

Wadkin BURSGREEN

Wadkin Bursgreen BSK HD 400R - Heavy Duty Rip Saw



Supplied by Advanced Machinery Services

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EC Declaration of Conformity

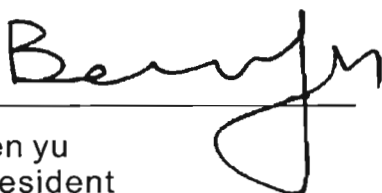


We declare under our sole responsibility that this product is in conformity with the following standards or standardization documents: ISO EN12100-1/-2, En1050, EN418, EN1088, EN1870-1 and EN60204-1

According to the provisions of the regulation 98/37/EC, 2006/95/EC, and 2004/108/EC.

This equipment must not put into service until the equipment into which it is to be incorporated has been declared in conformity with the provision of the Directive.

Name and Signature


Ben yu
President

Date and Place

2009.06.10
Taichung, Taiwan

1. General Information

Union-One Machinery Co., Ltd. is specialized to supply full series of table saw from 254mm(10"),305mm(12"),400mm(16") to 450mm (18") size of sawblade. In Order to provide the best products to our customers we have been focusing on improving the management, strict control of quality and reasonable prices (we were certified with ISO 9002 in 1989, and are presently applying for the ISO 9001 Certification). We will keep improving the quality of our woodworking machines, its precision, its durability and finally its developing technique. We want our customers get the best value on the markets and have strong confidence in use and our products by giving a reasonable price and excellent quality.

The TSCE-series are professional for woodworking machine designed to rip solid wood, chipboard, fiberboard, plywood and so these materials. Be careful for rigidity of working materials, don't try forbidden materials such as low flash point metals and high stiff stone...etc.

HSS (High Speed Steel) sawblade and milling tools should not be used. The sawblade made in accordance with EN847-1: 1997 shall be used on the machine.

Generally, the table saw shall be installed in the following conditions:

- 1) Supply voltage: 0.9-1.1 nominal supply voltage
- 2) Source frequency: 0.99 1.01 nominal frequency
- 3) Ambient temperature: 5°C-40°C
- 4) Altitude: shall be at altitudes up to 1000m above mean sea level.
- 5) Relative humidity: not exceed 50% at 40°C.
- 6) Atmosphere: Free from excessive dust, acid fume,corrosive gases and salt.
- 7) Avoid exposing to direct sunlight or heat rays which can change the environmental temp.
- 8) Avoid exposing to abnormal vibration.
- 9) Electrical equipment shall withstand the effects of transportation and storage temperature within a range of -25°C to 55°C and for short periods not exceeding 24 hours at up to +70°C.

This machine was designed for certain applications only. We strongly recommend that this machine NOT be modified and/or used for any application. DO NOT use the machine until you have had detail instruction from your dealer.

2. Safety Rules

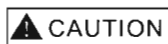
Warnings


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. Do not use this table saw for other than its intended use. If used for other purposes, manufacturer disclaims any real or implied warranty and holds itself harmless from any injury that may result from that use.
5. Always wear approved safety glasses/face shields while using this table saw. Everyday eyeglasses only have impact resistant lenses; they are not safety glasses.
6. Before operating this table 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.
7. Wear ear protector (plugs or muffs) during extended periods of operation.
8. Some dust created by power sanding, sawing, grinding, drilling and other construction activities contain chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:
Lead from lead based paint.
Crystalline silica from bricks, cement and other masonry products.
Arsenic and chromium from chemically treated lumber.
Your risk of exposure varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well-ventilated area and work with approved safety equipment, such as face or dust masks that are specifically designed to filter out microscopic particles.
9. Do not operate this machine while tired or under the influence of drugs, alcohol or any medication.
10. Make certain the machine is properly grounded.
11. Make all machine adjustments or maintenance with the machine unplugged from the power source. A machine under repair should be RED TAGGED to show it must not be used until maintenance is complete.
12. Remove adjusting keys and wrenches. From a habit of checking to see that keys and adjusting wrenches are removed from the machine before turning it on.
13. 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.
14. Check the alignment of the riving knife, fence and miter slot to the blade. A caution decal is installed on each guard to remain the operator of the dangers of improper machine operation.
15. 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.

Warnings

16. Provide for adequate space surrounding work area and non-glare, overhead lighting.
17. Keep the floor around the machine clean and free of scrap material, oil and grease.
18. Keep visitors a safe distance from the work area. Keep children away.
19. Make your workshop child proof with padlocks, master switches or by removing safety keys.
20. Give your work undivided attention. Looking around, carrying on a conversation and “horse-play” are careless acts that can result in serious injury.
21. Maintain a balanced stance at all time so that you do not fall or lean against the blade or other moving parts. Do not overreach or use excessive force to perform any machine operation.
22. 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.
23. Use recommended accessories; improper accessories may be hazardous.
24. Maintain tools with care. Keep blade sharp and clean for the best and safest performance. Follow instructions for lubricating and changing accessories.
25. Check the saw blade for cracks or missing teeth. Do not use a cracked or dull blade or one with missing teeth or improper set. Make sure the blade is securely locked on the arbor.
26. Keep hands clear of the blade area. Do not reach past the blade to clear parts or scrap with the saw blade running. Never saw freehand. Avoid awkward operations and hand positions where a sudden slip could cause your hand to contact the blade.
27. Do not attempt to saw boards with loose knots or with nails or other foreign material, on its surface. Do not attempt to saw twisted, warped, bowed or “in wind” stock unless one edge jointed for guiding purposes prior to sawing.
28. Do not attempt to saw long or wide boards unsupported where spring or weight could cause the board to shift position.
29. Always use the riving knife, blade guard, push stick and other safety devices for all operations where they can be used. Release the blade guard down immediately after completing the sawblade exchange process.
30. Be sure the saw blade rotates clockwise when viewed from the motor side of the machine.
31. Turn off the machine before cleaning. Use a brush or compressed air to remove chips or debris-do not use your hands.
32. Do not stand on the machine. Serious injury could occur if the machine tips over.
33. Never leave the machine running unattended. Turn the power off and do not leave the machine until it comes to a complete stop.
34. Remove loose items and unnecessary work pieces from the area before starting the machine.

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.

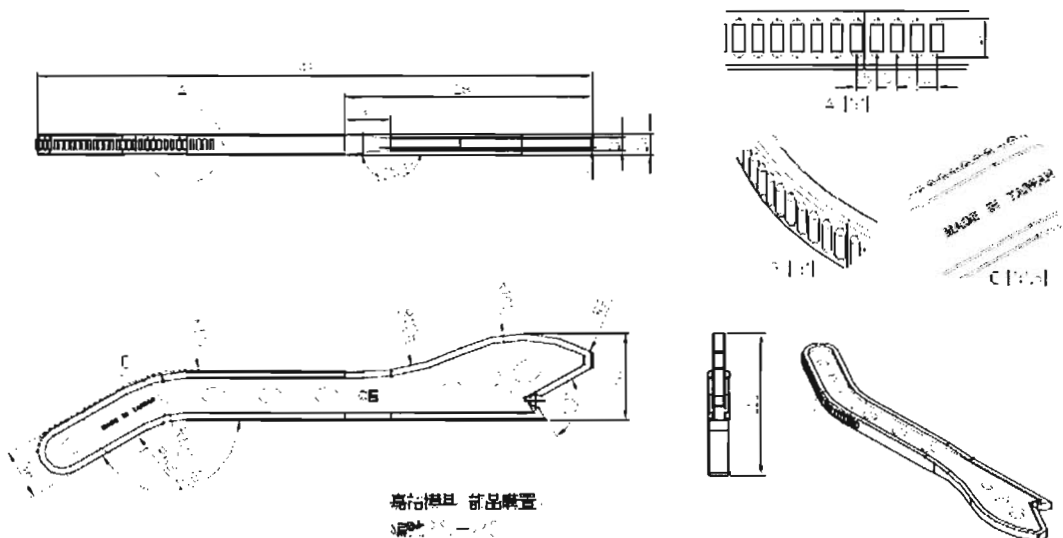
Warnings

35. Ground all machines.
It should make sure the "PE" terminal being connection before machine operating.
36. Don't use in dangerous environment.
Don't use machine in damp or wet locations, or expose them to rain.
Please provide a suitable illumination around the machine for safety operation.
37. Please wear eye-shield and ear-shield during operation.
38. Don't force machine. It will do the job better and be safer at the rate for which it was designed.
39. SHUT OFF the power, remove the products, and isolated energy before leaving the machine. Shut off the power and carried out only when the machine is stationary before inspection, maintenance, adjustment and cleaning.
40. Don't smoking!!
41. Have your machine repaired by a qualified person.
Repairs should be carried out by qualified-persons using original spare parts, otherwise this may result in considerable danger to the user.
42. Disposing wasted material and wasted lubricating oil shall obey the local regulation and be deeply careful.
43. Workshop of user shall be with the fire extinguisher or other devices according to the local safety regulations and deeply careful.
44. Stand on proper position for operation.
45. Use recommended ancillary equipment. If ancillary equipment is removed the original guards or safety devices shall be replaced. Union-One and our authorized agency are responsible for a future connection of the machine with ancillary equipment only if we ourselves have designed such connection.
46. The noise level of this machine is testing on continuous running.
 - a) Airborne noise emission by the TSCE - series is established on the basis of measurements.
 - b) The workstation for the measurement of emission sound pressure level is defined according to European Standard, ISO3746 and complied with annex A of ISO 7960.
 - c) A weighted sound pressure level measuring under load is 84-86dB(A).
 - d) A weighted sound power level measuring under load is 98-100dB(A).
 - e) The figure quoted are emission levels and are not necessarily safe working levels. Whilst there is a correlation between the emission and exposure levels, this cannot be used reliably to determine whether or not further precautions are required. Factors that influence the actual level of exposure of the work-force included the characteristic of the work room, the other sources of noise etc. i. e. the number of the machines and other adjacent processes. Also the permissible exposure level can vary from country to country. This information, however, will

enable the user of the machine to make a better evaluation of the hazard and risk.

47. After switching off the saw motor, allow the sawblade to stop freely. Never attempt to stop the cutting by hand or other objects.
48. Never cut the wood plate if there is no completed width or too small.
49. The max. rotation speed marked on the saw blade must not be exceeded.
50. The machine shall be not loaded with more than workpiece at a time.
51. During making wooden cases, it will emit harmful dust. User must install exhaust system for the extraction of harmful dust.
52. Use correctly sharpened sawblades. Observe the max. speed marked on the sawblade. User shall be to select the optimum speed for sawblade.
53. Report faults on the machine, including guards or sawblades, as soon as they are discovered.
54. Adopt safe procedures for cleaning, maintenance and remove chips and dust regularly to avoid the risk of fire.
55. Follow manufacturers instructions for use, adjustment and repair of sawblades.
56. Ensure that any spacers and spindle rings used are suitable for the purpose as stated by the manufacturer.
57. Refrain from removing any off-cut or other part of the workpiece from the cutting area whilst the machine is running.
58. Ensure that guards and other safety devices necessary for machine operation are in position, in good working order and properly maintained.
59. Safety working practice.

A) Use of push block and push stick-Push stick should be used to avoid working with hands close to the sawblade. Push blocks should be between 300mm and 400mm long, 80mm to 100mm wide and 15mm to 20mm deep. Push blocks should be used when cutting small workpieces and in circumstances where it is necessary to push the workpiece against the fence. If any damage, please replace new one follow below dimension.



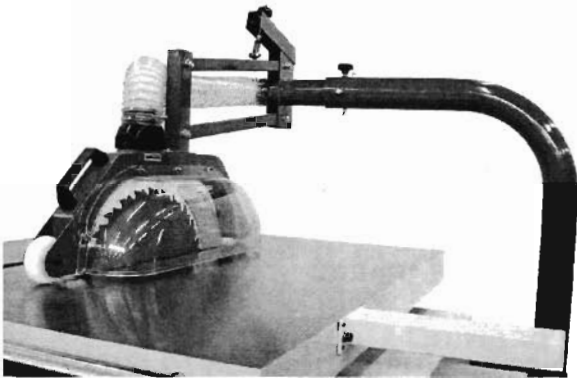
b) Selection of sawblade and riving knife: The operator should only select sawblade of a diameter and thickness suitable for the machine, as specified in the appendix A.

c) Selection of riving knife slot- The riving knife guiding slot should be no more than 0.5mm wider than the riving knife guiding elements.

d) Fixing of sawblade to spindle: Where the spindle diameter is less than the sawblade bore diameter, flanged bushes provided by the machine manufacturer should be used to make up the difference. The use of loose rings or bushes is not permitted.

e) Lighting: it is important to provide adequate lighting around the machine.

60. The TSEC - series table saw is designed with mounted separately from riving knife type or mounted on riving knife type (only for saw-blade $\varnothing < 315\text{mm}$) saw guard, be careful the saw-blade size before any replacing.



61. Guide the workpiece along the rip fence and through the rotation saw blade, using the push stick if necessary. Any damage, please replace new one that specification according above drawing.

*Any other maintenance is welcome to be contacted manufacturer or our distributor.

