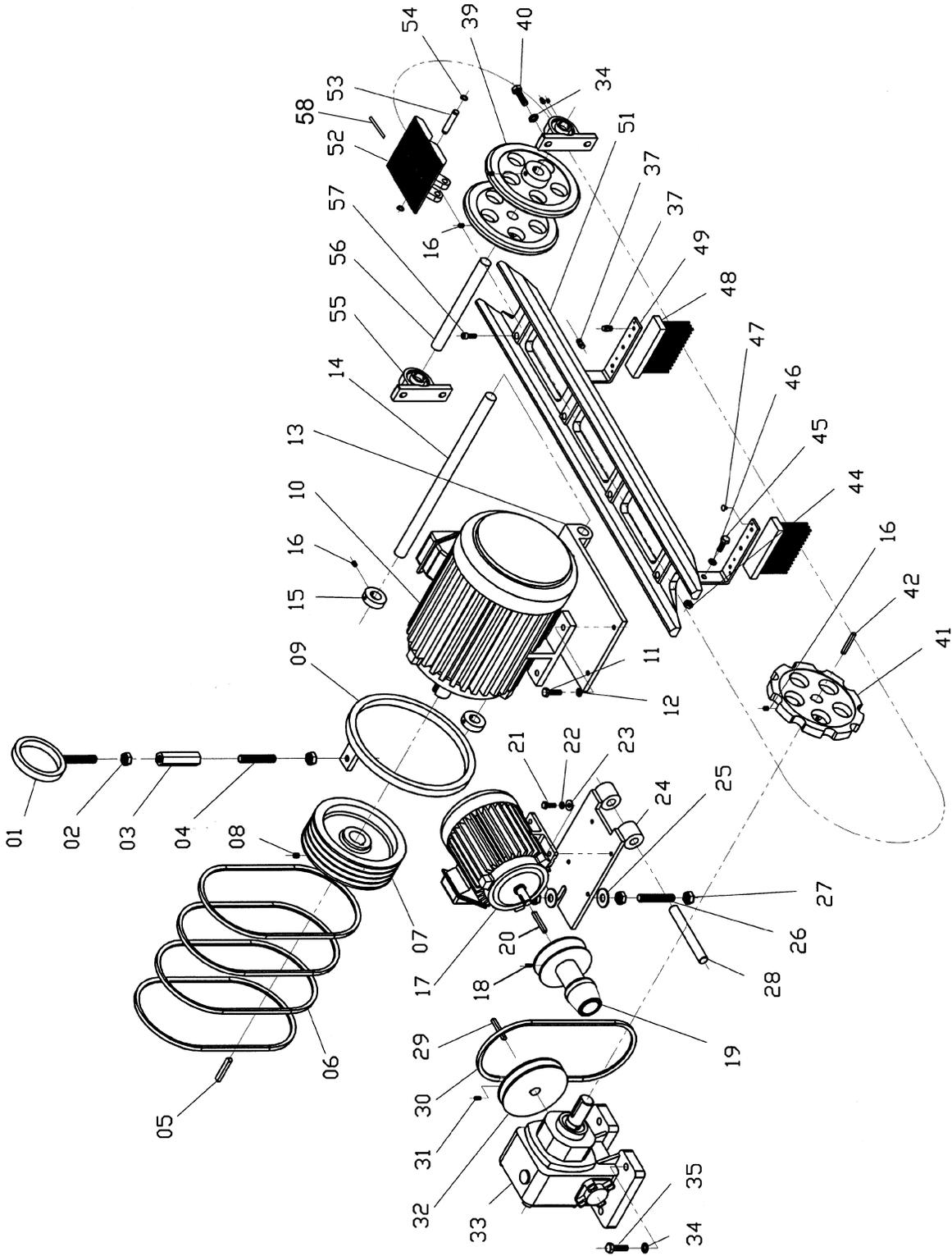
# Arbor Spindle Assembly – Exploded View