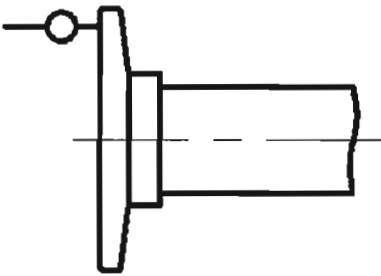
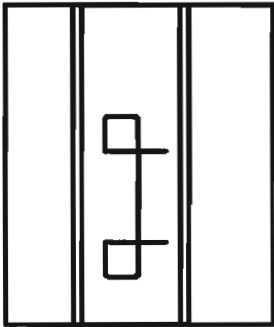
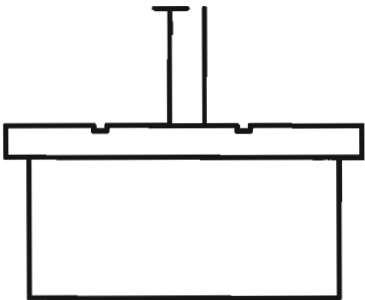
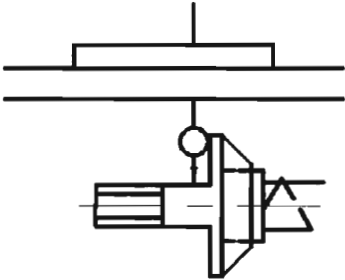
Inspection of accuracy for machine spindle

MODEL:

SERIES:

DATE:

Measuring instruments: Dial gauge

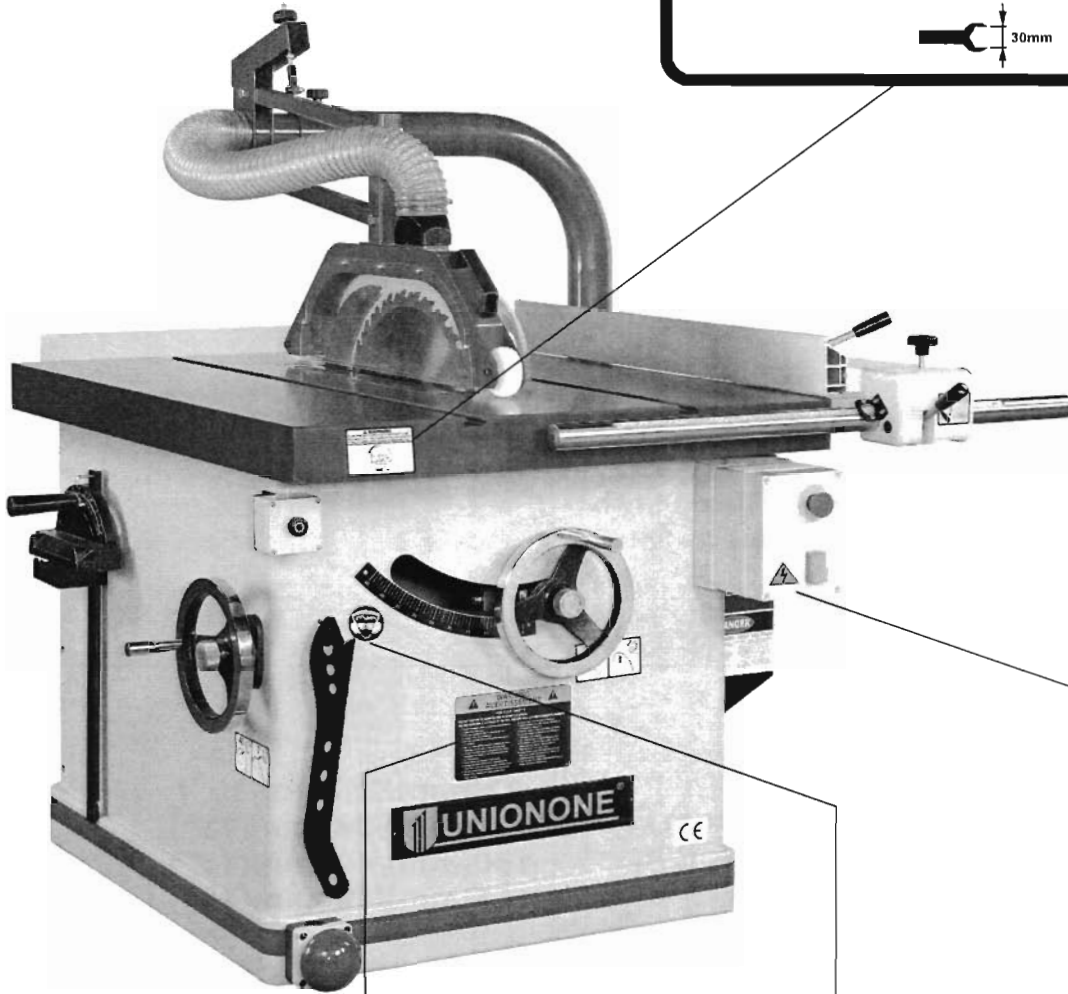
	DESCRIPTION OF TEST	ALLOWED TOLERANCE	TEST RESULTS
	Run-Out of Arbor Flange	0.02mm	
	Parallelism Between Blade and Mitre Slot	0.30mm	
	Minimum Blade Height	77(mm)/255mm(10") 102(mm)/305mm(12") 130(mm)/400mm(16") 155(mm)/450mm(18")	
 <p>Measurement mode as close as possible</p>	Measuring the run-out of Saw spindles	0.03mm	

Contents of warning labels

⚠ WARNING
 Never open the protective cover or safety guard while the machine is running. Hold the safety cover closed for at least 10 seconds until movements completely stop.

Speed=3000rpm

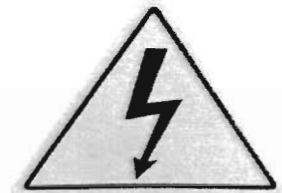
30mm




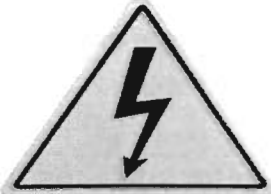


⚠ WARNING
AVERTISSEMENT
FOR YOUR SAFETY

DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS
NE PAS EXPOSER A LA PLUIE ET NE PAS UTILISER DAN LES EMPLACEMENTS HUMIDES

1. Read and understand instruction manual before operating table saw.
2. Do not expose to rain or operate in rain.
3. Always wear eye protection.
4. Do not operate without all guards and covers in position.
5. Do not wear gloves, neckties, jewelry, or loose clothing, and be sure to tie back long hair.
6. Always use blade guard and splinter for every operation for which it can be used, including all thru-sawing.
7. Keep hands out of path of saw blade.
8. Always use push sticks when required as for "non-thru" cuts and when ripping narrow work.
9. Do not perform any operation free hand. Use fence when ripping and miter gauge when cross-cutting.
10. Know how to avoid risk of kickback.
11. Make certain that side of long workpieces are properly supported.
12. Never reach in back of or over saw blade.
13. Do not remove jammed or cut-off pieces until blade has stopped.
14. Be sure machine is electrically grounded.
15. Disconnect machine from power source before making repairs, adjustments or cleaning chips from work area.
16. Keep floor around the machine clean and free from scraps, sawdust, oil or grease to minimize danger of slipping.
17. Do not operate while under the influence of drugs, alcohol or medication.



Contents of Warning Labels

Dangerous area and Working Environment		
Dangerous Location	Precaution	Making Label
Working area	High noise! High dust environment! Be careful for eject-out-of material!	
Warning sign.	Warning on the electrical cabinet and terminal box. Be sure to connect the earth line on control box, electric cabinet.	
Working area	<div style="border: 1px solid black; padding: 10px; background-color: #f0f0f0;"> <div style="display: flex; justify-content: space-between; align-items: center;">  WARNING AVERTISSEMENT  </div> <div style="background-color: black; color: white; padding: 5px; text-align: center; font-weight: bold; font-size: 0.8em;">FOR YOUR SAFETY</div> <div style="background-color: black; color: white; padding: 5px;"> <p>DO NOT EXPOSE TO RAIN OR USE IN DAMP LOCATIONS NE PAS EXPOSER A LA PLUIE ET NE PAS UTILISER DAN LES EMPLACEMENTS HUMIDES</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <ol style="list-style-type: none"> 1. Read and understand instruction manual before operating table saw. 2. Do not expose to rain or operate in rain. 3. Always wear eye protection. 4. Do not operate without all guards and covers in position 5. Do not wear gloves, neckties, jewelry, or loose clothing, and be sure to tie back long hair. 6. Always use blade guard and splitter for every operation for which it can be used, including all thru-sawing. 7. Keep hands out of path of saw blade. 8. Always use push sticks when required as for "non-thru" cuts and when ripping narrows work. 9. Do not perform any operation free hand. Use fence when ripping and miter gauge when cross-cutting. </div> <div style="width: 45%;"> <ol style="list-style-type: none"> 10. Know how to avoid risk of kickback. 11. Make certain that side of long workpieces are properly supported. 12. Never reach in back of or over saw blade. 13. Do not remove jammed or cut-off pieces until blade has stopped. 14. Be sure machine is electrically grounded. 15. Disconnect machine from power source before making repairs, adjustments or cleaning chips from work area 16. Keep floor around the machine clean and free from scraps, sawdust, oil or grease to minimize danger of slipping. 17. Do not operate while under the influence of drugs, alcohol or medication. </div> </div> </div> </div>	

Shipping Contents

Unpacking

Remove box and wood crating completely from around saw. Check for shipping damage immediately to your distributor and shipping agent. Do not discard any shipping material until the Table Saw is assembled and running properly.

Compare the contents of your container with the parts lists in the next two pages 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.

1. Unbolt the saw from the skid.
2. Carefully slide the saw from the pallet onto the floor.

Do not connect the tablesaw to the power source until all assembly has been completed! Failure to comply may cause serious injury!

The Table Saw should be placed in an area with a sturdy level floor, good ventilation and sufficient lighting. Leave enough space around the machine for mounting extension wings and rail assemblies, and loading and off-loading stock and general maintenance work.

Cleaning

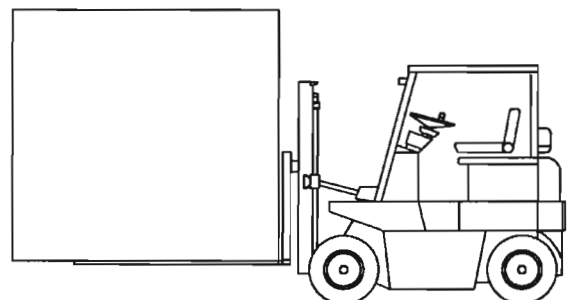
Expose metal surfaces, such as the table top and extension wings, have been given a protective coating at the factory. This should be removed with a soft cloth moistened with kerosene. Do not use acetone, gasoline, or lacquer thinner for this purpose. Do not use solvents on plastic parts, and do not use an abrasive pad because it may scratch the surfaces.

Transporting and handling

The machine shall be moved by persons who are qualified.

Persons besides the worker are not allowed to stay in the work place during transporting the machine.

- a) Please refer to instruction manual in specifications and machine weight to arrange handling equipment. Be sure to use capable fork-lifter referring to lift of machine.
- b) Forklift can be used in handling and shall be operated by qualified driver.
- c) Before handling, make sure all moveable parts are secured in their position and all moveable accessories should be removed from machine.
- d) Make sure that the strength of forklift is sufficient to handle machine.
- e) During handling, people are strictly prohibited from entering into the path of machine movement.
- f) While transportation, keep attention to the balance of machine.
- g) About forklift position of machine, please refer following diagram. The fork length shall be $\geq \frac{2}{3}$ machine depth.



Machine Specification

TSCE-400R

Saw Blade Diameter	400mm
Saw Blade Bore	30mm
Saw Blade Projection @90°	130mm
Saw Blade Projection @45°	93mm
Arbor Speed (rpm).....	3500
Table In Front Of Saw Blade at Max. Cut.....	325mm
Height Of Table	850mm
Dust Port Diameter (Saw Guard/ Outlet Machine).....	100/150
Table Size.....	1125mm×900mm
Distance Saw To Fence	680mm
Fence With Micro Adjustment	950×90mm
Motor Rating	880300-3.75KW(3ph)
.....	880301-4.5KW(1ph)
.....	880302-5.625KW(3ph)
.....	880303-7.5KW(3ph)

Optional Accessory:

620mm Cross Cut Table Size	L700mm×W460mm
1245mm Panel Sliding Table Size.....	L1500mm×W247mm
.....	L1250mm×W247mm
Right Hand Ext Table Size (Distance Saw Mitre Fence 1220mm)..	L1080mm×W910mm
Rear Take Off Table Size	L600mm×W600mm

Machine Specification

TSCE-450R

Saw Blade Diameter.....	450mm
Saw Blade Bore.....	30mm
Saw Blade Projection @90°	155mm
Saw Blade Projection @45°	110mm
Arbor Speed (rpm)	3100
Table In Front Of Saw Blade at Max. Cut	300mm
Height Of Table	850mm
Dust Port Diameter (Saw Guard/ Outlet Machine).....	100/150
Table Size.....	1165mm×900mm
Distance Saw To Fence.....	680mm
Fence With Micro Adjustment.....	950×90mm
Motor Rating.....	880290-3.75KW(3ph)
.....	880291-4.5KW(1ph)
.....	880292-5.625KW(3ph)
.....	880293-7.5KW(3ph)

Optional Accessory:

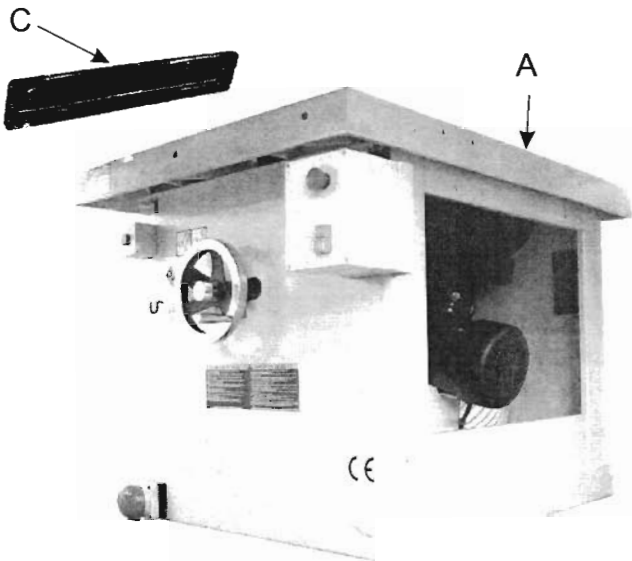
620mm Cross Cut Table Size	L700mm×W460mm
1245mm Panel Sliding Table Size.....	L1500mm×W247mm
.....	L1250mm×W247mm
Right Hand Ext Table Size (Distance Saw Mitre Fence 1220mm)..	L1080mm×W910mm
Rear Take Off Table Size	L600mm×W600mm

5. Main Features

Contents of the Shipping Container

Main Saw Container

- 1 Table Saw (A)
- 1 Rip Fence Complete (not shown)
- 1 Table Insert (C)
- 1 Owner's Manual (D)
- 1 Inspection Record (not shown)



D

Operating Instruction and Parts Manual

TSCE-400R/TSCE-450R
Tilting Arbor Tablesaw

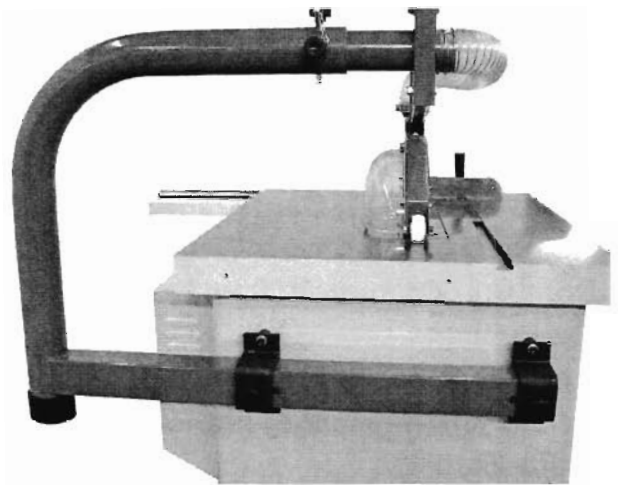


CE

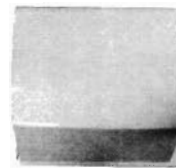


Manufacture:
Union-one Machinery Co., Ltd
No. 30-2, Lane 70, Hsinglung Rd., Sec. 1,
Taiping City, Taichung Hsien (411), Taiwan
Tel: 886-4-22776053 (5 lines)
Fax: 886-4-22777579, 22750090
http://www.unionone.com.tw
e-mail: union.one@msa.hinet.net

680mm Overhead Guard Assembly



Side Cover Box
1 Side Cover

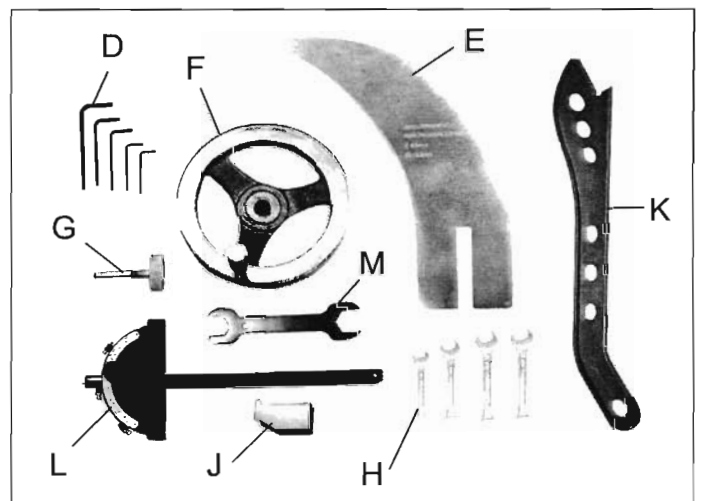


Contents of Side Over Box

Small Box

The small box consists of the following items:

- 5 Hex Wrench (D)
- 1 Riving Knife (E)
- 1 Handwheel and Swivel Handle (F)
- 1 Lock Knob (G)
- 1 Off-Set Wrench (H)
- 1 Small Hook for Miter Gauge (J)
- 1 Push Stick (K)
- 1 Miter Gauge Assembly (L)
- 1 Arbor Wrench (M)
- 1 Fence Support Bracket (not shown)



Assembly

Motor Cover Assembly

- Tool: 6mm Allen Hex Wrench
- 1. Remove motor cover A (Figure 1) insert on cabinet.
- 2. Closing the motor cover and fasten cover two screw A (Figure 2).

Handwheel Assembly

Referring to Figure 3:

Hardware: (2) Handle & Handwheel (C),
(2) Lock Knob (D), (2) Shaft Key (A)

Tools: 3mm hex wrench

The front handwheel (E) is installed at the factory.

Install the side handwheel (C) as follows:

1. Line up the key (A) (taped to shaft) on the shaft (B) with the key in the handwheel (C) and slide the handwheel onto the shaft.
2. Tighten the set screw on the handwheel hub (3mm hex wrench) securely to hold in place.
3. Install the center lock knob (D) by inserting into center hole in the shaft and threading in a clockwise direction.
4. Install the remaining handwheel assembly (E) in the same manner.

Miter Gauge and Fence Storage Hooks

Referring to Figure 3:

Hardware: (1) Small Hook (F)
(2) 1/4" Flat washers (J). (2) 1/4" Lock washers (H), (2) 1/4" x 5/8" Socket-Head Cap Screw (G)

Tools: 5mm hex wrench

Mount the small Hook (F) to the side of the saw cabinet with two each 1/4" x 5/8" socket-Head Cap Screws (G), 1/4" Lock Washers (H) and 1/4" Flat Washers (J)

Tighten with 5mm hex wrench

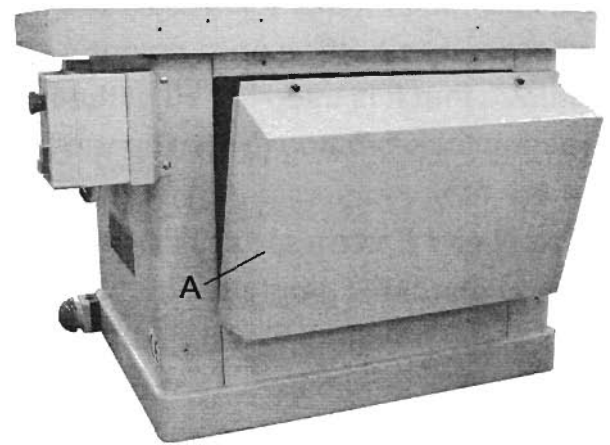


Figure 1

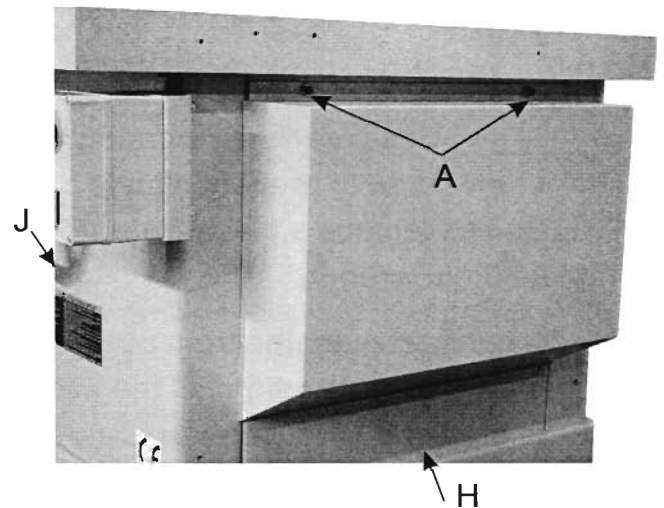


Figure 2

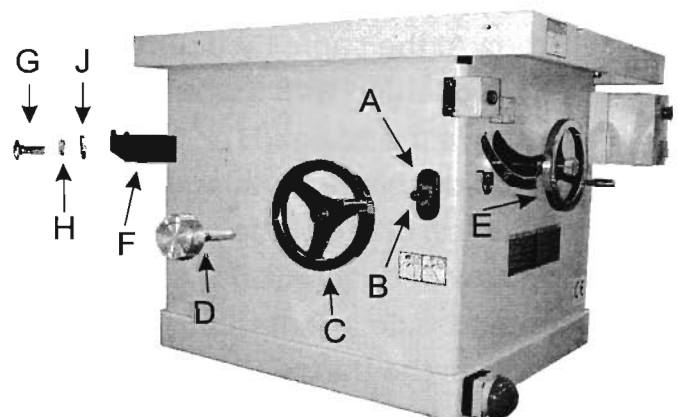


Figure 3

Emergency Foot Operated Stop Switch

This switch (Figure 4.) is provided for use in emergency situation only, do not remove that it is used in lieu of the mushroom headed lock-off stop switch on the front of the switch box.

The Rear Extension Table

If an assistant is employed at the rear of the machine to remove cut piece the Table (Figure 5.) Should be extended to the distance between the saw blade spindle and the rear edge of the table is at least 1200mm. The assistant should always remain at the outfeed end of the extension table and should not lean forward and put his hand near to the Saw teeth.

Blade Installation/ Replacement

▲ CAUTION Use care when working with or around sharp saw blade to prevent injury!

To install or replace a blade (refer to Figure 13) :

Tools: 30mm wrench

1. Disconnect machine from power source.
2. Raise the blade height all the way up and set the blade tilt to 0° (refer to Handwheel Adjustments on page 15).
3. Remove the table insert.
4. Rotate the arbor to line up the slot (C) with the arbor lock (D).
5. Press the arbor lock (D) in the direction shown by the arrow to engage it into the slot (C) in the arbor. At the same time remove the arbor nut (A), loosening with a wrench if necessary.
6. Remove the flange(B).
7. Install the blade, making sure the cutting teeth at the top of the blade point toward the front of the saw. If unsure, refer to Figure 8 for the proper blade orientation.
8. Replace the flange (B) and arbor nut (A).
9. Engage the arbor lock (D) and tighten the nut (A) with a wrench.
10. Lower the blade below the table.

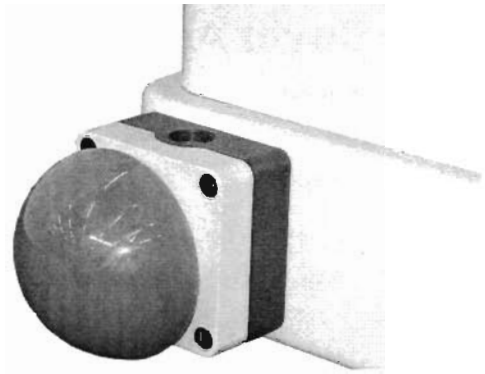


Figure 4

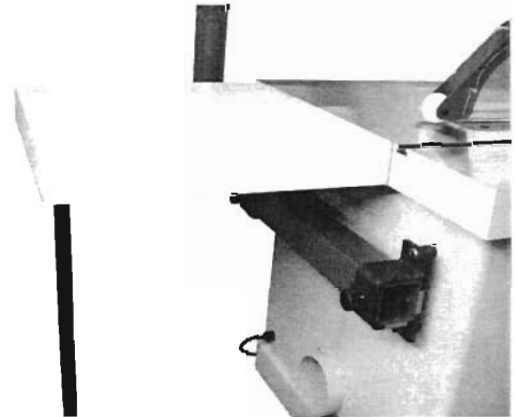


Figure 5

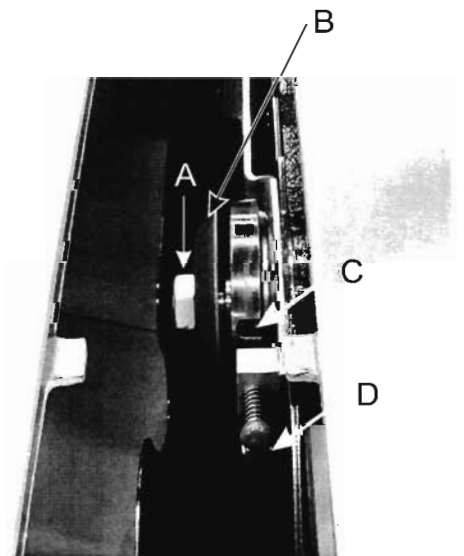


Figure 6

Riving Knife Installation

Description

Referring to Figure 8:

1. Set the saw blade to the 90 degree position and raise it all the way (refer to Handwheel Adjustments on Figure 16.)
2. Remove the table insert (J).
3. Located inside the table and accessible through the insert opening (Figure 8 inset), place the quick-release clamp lock handle (K) in the unlock position.
4. The floating clamp block (L) is spring loaded and will move away (O) from the fixed block (M), leaving a gap.
5. Insert the bottom of the riving knife (N1,N2) all the way into the gap between the clamp blocks (L, M); then lock the handle (K).
6. Replace the insert (J) back on the table. The saw blade and riving knife should protrude through the slot in the insert.

You should feel a snap as each piece locks in position. Attempt to lift as a test to make sure that they are securely locked in place.

Adjustment

The clamping blocks (L, M, Fig. 8) are adjusted at the factory and no further adjustment of the blade guard and riving knife should be necessary. However, proper alignment is very important. Before operating the table saw, read Riving Knife Adjustment (Figure.21) to verify and follow the adjustment procedure if necessary.

Note: please use the correct thickness of Riving Knife to fit your blade.