## Arbor Spindle Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
	SLR12-200	Arbor Spindle Assembly (Items 1 thru 13)		1
1	TS-1492041	Hex Cap Screw	M12x40	1
2	TS-2361121	Lock Washer	M12	14
3	SLR12-201	Arbor Washer		1
4	SLR12-202	Outer Collar		1
5	SLR12-203	Arbor Spindle		1
6	TS-1503071	Socket Head Cap Screw	M6x30	7
7	SLR12-204	Front Cover		1
8	SLR12-BB7208	Ball Bearing	# 7208	2
9	SLR12-205	Spacer (Inner)		1
10	SLR12-206	Spacer (Outer)		1
11	SLR12-207	Spacer, Front		1
12	SLR12-208	Bearing Washer	# AW08	1
13	SLR12-209	Bearing Nut	# AN08	1
14	SLR12-210	Adjustment Nut		1
15	SLR12-211	Arbor Spindle Housing		1
16	TS-1540061	Hex Nut	M8	1
17	TS-1490061	Hex Cap Screw	M8x35	1
18	SLR12-212	Collar Retainer		1
19	TS-1524021	Socket Set Screw	M8x10	2
20	SLR12-213	Pivot Shaft		1
21	SLR12-214	Adjustment Nut		1
22	BB-6207	Ball Bearing	# 6207	1
23	SLR12-215	Rear Spacer		1
24	SLR12-216	Spindle Cover		1
26	SLR12-217	Spacer		1
27	SLR12-218	Spindle Sheave		1
28	SLR12-219	Key	10x8x40mm	1
29	TS-1550071	Flat Washer	M10	1
30	TS-2361101	Lock Washer	M10	1
31	TS-1505031	Socket Head Cap Screw	M10x25	1
32	SLR12-220	Saw Blade	Φ12"x48Tx4W	1
	SLR12-221	Arbor Wrench (not shown)		1
	SLR12-222	T-Wrench (not shown)		1