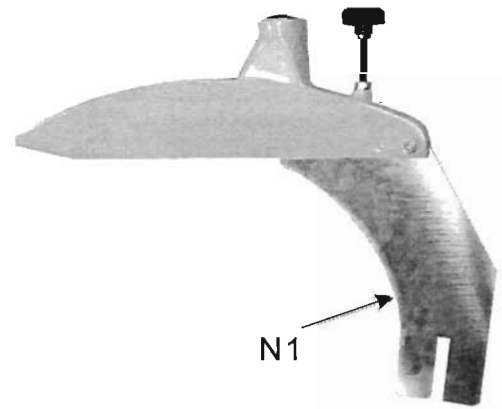


Figure 7(Optional)

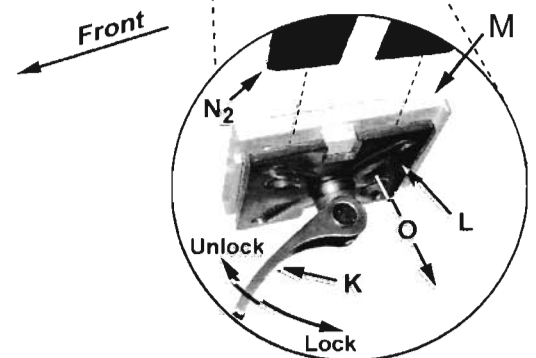
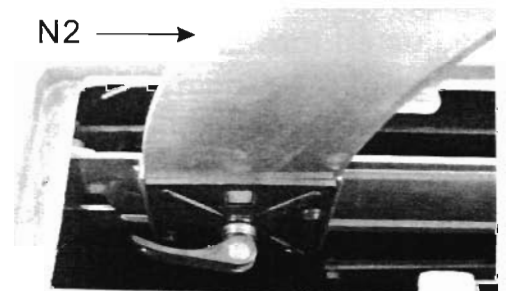


Figure 8

The Rip Fence

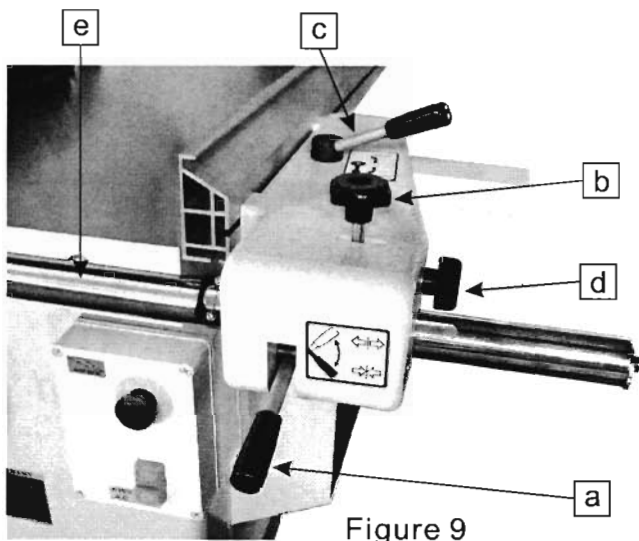
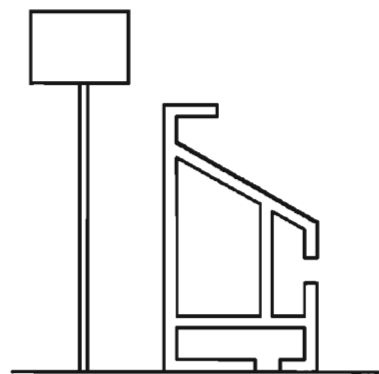


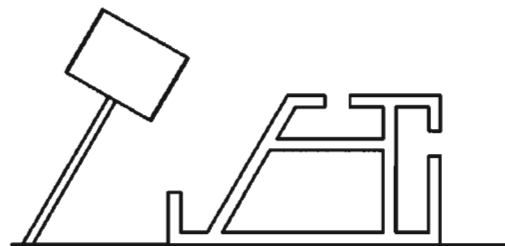
Figure 9

- a) One single lock down lever-simple and precise to lock the fence assembly into fence rail.
- b) Micro adjusting knob Precisely adjustment.
- c) Forward and backward slide lock handle– To firm the high/low profile alum. Fence on its forward/backward slide track.
- d) Micro– adjust lock knob secures the fence after has been adjusted with micro–adjustment knob.
- e) Rip Fence Scale- Allows precise measurement of rip cutting operations.

The function of the sawfence is to act as a guide and support to the timber. It can be adjusted fore and aft to suit the operation being carried out. When ripping, the front edge of the fence should be in line with the root of the teeth of the sawblade. When crosscutting, the maximum possible length of fence should lie on the machine table. To adjust, simply release the two clamping levers at the back of the fence. Note: the fence casting is eased along its travel by means of a nylon roller. To ensure that the roller remains in contact with the machine table in all fence positions, the fence extrusion should be set slightly higher than the table itself. When sawing thin pieces of timber ensure that the two positional fence is adjusted to suit:



High Position For Deep Work



Low Position For Shallow or Angled Cutting

The Rip Fence Fine Adjuster

For approximate setting of the width of the table rule can be used, located on the fence support bar, although the accuracy of this will depend on the sawblade being used. The most reliable method for setting the width of cut is to measure from the fence to the inside edge of the tooth. This takes account of different amounts of set on the saw teeth of other saws. To take account of any wobble on the saw, a trial cut should be made and measured with a steel rule; then adjustments may need to be made using the fine adjustment screw. The guards should be in place for the trial cut. Ensure that the machine is switched off before making any adjustments.

Mounting Front Guide Bar

Mounting the Front Guide Bar A (Figure 10) to the front of the saw Table B (Figure 10).

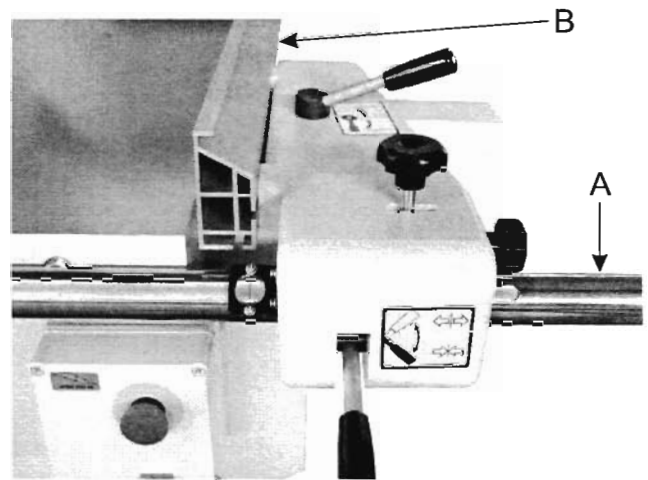
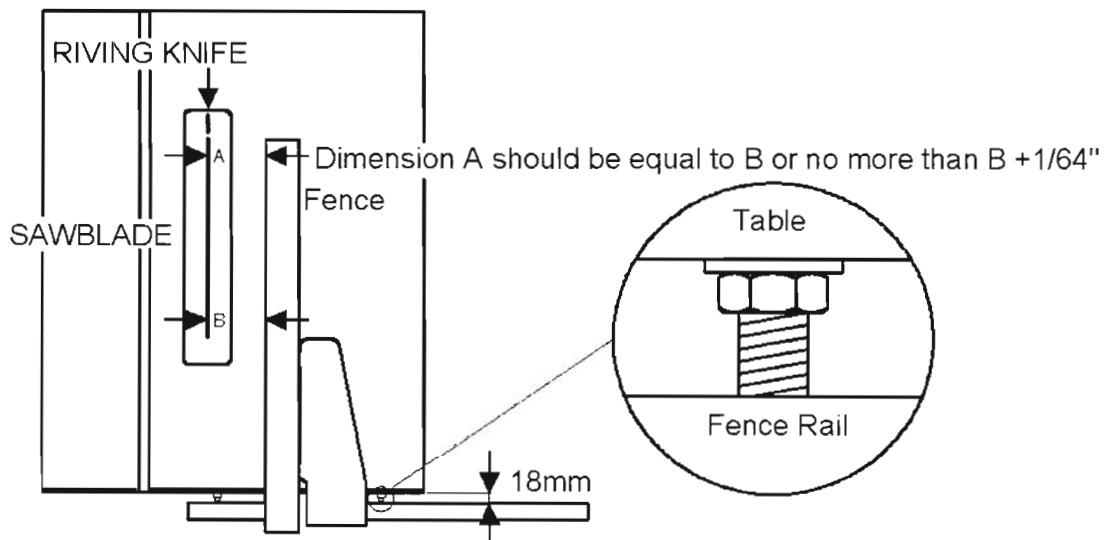


Figure 10

Rip Fence Alignment

Burning on the waste side of stock and/or the workpiece binding between the rip fence and the back of the saw, are both indicative of the rip fence being out of square to the blade. Check by placing a piece of 3/4" stock at the front and another piece at the rear of the near side of the sawblade. Slide the rip fence up against these to determine alignment. If necessary adjust the fence using the locking bolts at the back of the fence rail. So as to prevent the fence casting catching on the fixing studs a distance of 18mm from the fence bar to the table is required.

To reduce the potential for kickback set the rip fence so that it is slightly farther (about 1/64 in.) from the back of the blade than from the front, so that the rear teeth just miss the stock being cut.



When adjusting the position fore and aft of the rip fence set the extrusion so that it sits slightly above the table when clamped up against the fence casting. This will ensure that the nylon roller underneath the casting remains in contact with the table.

Alternatively the rip fence extrusion may have been bent. Check by placing a straight edge along its length. Either replace it, or add an auxiliary wood fence and shim it to even out any imperfections.

Mounting Rip Fence Support Bracket

Adjust the rip fence support bracket flush with the Table by turning four set screw A (Figure. 11) and using a straight edge.

Check the water level once again after tightening two hex cap screw B (Figure. 11).

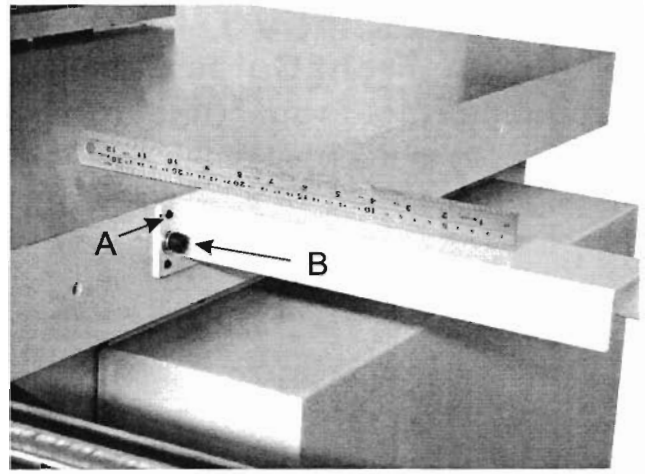


Figure. 11

Mounting Overhead Guard

- Machine with the overhead guard bracket D (Figure. 12) is adjusted at the factory.
- Remove overhead guard two set screw A (Figure. 12) install overhead guard C (Figure.12) into overhead guard bracket using the allen key provided, securely tighten the two set screw A(Figure. 12). Then tighten two lock knob B (Figure. 12).

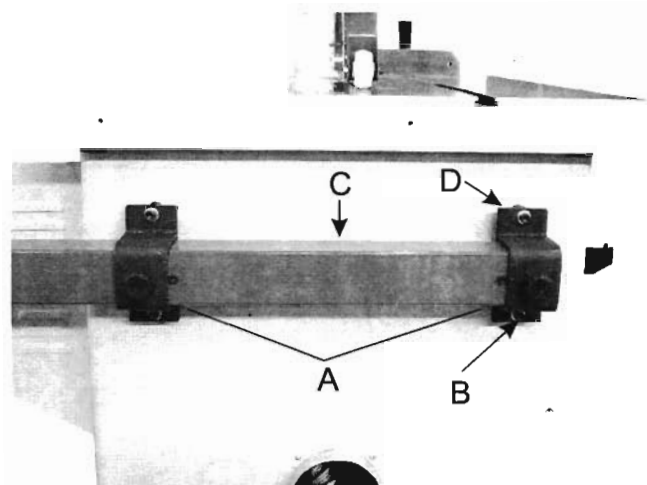


Figure. 12

Overhead Guard Alignment

The overhead guard alignment with the table saw blade is adjusted at the factory. Before of use or moving the saw to another location, the overhead guard may need disconnect the Saw from the Table, make sure lock pin E (Figure. 13) insert swing arm bracket G (Figure. 13), then tighten two lock knob F (Figure. 13).

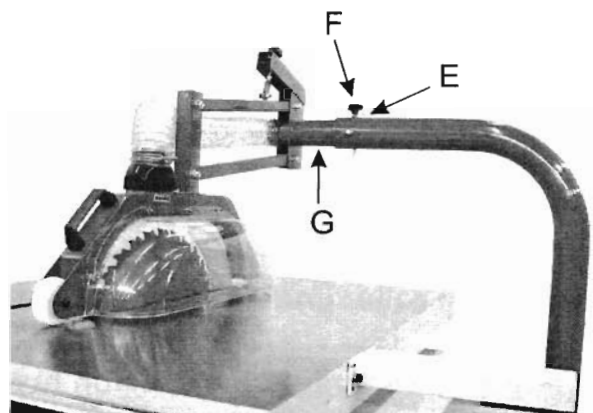


Figure. 13

Dust Collection

There are two dust ports are designed on this machine, please connect the dust collection system before operations.

Secure a 150mm dust hose to the dust port located under the saw table.

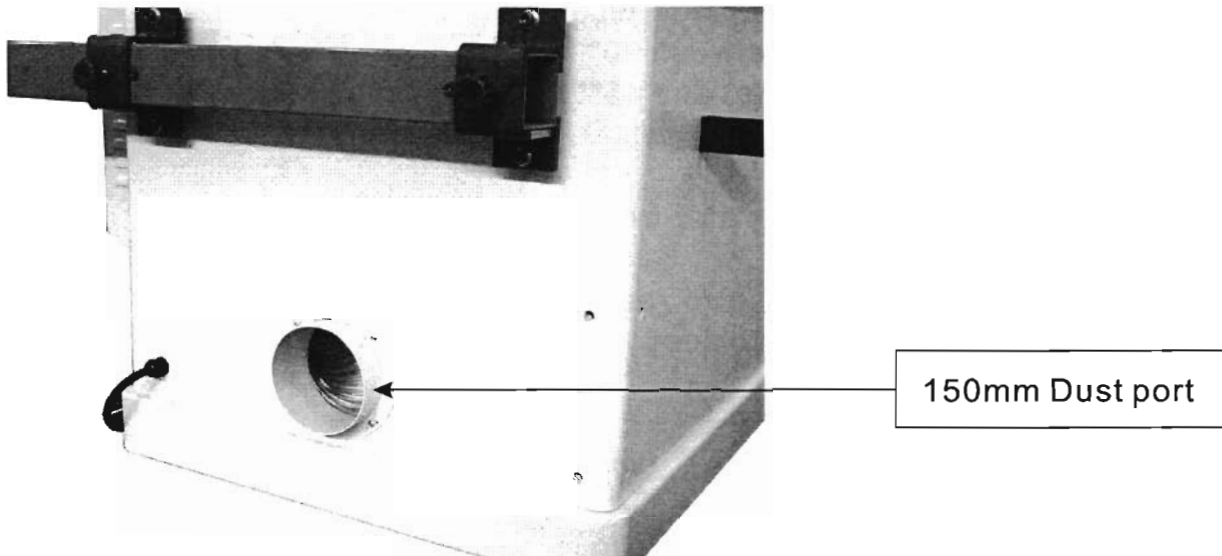


Figure. 14

Run the 100mm hose to your dust collection system. Slide the blade guard/dust hood over the riving knife.

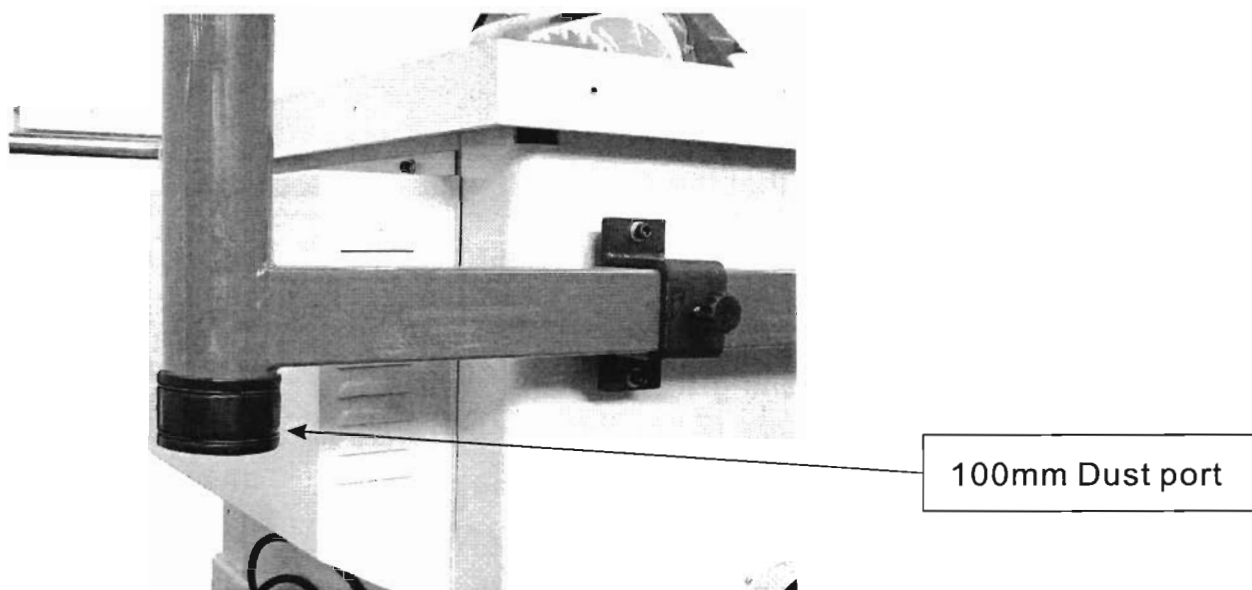


Figure. 15

- A) Run a ground wire along the dust hose and attach the wire to the machine to protect against static electricity.
- B) We recommended that using of dust collector shall be more than following type:
 - a) airflow in $550\text{m}^3/\text{h}$;
 - b) pressure drop $\leq 0.5\text{bar}$ at each connection outlet;
 - c) conveying air velocity in the duct at least 18 m/sec .

Adjustments

Handwheel Adjustments

Referring to Figure. 16

The front handwheel (D) controls the raising and lowering of the blade (blade height).

The side handwheel (B) controls the blade tilt. The blade can be adjusted for a tilt between 90° (vertical or a setting of 0° on the scale) and 45° right tilt (B).

Blade height

1. Loosen the lock knob (C) on the front handwheel (D).
2. Turn the handwheel (D) clockwise to raise and counterclockwise to lower the blade.
3. Tighten the lock knob (C).

Blade tilt adjustment

1. Loosen the lock knob (A) on the side handwheel (B).
2. Turn the handwheel (B) counterclockwise to adjust the saw blade down to 45° right tilt. Turn clockwise to adjust the saw blade to maximum of 90°.
3. After selecting the position, tighten the lock knob (A).

Insert Adjustment

Adjust the setscrews in the insert with a 3mm hex wrench (Figure 17) to ensure that the insert is stable and flush with the table top.

Miter Gauge

Referring to Figure 18:

1. Operate miter gauge by loosening the lock knob (A) and turning the miter body (B) to the desired angle.

Note: Always make test cuts. Do not rely solely on miter gauge indicator marks. There are holes in the miter gauge body that will allow you to mount a wooden extension fence.

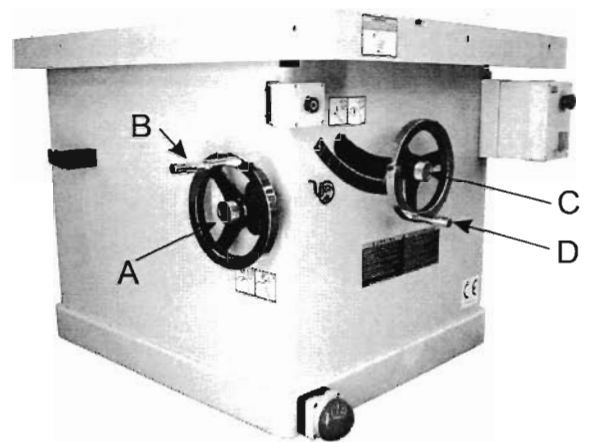


Figure. 16

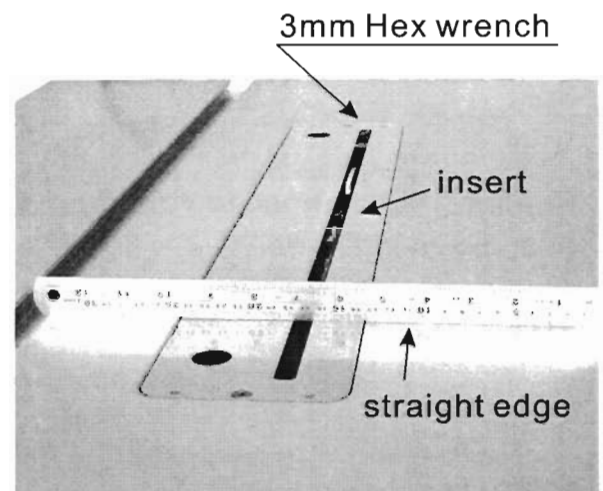


Figure. 17

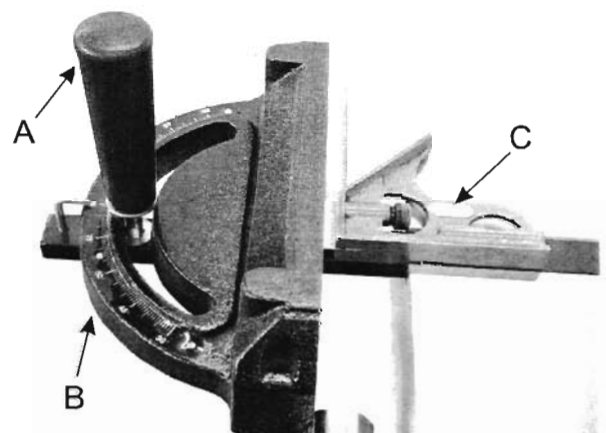


Figure. 18

Riving Knife Adjustment

Lateral alignment

The saw blade and riving knife must be in line as close as possible with each other (lateral alignment) for the prevention of kickback. Upon initial blade guard and riving knife installation no further adjustment should be necessary. Alignment should be checked and adjusted, if required, after each blade change.

Check the alignment as follows:

1. Remove the blade guard (Figure 13).
2. Place a straightedge (A, Fig.19 on the table so it rests against the blade (B, Fig. 19) and riving knife (C, Fig. 19). Rotate the blade so the top of the blade tooth touches the straightedge.

The saw blade and riving knife must be in line. If adjustment is required:

3. Remove the table insert.
4. Loosen the lock handle (A, Fig. 20) and remove the riving knife, making a note as to which direction the riving knife needs to be moved to align it with the saw blade.
5. Using a 3mm hex wrench, make adjustments to four set screws (D, Fig. 21) accessible through openings located in the corners of the floating clamp block (B, Fig. 21).
6. If necessary, repeat the above procedure.

Blade proximity alignment

To comply with the regulations, the gap between the saw blade and riving knife must be between 3 and 8mm (Figure 22) to reduce the possibility of kickback. For safety reason, this have set for 5 to 6mm at factory before shipment.

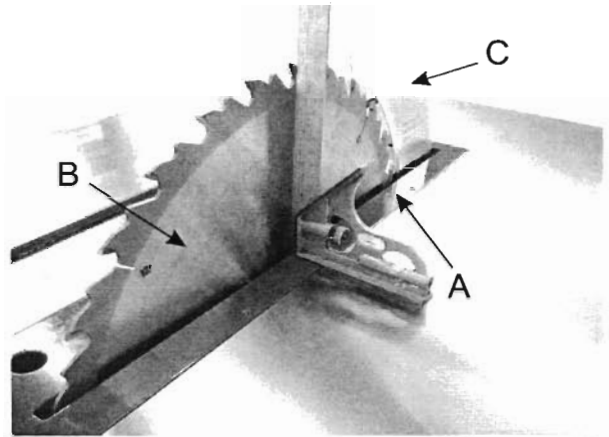


Figure 19

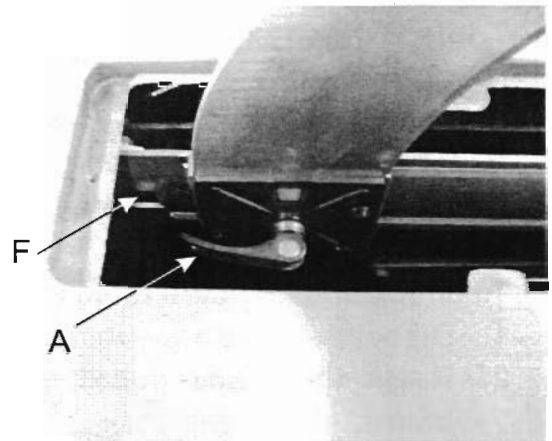


Figure 20

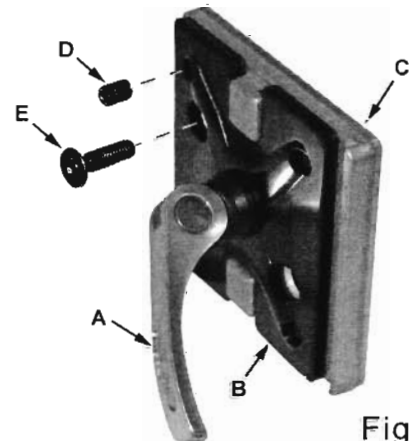


Figure 21

Spacing specification between
Saw blade and riving knife:
minimum gap=3mm
Maximum gap=8mm

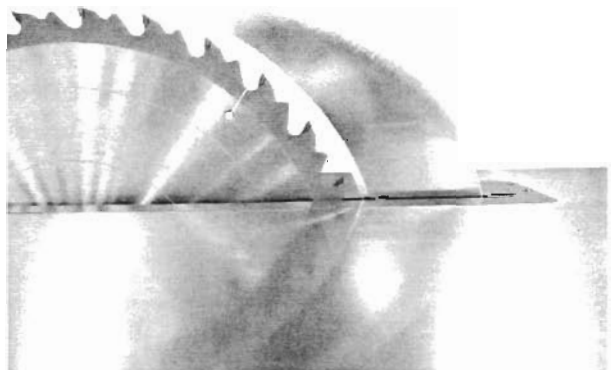


Figure 22

4. Tighten the socket head flat screws (E).
5. Reinsert the riving knife; tighten the lock handle (A, Fig. 20) and check that the saw blade/knife gap is between 3-8mm (Figure 22).

Note: Attempt to make the gaps as even as possible.

Blade Alignment

Tools: 8mm hex wrench, combination square, marker

Blade alignment with the table is adjusted at the factory. After a period of use, or, after moving the saw to another location, the blade may no longer be aligned with the table.