# Motor and Drive Unit Assembly – Exploded View

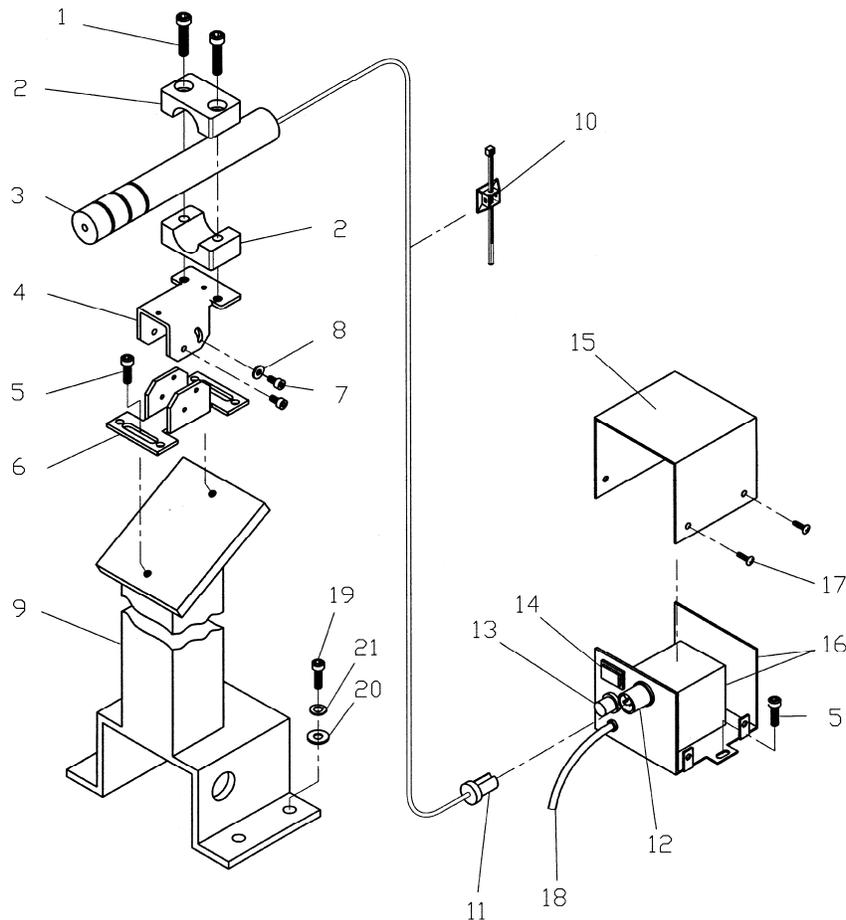


## Motor and Drive Unit Assembly – Parts List

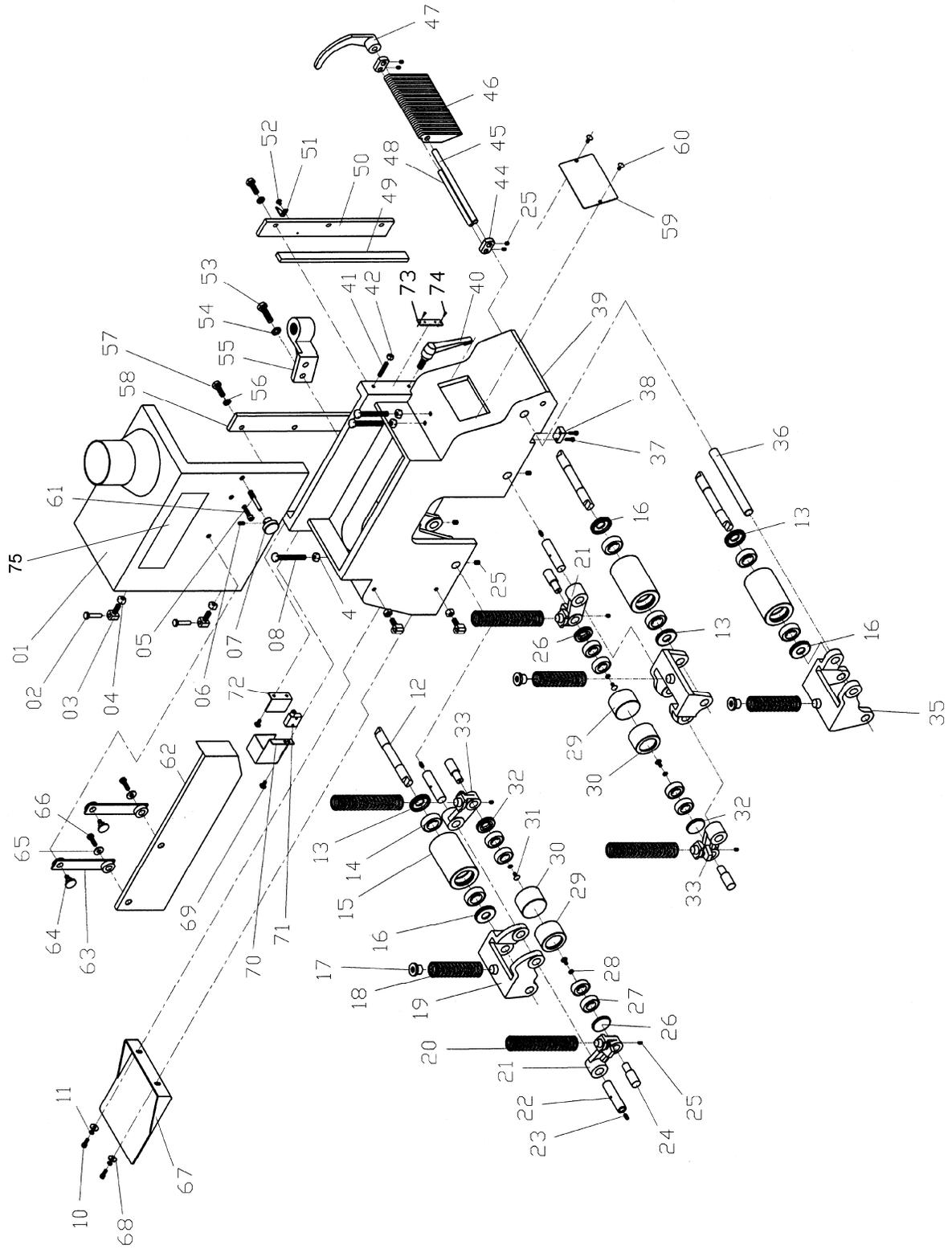
Index No.	Part No.	Description	Size	Qty
1	SLR12-501	Eye-Bolt		1
2	TS-2311161	Hex Nut	M16	2
3	SLR12-502	Adjustment Nut	M16	1
4	SLR12-503	Adjustment Bolt	M16	1
5	SLR12-504	Key	10x8x65	1
6	SLR12-505	V-Belt	A-56	4
7	SLR12-506	Sheave		1
8	TS-1525011	Socket Set Screw	M10x10	2
9	SLR12-507	Adjusting Ring		1
10	SLR12-508	Motor	15HP,230V/460V,3PH	1
11	TS-149105	Hex Cap Screw	M10x35	4
12	TS-2361101	Lock Washer	M10	6
13	SLR12-509	Motor Base		1
14	SLR12-510	Shaft		1
15	SLR12-511	Spacer		2
16	TS-1524021	Socket Set Screw	M8x10	4
17	SLR12-512	Motor	2HP,230V/460V,3PH	1
18	TS-1524041	Socket Set Screw	M8x16	2
19	SLR12-513	Reducer Sheave		1
20	SLR12-514	Key	6x6x60mm	1
21	TS-1490041	Hex Cap Screw	M8x25	4
22	TS-2361081	Lock Washer	M8	4
23	TS-1550061	Flat Washer	M8	4