To check and align the table (refer to Figure 23):

1. Disconnect the saw from the power source.
2. Raise the blade guard up a way from the blade.
3. Choose a tooth on the far side of the blade (toward the rear) and position the tooth slightly above the table insert. Mark the tooth with a marker. Measure the distance from the side of the blade to the right T-slot edge using a combination square. Make sure to measure between the teeth not to the tooth (Figure 23).
4. Rotate the blade toward the front so that the marked tooth is just above the insert. Measure the distance from the side of the blade to the right T-slot edge. The two measurements should be the same.
5. If they are not the same, loosen four hex socket cap screws (A, Fig. 24) that hold the table to the base. Two are shown in Figure 24.
6. Make the needed adjustments and tighten the four hex socket cap screws firmly.
7. Check the alignment once again after tightening hardware.

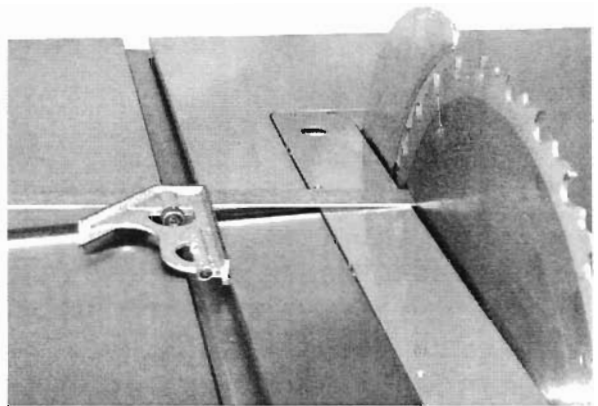


Figure 23

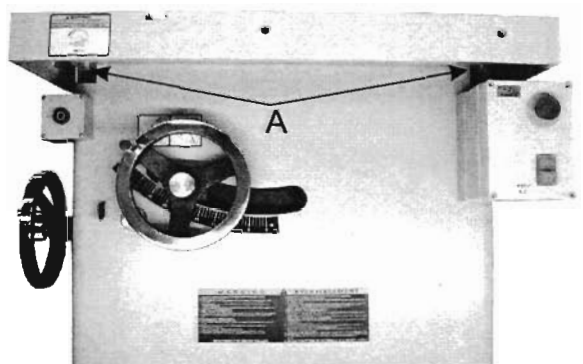


Figure 24

Adjusting 45° and 90° Positive Stops

The stops have been adjusted at the factory. After a period of use, or, after moving the saw to another location, the stops may no longer be set properly. To check and adjust the stops:

Tools : 12mm wrench, combination square

1. Disconnect saw from power source.
2. Raise the saw blade to its maximum height by using the handwheel.
3. Set the blade at 90 degrees to the table by turning the blade tilting handwheel clockwise as far as it will go.
4. Place a combination square on the table against the blade and check to see that the blade is at a 90° angle to the table, Figure 25. Make sure square is not touching a blade tooth.
5. If blade is not at 90 degrees, open the motor cover door, loosen lock nut (A, Fig. 26) and turn adjusting stop screw (B, Fig. 26) on the front trunnion in, or out. The adjusting stop screw should stop against the front trunnion bracket when the blade is 90° to the table.
6. Tighten the lock nut (A, Fig.26).
7. Set the blade at 45 degrees to the table by turning the blade tilting handwheel counter-clockwise as far as it will go. Place a combination square on the table against the blade. Make sure square is not touching a blade tooth.
8. If the blade is not 45 degrees, remove the raising and lowering handle. Loosen lock nut (A, Fig. 27) and turn adjusting stop screw (B, Fig. 27) on the front trunnion in, or out. The adjusting stop screw should stop against the front trunnion bracket when the blade is 45° to the table.
9. Check the accuracy of the pointer (C, Fig. 27) on the angle scale and adjust, if necessary.

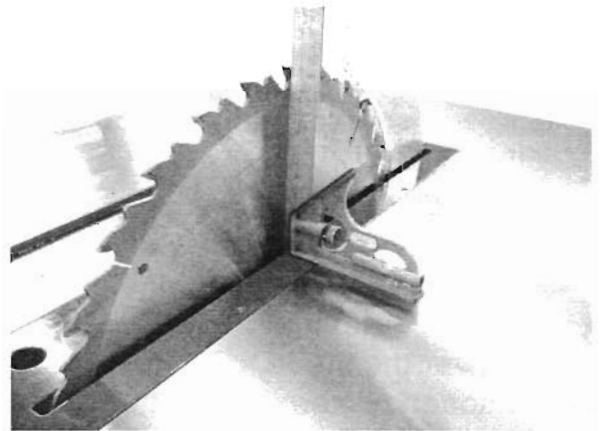
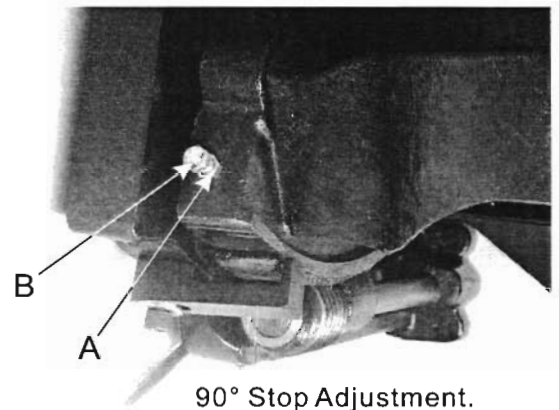


Figure 25



90° Stop Adjustment.

Figure 26

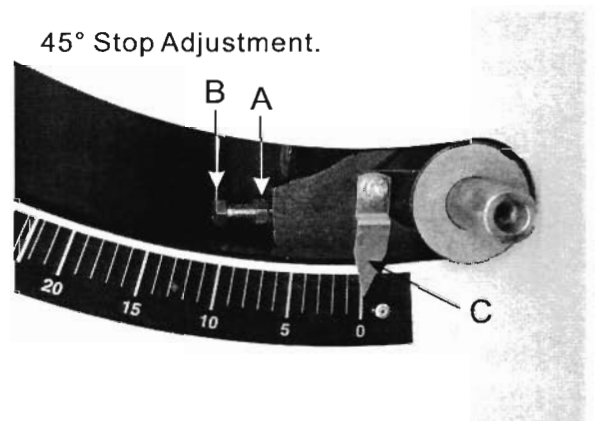


Figure 27

Assembly and adjustment of the saw are now complete. Make sure all fasteners are tight. The saw may now be placed into operation.

Changing the Belt

▲ WARNING Make all machine adjustments or maintenance with the machine unplugged from the power source. Failure to comply may cause serious injury!

Referring to Figure 28:

· **Tools:** 17mm Wrench

1. Disconnect the machine from the power source, unplug.
2. Lower the blade to its lowest point.
3. Loosen two hex cap bolts (A).
4. Take the tension off of the belt (B) by lifting up on the motor.
5. Remove the belt from the arbor and motor pulleys.
6. Replace and tension the belt. Two weight of the motor should apply enough tension to the belt. Tighten the hex cap bolts (A).
7. Check the belt tension after the saw has been used for a few hours. Adjust as necessary.

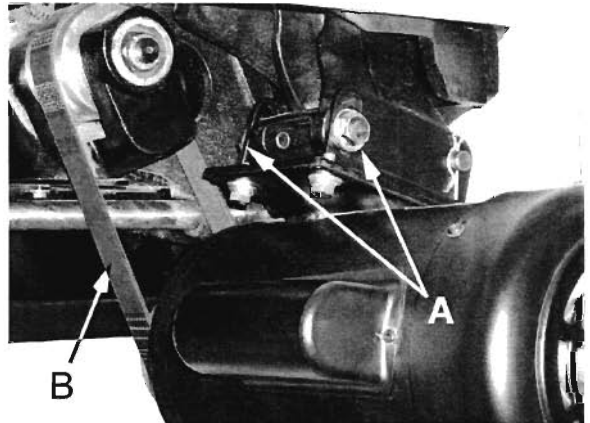


Figure 28

Maintenance

▲ WARNING Always disconnect power to the machine before performing maintenance. Failure to do this may result in serious personal injury.

Cleaning

Note: The following maintenance schedule assumes the saw is being used every day.

Daily:

- Wipe down the table surface and grooves with a rust preventive.
- Clean pitch and resin from the saw blade.

Weekly:

Table surface must be kept clean and free of rust for best results. Apply a coat of paste wax to the surface to facilitate this. An alternative is to apply white talcum powder, rubbed in vigorously once a week with a blackboard eraser; this will fill casting pores and form a moisture barrier. This method provides a table top that is slick and allows rust rings to be easily wiped from the surface. Important also is the fact that talcum powder will not stain wood or mar finishes as wax pickup does. Clean motor housing with compressed air. Wipe down the fence rails with a dry silicon lubricant.

Periodic:

- Keep the inside of the cabinet and trunnion area clean.
- Check for excessive play in the tilting and raising mechanism and in the saw arbor and re-adjust as required.
- Check for belt tension and wear. Re-adjust or replace belt as required.

Lubrication

- Grease the tilting worm gear, raising worm gear, castor system worm gear and the trunnion areas with a good grade non-hardening grease.
- Check all adjustments after lubricating.

Miscellaneous

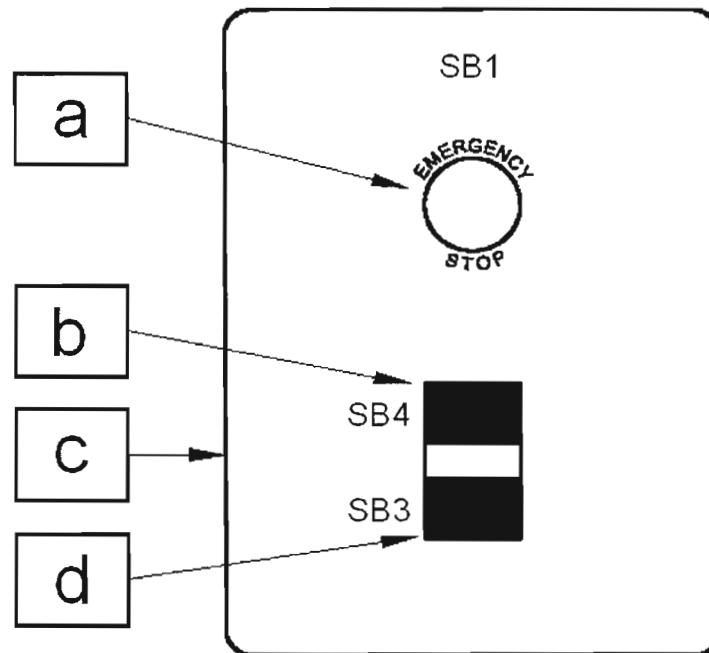
- Routinely check condition of the following items:
 - Mounting bolts
 - Power switch
 - Saw blade
 - Blade guard assembly

8.Operation of Electrical Control

You must follow the follow instructions every time you use your saw

1. Stand to the left of the blade line-of-cut when performing a cutting operation.
2. Turn off the saw and allow the blade to come to a complete stop before removing the cut-off piece.
3. Make sure the riving knife is always aligned with the main blade before cutting.
4. Always position the blade guard to the correct height above the workpiece.
5. Carefully plan each cutting operation to avoid injuries.
6. When you release the sliding table lock, make sure that the knob is positioned so that it will not lock the table during a cut.
7. Support long and wide workpieces with helping roller stands.

Control Panel



TSCE - series (1-phase)
TSCE - series (3-phase)

- a)Emergency Stop Button: disconnect motor power for danger situation .
- b)Start Button: start saw blade.
- c)Switch Box
- d)Stop Button: stop saw blade.

You can start the machine with the green ON-button, the red OFF-button stops the machine.

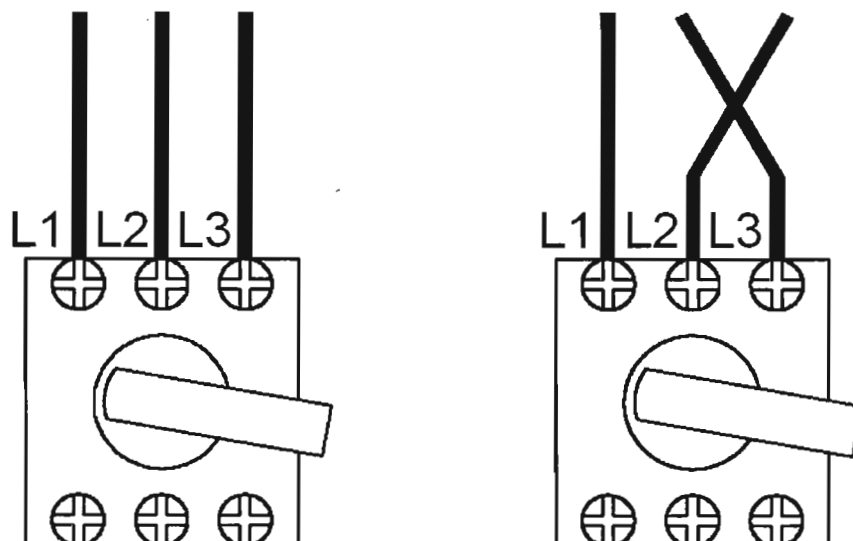
Try Run

Before operation, it must be testing this machine to make sure all the controls are working properly.

WARNING

Before starting the saw, make sure you have performed the preceding assembly and adjustment instructions, and you have read through the rest of the manual and are familiar with the various functions and safety issues associated with this machine. Failure to follow this warning could result in serious personal injury or even death!