24	SLR12-515	Motor Base		1
25	TS-2360121	Flat Washer	M12	2
26	SLR12-516	Stud Bolt	M12x100	1
27	TS-1540081	Hex Nut	M12	3
28	SLR12-517	Shaft		1
29	SLR12-518	Key	7x7x40mm	1
30	SLR12-519	V-Belt	1220VB30-22	1
31	TS-1523031	Socket Set Screw	M6x10	2
32	SLR12-520	Reducer Sheave		1
33	SLR12-521	Worm Gear Reducer		1
34	TS-2361121	Lock Washer	M12	4
35	TS-1492041	Hex Cap Screw	M12x40	4
37	SLR12-522	Oil Nozzle	PT1/8"	5
39	SLR12-523	Idle Wheel		2
41	SLR12-524	Sprocket	10T	1
42	SLR12-525	Key	10x8x60mm	1
44	TS-2311101	Hex Nut	M10	2
45	TS-1491041	Hex Cap Screw	M10x30	2
47	TS-0803052	Slotted Round Head Machine Screw	#5-40x5/8"	8
48	SLR12-526	Brush		2
49	SLR12-527	Rail Bracket		2
51	SLR12-528	Rail Body		1
52	SLR12-529	Caterpillar Block		38
53	SLR12-530	Shaft		38
54	SLR12-531	Retaining Ring	C12	76
55	SLR12-532	Ball Bearing Assembly	# UCP205	2
56	SLR12-533	Shaft		1
57	TS-1504051	Socket Head Cap Screw	M8x25	8
58	SLR12-534	Caterpillar Chain Insert		38

## Laser Assembly (Optional Accessory) – Parts List & Exploded View

Index No.	Part No.	Description	Size	Qty
.....	SLR12-700	Laser Assembly (Items 1 thru 18)	.....	.....
1	TS-1503081	Socket Head Cap Screw	M6 x 35	2
2	SLR12-701	Clamp Seat		2
3	SLR12-702	Laser		1
4	SLR12-703	Adjustment Bracket		1
5	TS-1502041	Socket Head Cap Screw	M5 x 16	4
6	SLR12-704	Bracket		1
7	TS-1501021	Socket Head Cap Screw	M4 x 8	4
8	TS-1550021	Flat Washer	M4	2
9	SLR12-705	Mounting Bracket		1
10	SLR12-706	Cord Holder		6
11	SLR12-707	DC Power Connector (Male)		1
.....	SLR12-714	Transformer Assembly (Items 12 thru 18)	.....	.....
12	SLR12-708	DC Power Connector (Female)		1
13	SLR12-709	Fuse	1A	1
14	SLR12-710	Power Switch		1
15	SLR12-711	Control Box		1
16	SLR12-712	Transformer with Base Plate		1
17	TS-1531012	Philips Pan Head Machine Screw	M3 x 6	4
18	SLR12-713	Power Cord		1
19	TS-1504041	Socket Head Cap Screw	M8 x 20	4
20	TS-1550061	Flat Washer	M8	4
21	TS-2361081	Lock Washer	M8	4