- a) Connect the machine to the power source.
- b) Turning on the main switch or plug-in the power source.
- c) Press the power ON button, if the main blade is rotating in a counter-clockwise, if the saw blade is rotating in a clockwise direction, disconnect the saw from power and exchange the incoming wire L2 and L3 in the terminal box (for 3-phase machine).



Troubleshooting

Trouble	Possible Cause	Solution
Saw stops or will not start	Overload tripped Saw unplugged from wall or motor Fuse blown or circuit breaker tripped Cord damaged	Allow motor to cool and reset by pushing off switch Check all plug connections Replace fuse or reset circuit breaker Replace cord
Does not make accurate 45° or 90° cuts	Stop not adjusted correctly Angle pointer not set accurately Miter gauge out of adjustment	Check blade with square and adjust stops Check blade with square and adjust pointer Adjust miter gauge
Material binds blade when ripping	Fence not aligned with blade Warped wood Excessive feed rate Splitter not aligned with blade	Check and adjust fence Select another piece of wood Reduce feed rate Align splitter with blade
Saw makes unsatisfactory cuts	Dull blade Blade mounted backwards Gum or pitch on blade Incorrect blade for cut Gum or pitch on table	Sharpen or replace blade Turn blade around Remove blade and clean Change blade to correct type Clean table
Blade does not come up to speed	Extension cord too light or too long Low shop voltage Motor not wired for correct voltage	Replace with adequate size cord Contact your local electric company Refer to motor junction box
Saw vibrates excessively	Stand on uneven floor Damaged saw blade Bad poly v-belts Bent pulley Improper motor mounting Loose hardware	Reposition on flat, level surface Replace saw blade Replace poly v-belts Replace pulley Check and adjust motor Tighten hardware
Rip fence binds on guide rails	Guide rails or extension wing not installed correctly Guide of rip fence not adjusted properly	Reassemble guide rails, refer to fence manual Adjust guides, refer to fence manual
Material kicked back from blade	Rip fence out of alignment Splitter not aligned with blade Feeding stock without rip fence Splitter not in place Dull blade Letting go of material before it is past blade Anti-kick back plates dull	Align rip fence with miter slot Align splitter with blade Install and use rip fence Install and use splitter (with guard) Replace blade Push material all the way past blade before releasing work Replace or sharpen anti-kick back plates
Blade does not raise or tilt freely	Sawdust and debris in raising and tilting mechanisms	Clean and regrease

Table and Cabinet Assembly

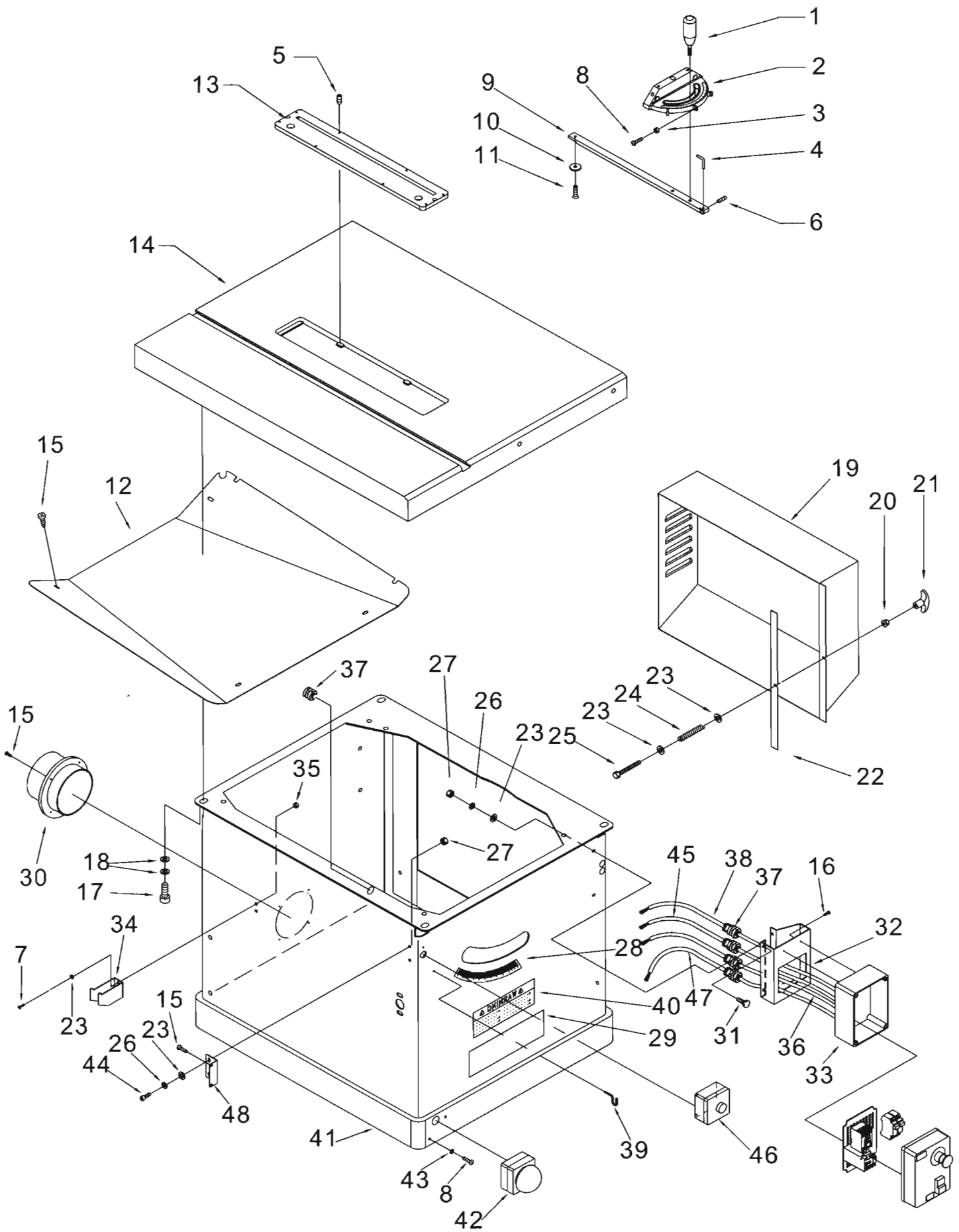


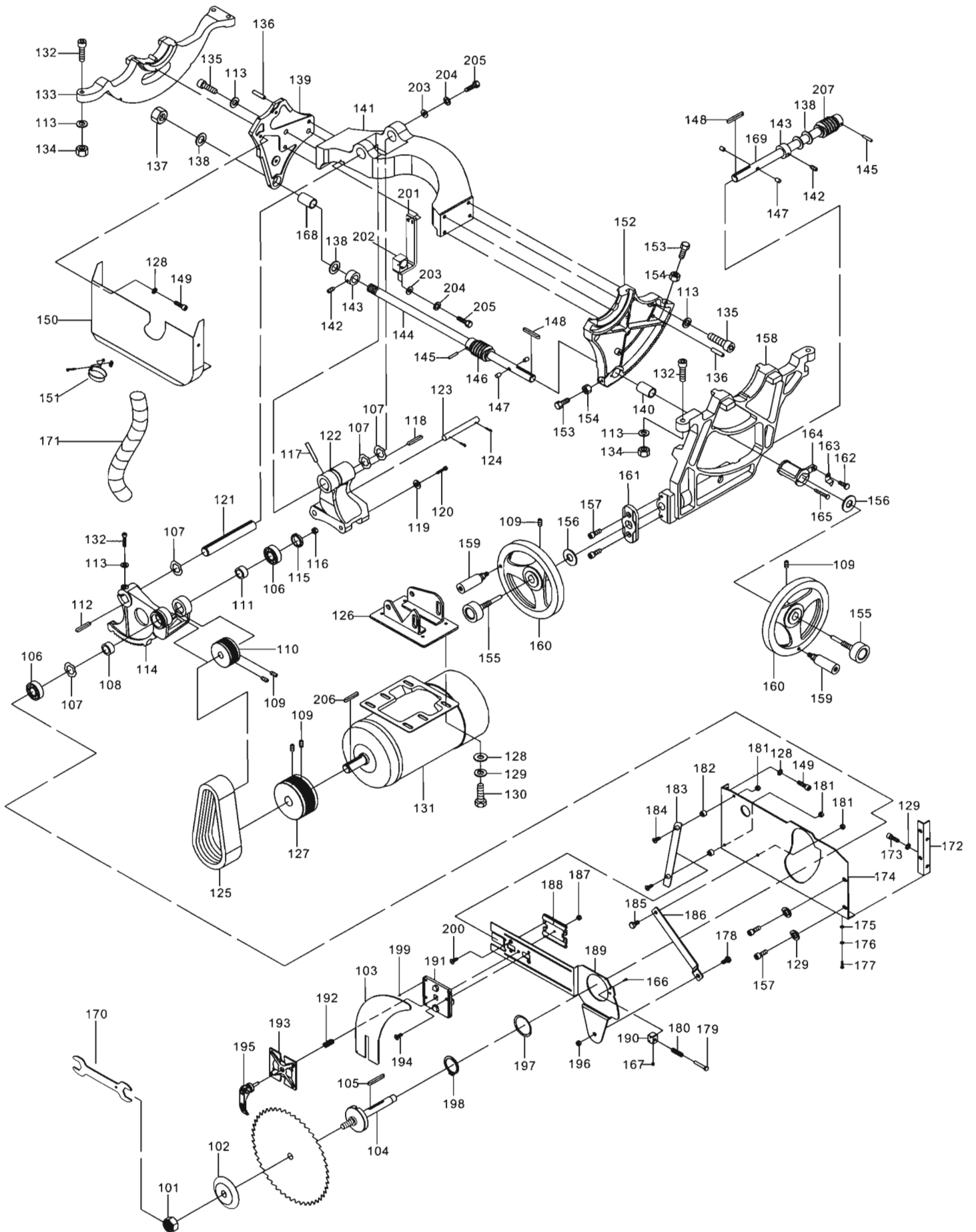
Table and Cabinet Assembly

Index No.	Part No.	Description	Size	Qty.
1	150-1021	Lock Knob		1
2	150-1022	Mitre Gauge Body		1
3	290-1023	Hex Nut	M5	3
4	150-1024	Pointer		1
5	100-1025	Set Screw	1/4"×3/8	5
6	290-1026	Set Screw	M5×5	1
7	290-1027	Hex Socket Head Screw	1/4"×3/4"	1
8	290-1028	Screw	M5×20	5
9	150-1029	Guide Bar		1
10	50-1024	Guide Washer		1
11	290-10211	Flat Head Screw	M6×10	1
12	290-10212	Lower Panel		1
13	290-10213	Table Insert(TS450)		1
	300-10213	Table Insert(TS400)		1
14	290-10214	Table(TS450)		1
	300-10214	Table(TS400)		1
15	290-10215	Tap Screw	M5×10	6
16	290-10216	Screw	M4×16	4
17	290-10217	Hex Socket Cap Screw	M12×35	4
18	290-10218	Flat Washer	M13	8
19	290-10219	Motor Cover		1
20	290-10220	Flange Nut	M6	1
21	290-10221	Handle		1
22	290-10222	Foam Strip		1
23	290-10223	Flat Washer	1/4"	14
24	290-10224	Spring		1
25	290-10225	Hex Cap Bolt	M6×50	1
26	290-10226	Lock Washer	1/4"	10
27	290-10227	Hex Nut	1/4"	6
28	290-10228	Tilt Scale		1
29	100-10229	Logo Lable		1
30	290-10230	Dust Hose Adapter		1
31	290-10231	Carriage Bolt	1/4"×3/4"	4

Table and Cabinet Assembly

Index No.	Part No.	Description	Size	Qty.
32.....	231-10232.....	Switch Base.....		1
33.....	290-10233.....	Switch box.....		1
34.....	210-10234.....	Hook(For Mitre Gauge).....		1
35.....	290-10235.....	Nylon Nut.....	1/4"	4
36.....	290-10236.....	Power Cord.....		1
37.....	290-10237.....	Cable Gland.....		4
38.....	290-10238.....	Power Cord(Switch to Motor).....		2
39.....	290-10239.....	Hook(For Push Stick).....		1
40.....	290-10240.....	Warning Lable.....		1
41.....	290-10241.....	Cabinet.....		1
42.....	290-10242.....	Foot Stop Switch.....		1
43.....	290-10243.....	Flat Washer.....	M5	2
44.....	290-10244.....	Hex Socket Head Screw.....	1/4"×5/8"	2
45.....	290-10245.....	Power Cord (Main Switch to Stop Switch).....		1
46.....	290-10246.....	Stop Switch (For Normal Stop).....		1
47.....	290-10247.....	Power Cord (Main Switch to Foot Stop Switch).....		1
48.....	231-10249.....	Switch Base.....		1

Motor and Trunnion Assembly



Motor and Trunnion Assembly

Index No.	Part No.	Description	Size	Qty.
101	230-101101	Arbor Nut		1
102	230-101102	Arbor Flange		1
103	290-101103	Riving Knife(TS450)		1
	300-101103	Riving Knife(TS400)		1
104	290-101104	Arbor With Flange		1
105	290-101105	Key	1/4"×50	1
106	290-101106	Ball Bearing	6206zz	2
107	290-101107	Bearing Load Spring	6206	4
108	290-101108	Bearing Load Spacer		1
109	290-101109	Set Screw	1/4"×3/8"	10
110	290-101110	Arbor Pulley		1
111	290-101111	Collar		1
112	290-101102	Key	M8×70	1
113	290-101113	Lock Washer	M12	9
114	290-101114	Arbor Bracket(TS450)		1
	300-101114	Arbor Bracket(TS400)		1
115	290-101115	Spanner Nut		1
116	290-101116	Arbor Nut	M24	1
117	290-101117	Lock Pin	M8×70	1
118	290-101118	Key	M8×70	1
119	290-101119	Flat Washer	7/16"	2
120	290-101120	Hex Cap Screw	7/16"×1	2
121	150-101121	Shaft		1
122	290-101122	Motor Bracket		1
123	290-101123	Pin		1
124	290-101124	Spring Clip		2
125	290-101125	Poly V-Belt	PK650	1
126	290-101126	Motor Mounting		1
127	290-101127	Motor Pulley(TS450)		1
	300-101127	Motor Pulley(TS400)		1
128	290-101128	Flat Washer	5/16"	14
129	290-101129	Lock Washer	5/16"	10
130	290-101130	Hex Bolt	5/16"×3/4"	4