# Roller and Frame Assembly – Exploded View

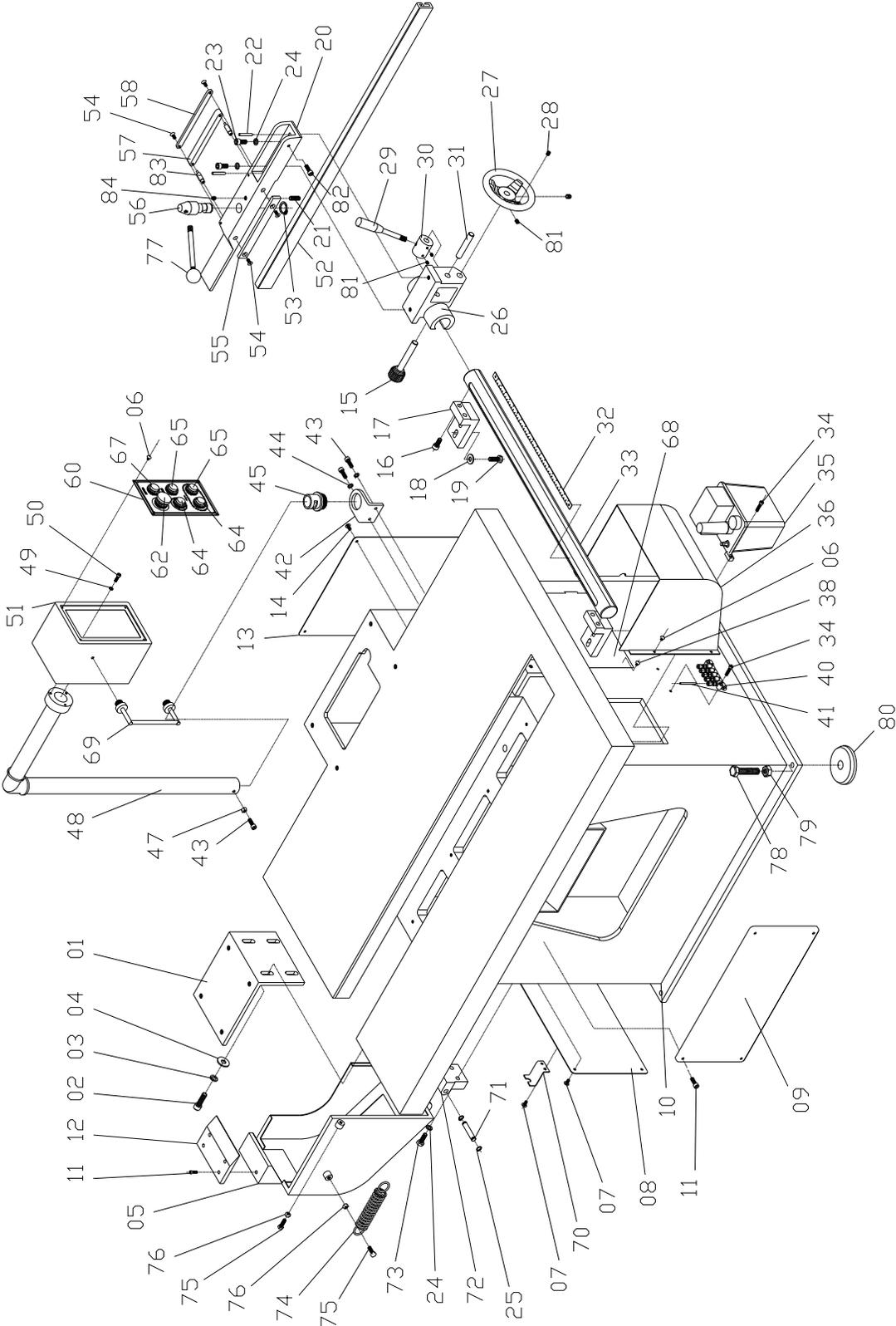


## Roller and Frame Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
	SLR12-300	Cover Assembly (Items 1 thru 7)		1
1	SLR12-301	Cover w/ Dust Port		1
2	SLR12-302	Rotation Shaft		2
3	SLR12-303	Special Screw		5
4	TS-1540071	Hex Nut	M10	7
5	SLR12-304	Lock Screw		1
6	TS-1523011	Socket Set Screw	M6x6	1
7	SLR12-305	Knob		1
8	TS-2210801	Hex Cap Screw	M10x80	3
10	TS-1503051	Socket Head Cap Screw	M6x20	2
11	TS-2361061	Lock Washer	M6	2
12	SLR12-306	Shaft		3
13	SLR12-307	Right Bearing Cover		3
14	BB-6204	Ball Bearing	# 6204	6
15	SLR12-308	Roller		3
16	SLR12-309	Left Bearing Cover		3
17	SLR12-310	Spring Seat		3
18	SLR12-311	Spring		3
19	SLR12-312	Arm		2
20	SLR12-313	Spring		4
21	SLR12-314	Arm		2
22	SLR12-315	Shaft		4
23	SLR12-316	Grease Fitting	# 6	4
24	SLR12-317	Shaft		4
25	TS-1523031	Socket Set Screw	M6x10	18
26	SLR12-318	Left Bearing Cover		2
27	BB-6302	Ball Bearing	# 6302	8
28	TS-1550041	Flat Washer	M6	4
29	SLR12-319	Left Roller		2
30	SLR12-320	Right Roller		2
31	TS-2286202	Pan Head Machine Screw	M6x20	4
32	SLR12-321	Right Bearing Cover		2
33	SLR12-322	Left Arm		2
35	SLR12-323	Arm		1
36	SLR12-324	Shaft		1
37	TS-1502041	Socket Head Cap Screw	M5x16	4
38	SLR12-325	Block		2
39	SLR12-326	Roller Housing		1
40	SLR12-327	Locking Handle	M12	1
41	TS-1524061	Socket Set Screw	M8x25	3
42	TS-1540061	Hex Nut	M8	3
44	SLR12-328	Block		2
45	SLR12-329	Shaft		1
46	SLR12-330	Anti-Kickback Fingers		25
47	SLR12-331	Bracket		1
48	SLR12-332	Shaft		1
49	SLR12-333	Slide Plate		1
50	SLR12-334	Lock Bar		1
51	SLR12-335	Needle		1
52	TS-1533032	Pan Head Machine Screw	M5x10	1
53	TS-1492041	Hex Cap Screw	M12x40	2
54	TS-2361121	Lock Washer	M12	2
55	SLR12-336	Bracket		1
56	TS-2361101	Lock Washer	M10	6
57	TS-1491041	Hex Cap Screw	M10x30	6
58	SLR12-337	Lock Bar		1
59	SLR12-338	Cover		1

Index No.	Part No.	Description	Size	Qty
60	TS-1534042	Pan Head Machine Screw	M6x12	2
61	TS-1504051	Socket Head Cap Screw	M8x25	1
62	SLR12-339	Side Guard		1
63	SLR12-340	Arm		2
64	SLR12-341	Special Screw		2
65	TS-1550061	Flat Washer	M8	2
66	TS-1490041	Hex Cap Screw	M8x25	2
67	SLR12-342	Safety Guard		1
68	TS-1550041	Flat Washer	M6	2
69	TS-1533032	Pan Head Machine Screw	M5x10	4
70	SLR12-343	Cover		1
71	SLR12-344	Limit Switch		1
72	SLR12-345	Bracket		1
73	SLR12-373	Lock Handle Label (Press Roller)		1
74	SLR12-135	Rivet	#3x5mm	2
75	3312341	Powermatic Logo		1

# Table and Stand Assembly – Exploded View



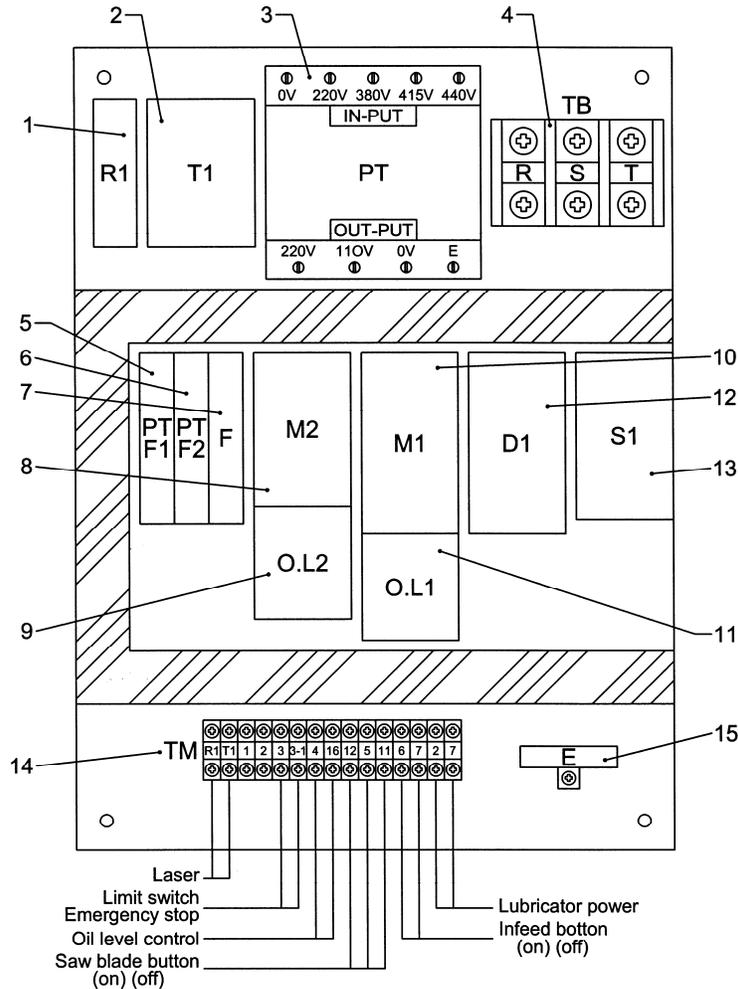
## Parts List: Table and Stand Assembly

Index No.	Part No.	Description	Size	Qty
	SLR12-400FAN	Fence Complete Assembly (Index 15, 20-24, 26-31, 52-58, 77, 81-84)		1
1	SLR12-401	Bracket		1
2	TS-1506051	Socket Head Cap Screw	M12x40	4
3	TS-2361121	Lock Washer	M12	4
4	TS-2360121	Flat Washer	M12	4
5	SLR12-402	Cover		1
6	TS-1533032	Pan Head Machine Screw	M5x10	11
7	TS-2248122	Pan Head Machine Screw	M8x12	6
8	SLR12-403	Cover		1
9	SLR12-404	Cover		1
10	SLR12-405	Stand		1
11	TS-1502041	Socket Head Cap Screw	M5x16	8
12	SLR12-406	Cover Plate		1
13	SLR12-407	Cover		1
14	TS-1534042	Pan Head Machine Screw	M6x12	6
15	SLR12-408N	Gear		1
16	TS-1505031	Socket Head Cap Screw	M10x25	4
17	SLR12-409	Bracket		2
18	TS-1550071	Flat Washer	M10	4
19	TS-1505061	Socket Head Cap Screw	M10x40	4
20	SLR12-410	Fence		1
21	SLR12-411	Special Screw		1
22	SLR12-412	Taper Pin	# 7	2
23	TS-1505051	Socket Head Cap Screw	M10x35	2
24	TS-2361101	Lock Washer	M10	4
25	SLR12-413	Retaining Ring	C12	2
26	SLR12-414N	Gear Box		1
	SLR12-414NK	Gear Box Kit (includes #29 thru 31)		1
27	SLR12-415	Handwheel	# 150	1
28	TS-0271031	Socket Set Screw	3/8"-16x3/8"	2
29	SLR12-416N	Knob Handle		1
30	SLR12-417N	Setting Block		1
31	SLR12-418N	Shaft		1
32	SLR12-419	Scale		1
33	SLR12-420	Gear Column		1
34	TS-1503051	Socket Head Cap Screw	M6x20	4
35	SLR12-421	Oil Reservoir		1
36	SLR12-422	Cover		1
40	SLR12-423	Oil Reservoir Contactor		1
41	SLR12-424	Oil Tube	O.D. 4x2.5 mm	5
42	SLR12-425	Control Panel Bracket		1
43	TS-1504051	Socket Head Cap Screw	M8x25	3
44	TS-1550061	Flat Washer	M8	2
45	SLR12-426	Rotation Seat		1
47	TS-1540061	Hex Nut	M8	1
48	SLR12-427	Control Panel Arm		1
49	TS-2361061	Lock Washer	M6	3
50	TS-1503061	Socket Head Cap Screw	M6x25	3
51	SLR12-428	Control Panel		1
52	SLR12-429	Side Plate		1
53	SLR12-430	Retaining Ring	C25	1
54	TS-2286201	Phillips Flat Head Machine Screw	M6x20	4
55	SLR12-431	Clamping Strip		1
56	SLR12-432	Lock Lever		1
57	SLR12-433	Clamp		1
58	SLR12-434	Cover		1
60	SLR12-436	Panel		1

Index No.	Part No.	Description	Size	Qty
62	SLR12-437	Emergency Stop Button		1
64	SLR12-438	Start Button		2
65	SLR12-440	Stop Button		2
67	SLR12-442	Start Button, Power On		1
68	SLR12-443	Electrical Control Assembly		1
69	SLR12-444	Handle		2
70	SLR12-445	Bracket		1
71	SLR12-446	Shaft		1
72	SLR12-447	Bracket		1
73	TS-1491061	Hex Cap Screw	M10x40	2
74	SLR12-448	Spring		1
75	TS-1490061	Hex Cap Screw	M8x35	2
76	TS-1540061	Hex Nut	M8	2
77	SLR12-449	Knob Handle		1
78	SLR12-450	Leveling Screw	M16x80	4
79	TS-2311161	Hex Nut	M16	4
80	SLR12-451	Foot Pad		4
81	TS-1524021	Socket Set Screw	M8 x10	4
82	TS-1523031	Socket Head Cap Screw	M6 x10	1
83	SLR12-483	Clamping Shaft		2
84	TS-1525031	Socket Set Screw	M10 x16	1

# Electrical Control Panel (SLR12-443) – Parts List & Diagram

Index No.	Part No.	Description	Size	Qty
1	SLR12-601	Control Relay	R1	MY2NJ-200/220VAC .. 1
2	SLR12-602	Timer	T1	1
3	SLR12-603	Transformer	PT	0V~440V .. 1
4	SLR12-604	Terminal Plate	TB	1
5	SLR12-605	Fuse	PTF1	10x38-4A .. 1
6	SLR12-606	Fuse	PTF2	10x38-4A .. 1
7	SLR12-607	Fuse	F	10x38-4A .. 1
8	SLR12-608	Switch	M2	LC1D096 .. 1
9	SLR12-609	Conveyor Overload	OL2 (230V)	LR3D12 5.5~8A .. 1
	SLR12-609A	Conveyor Overload	OL2 (460V)	LR3D10 4~6A .. 1
	SLR12-609AA	Conveyor Overload	OL2 (460V)	LR3D08 2.5~4A s/n 1703SLR12256 and higher .. 1
10	SLR12-610	Switch	M1	LC1D256 .. 1
11	SLR12-611	Main Motor Overload	OL1 (230V)	LR3D22, 16~24A .. 1
	SLR12-611A	Main Motor Overload	OL1 (460V)	LR3D16, 9~13A .. 1
12	SLR12-612	Switch	D1	LC1D256 .. 1
13	SLR12-613	Switch	S1	LC1D186 .. 1
14	SLR12-614	Terminal	TM	1
15	SLR12-615	Grounding Block	G	1







# Preventive Maintenance

## Checklist for Model SLR12 Straight Line Rip Saw

- [ ] Work area around machine marked off clearly.
- [ ] Non-skid floor strips in area where operator normally stands.
- [ ] Inspect entire machine for loose bolts, nuts, screws. Tighten and replace as necessary.
- [ ] Clean table area, removing sawdust and chips with a soft bristle brush. Remove gum and pitch with oven cleaner.
- [ ] Lubricate appropriate places with a good grade non-hardening grease.
- [ ] Clean table and fence surface. If rusted, use paste mixture of household ammonia, a good commercial detergent and 000 steel wool. Wash surface down with hot, soapy water, rinse and dry thoroughly. Coat surface with talcum powder, rubbing briskly into surface with a clean blackboard eraser.
- [ ] Check blade condition; should be sharp and free of nicks or grooves.
- [ ] Check belt condition. Replace as needed. Dress with parafin. Check belt tension.
- [ ] Check motor for loose wiring and sawdust congestion, pulleys tight and in line.
- [ ] Check bearings. Replace any bad or suspect bearings immediately.
- [ ] Fence properly aligned with blade.

# Warranty and Service

Powermatic warrants every product it sells against manufacturers' defects. If one of our tools needs service or repair, please contact Technical Service by calling 1-800-274-6846, 8AM to 5PM CST, Monday through Friday.

## Warranty Period

The general warranty lasts for the time period specified in the literature included with your product or on the official Powermatic branded website.

- Powermatic products carry a limited warranty which varies in duration based upon the product. (See chart below)
- Accessories carry a limited warranty of one year from the date of receipt.
- Consumable items are defined as expendable parts or accessories expected to become inoperable within a reasonable amount of use and are covered by a 90 day limited warranty against manufacturer's defects.

## Who is Covered

This warranty covers only the initial purchaser of the product from the date of delivery.

## What is Covered

This warranty covers any defects in workmanship or materials subject to the limitations stated below. This warranty does not cover failures due directly or indirectly to misuse, abuse, negligence or accidents, normal wear-and-tear, improper repair, alterations or lack of maintenance. Powermatic woodworking machinery is designed to be used with Wood. Use of these machines in the processing of metal, plastics, or other materials outside recommended guidelines may void the warranty. The exceptions are acrylics and other natural items that are made specifically for wood turning.

## Warranty Limitations

Woodworking products with a Five Year Warranty that are used for commercial or industrial purposes default to a Two Year Warranty. Please contact Technical Service at 1-800-274-6846 for further clarification.

## How to Get Technical Support

Please contact Technical Service by calling 1-800-274-6846. **Please note that you will be asked to provide proof of initial purchase when calling.** If a product requires further inspection, the Technical Service representative will explain and assist with any additional action needed. Powermatic has Authorized Service Centers located throughout the United States. For the name of an Authorized Service Center in your area call 1-800-274-6846 or use the Service Center Locator on the Powermatic website.

## More Information

Powermatic is constantly adding new products. For complete, up-to-date product information, check with your local distributor or visit the Powermatic website.

## How State Law Applies

This warranty gives you specific legal rights, subject to applicable state law.

## Limitations on This Warranty

POWERMATIC LIMITS ALL IMPLIED WARRANTIES TO THE PERIOD OF THE LIMITED WARRANTY FOR EACH PRODUCT. EXCEPT AS STATED HEREIN, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE EXCLUDED. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. POWERMATIC SHALL IN NO EVENT BE LIABLE FOR DEATH, INJURIES TO PERSONS OR PROPERTY, OR FOR INCIDENTAL, CONTINGENT, SPECIAL, OR CONSEQUENTIAL DAMAGES ARISING FROM THE USE OF OUR PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Powermatic sells through distributors only. The specifications listed in Powermatic printed materials and on the official Powermatic website are given as general information and are not binding. Powermatic reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

## Product Listing with Warranty Period

90 Days – Parts; Consumable items
1 Year – Motors, Machine Accessories
2 Year – Woodworking Machinery used for industrial or commercial purposes
5 Year – Woodworking Machinery

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427 New Sanford Road  
LaVergne, TN 37086  
Phone: 800-274-6848  
[www.powermatic.com](http://www.powermatic.com)