Motor and Trunnion Assembly

Index No.	Part No.	Description	Size	Qty.
131	290-101131	Motor		1
132	290-101132	Hex Socket Cap Screw	M12×60	6
133	290-101133	Rear Trunnion Bracket		1
134	290-101134	Hex Nut	M12	5
135	290-101135	Hex Socket Cap Screw	M12×40	4
136	290-101136	Lock Pin	M8×36	6
137	290-101137	Hex Nut	7/8"	1
138	150-101138	Fiber Washer	3/4"	4
139	290-101139	Rear Trunnion		1
140	150-101140-1	Bushing		1
141	290-101141	Yoke		1
142	290-101142	Set Screw	5/16"×1/4"	2
143	150-101143	Collar		2
144	290-101144	Shaft		1
145	290-101145	Lock Pin	M5×35	2
146	290-101146	Worm Gear		2
147	100-101147	Lock Pin		4
148	290-101148	Key	M5×35	2
149	290-101149	Hex Socket Cap Screw	5/16"×1/2"	4
150	290-101150	Dust Deflector		1
151	290-101151	Hose Clamp	6-1/4"	2
152	290-101152	Front Trunnion		1
153	290-101153	Hex Cap Bolt	5/16"×5/8"	2
154	290-101154	Hex Nut	5/16"	2
155	150-101155	Lock Handle		2
156	290-101156	Fiber Washer	3/4"	2
157	290-101157	Hex Socket Cap Screw	5/16"×1-1/4"	2
158	290-101158	Front Trunnion Bracket		4
159	100-101159	Hand Wheel Handle		1
160	150-101160	Hand Wheel		2
161	130-101161	Shield Plate		1
162	290-101162	Round Head Screw	1/4"×3/8"	1
163	100-101163	Pointer		1

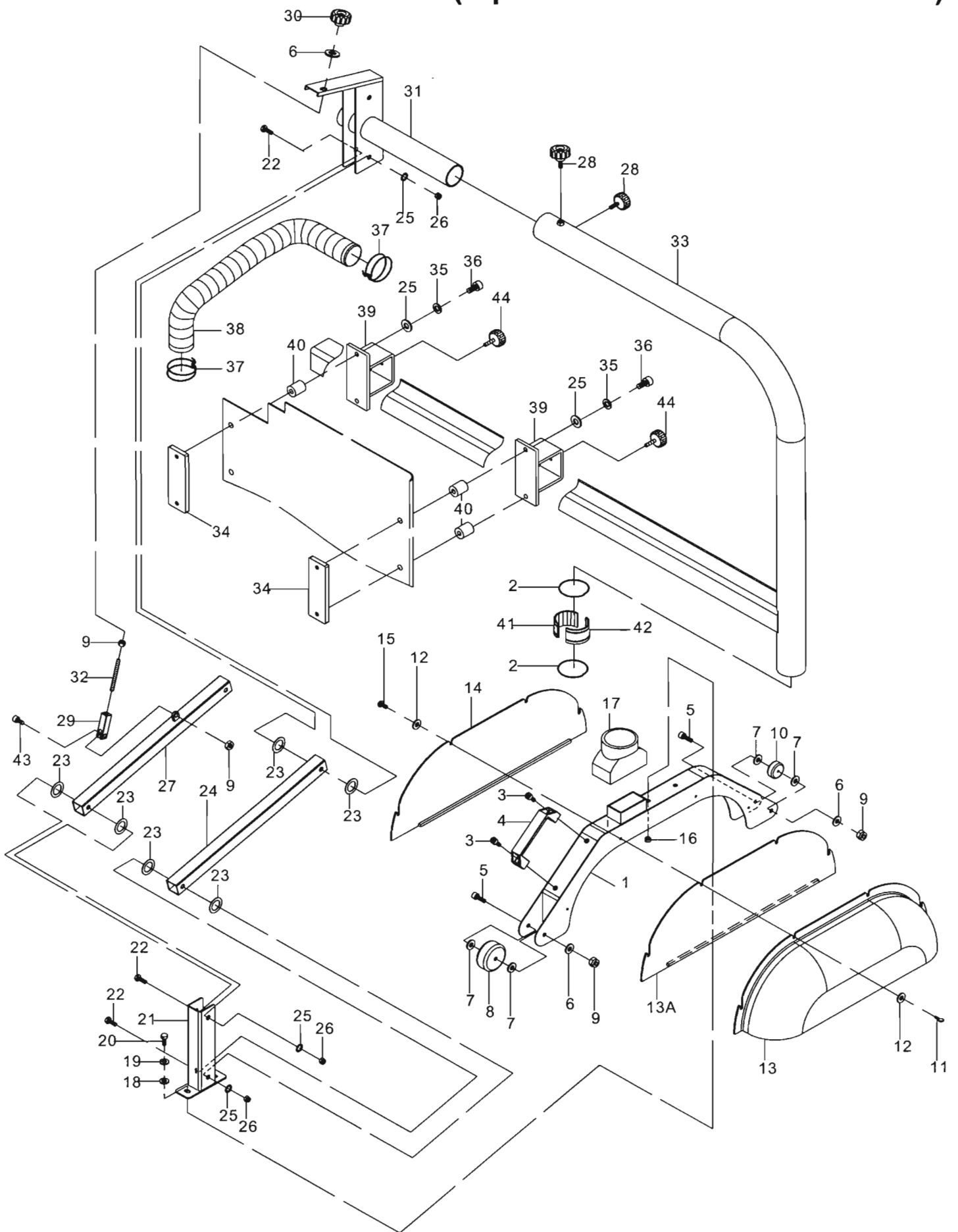
Motor and Trunnion Assembly

Index No.	Part No.	Description	Size	Qty.
164	150-101164	Pointer Bracket		1
165	290-101165	Round Head Screw	M6×75	2
166	290-101166	Hex Socket Cap Screw	M5×20	2
167	290-101167	Set Screw	M4×8	1
168	150-101168	Bushing		1
169	290-101169	Tilt Shaft		1
170	130-101170	Wrench		1
171	290-101171	Air Hose	150mm	1
172	290-101172	Plate		1
173	290-101173	Hex Socket Cap Screw	5/16"×3/4"	3
174	290-101174	Chip Plate		1
175	290-101175	Flat Washer	3/16"	3
176	290-101176	Lock Washer	3/16"	3
177	290-101177	Hex Cap Bolt	3/16"×3/8"	3
178	210-101178	Special Screw		1
179	210-101179	Lock Pin		1
180	210-101180	Spring		1
181	290-101181	Nylon Nut	1/4"	3
182	241-101182	Spacer		2
183	290-101183	Guide Bracket(TS450)		1
	300-101183	Guide Bracket(TS400)		1
184	290-101184	Flat Head Screw	1/4"×1"	2
185	210-101185	Special Screw		1
186	290-101186	Pilot Link Plate(TS450)		1
	300-101186	Pilot Link Plate(TS400)		1
187	290-101187	Nylon Nut	M6	1
188	290-101188	Plate		1
189	290-101189	Riving Knife Carrier Plate(TS450)		1
	300-101189	Riving Knife Carrier Plate(TS400)		1
190	231-101189-1	Lock Pin Bracket		1
191	290-101191	Riving Knife Mounting		1
192	210-101192	Spring		1

Motor and Trunnion Assembly

Index No.	Part No.	Description	Size	Qty.
193.....	290-101193.....	Pressure Plate		1
194.....	290-101194.....	Flat Head Socket Screw	M6×20	2
195.....	290-101195.....	Crank Handle		1
196.....	290-101196.....	Nylon Nut.....	M8.....	1
197.....	290-101197.....	Spring Shim Ring.....		1
198.....	290-101198.....	Snap Ring	S75	1
199.....	290-101199.....	Set Screw	M5×12	4
200.....	290-101200	Flat Head Screw		4
201.....	290-101201	Support Bracket.....		1
202.....	290-101202	Spacing Sleeve.....		1
203.....	290-101203	Flat Washer	M6.....	4
204.....	290-101204	Lock Washer	M6.....	4
205.....	290-101205	Hex Socket Cap Screw	M6×20	2
206.....	290-101206	Key	M5×60	1

Overhead Guard Assembly (Standard-overhead-680mm) (Optional-overhead-1260mm)



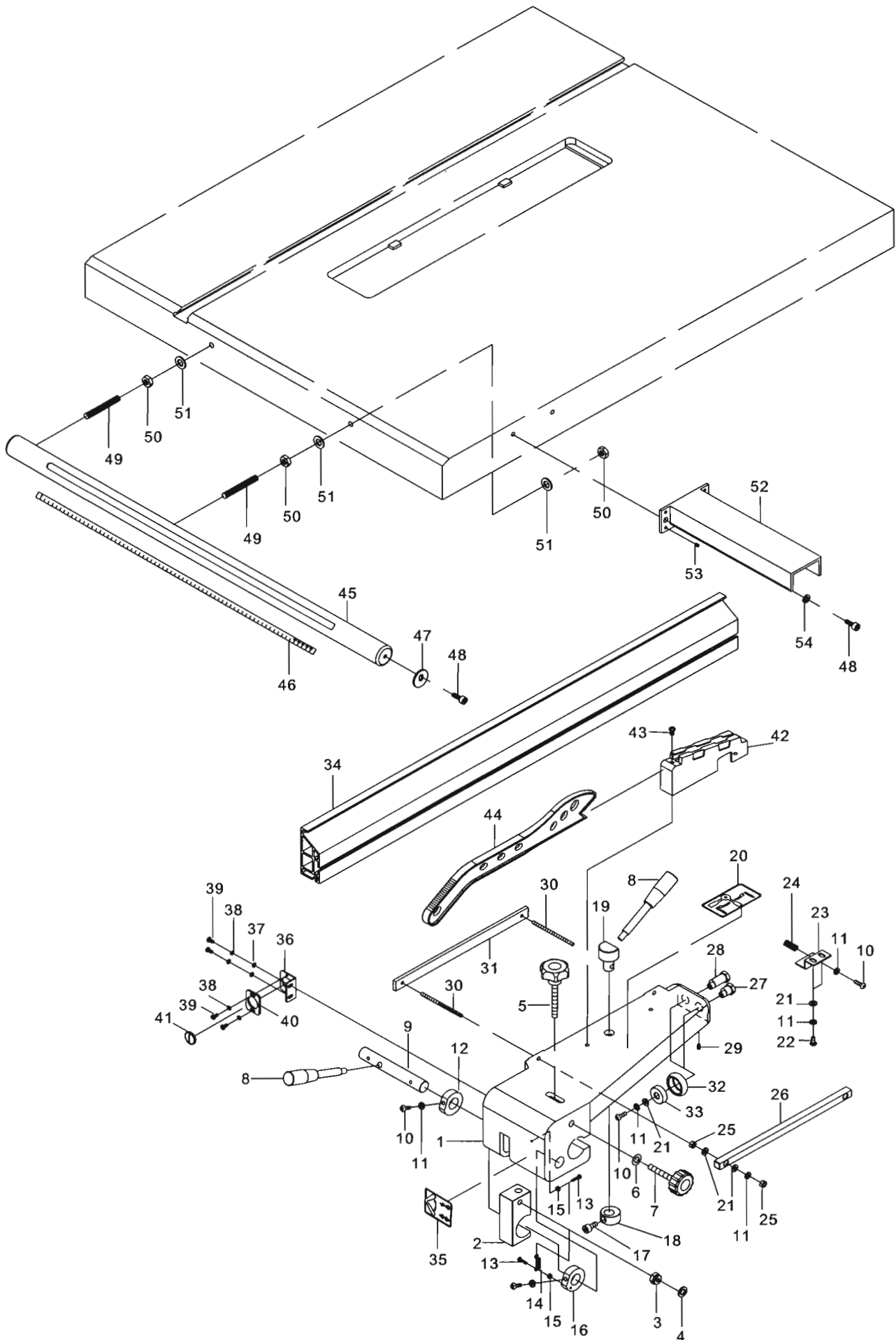
Overhead Guard Assembly

Index No.	Part No.	Description	Size	Qty.
1	290-1061	Blade Guard Frame		1
2	272-30641	Spring Clamp		2
3	290-1063	Hex Socket Cap Screw	M8×16	2
4	290-1064	Handle		1
5	290-1065	Hex Socket Cap Screw	M8×55	2
6	290-1066	Flat Washer	M8	3
7	272-1067	Flat Washer	M8	4
8	272-10638	Front Wheel		1
9	290-1069	Nylon Nut	M8	4
10	272-1068	Rear Wheel		1
11	272-10643	Screw	M5×12	5
12	290-10612	Flat Washer	M5	10
13	290-10613	Blade Guard(For Angle Cutting)		1
	290-10613A	Blade Guard(For Vertical Cutting)		1
14	290-10614	Left Side Guard		1
15	290-10615	Round Head Screw	M5×8	5
16	290-10616	Clinching Nut	1/4"	2
17	272-3062	Adapter		1
18	290-10618	Flat Washer	1/4"	2
19	290-10619	Lock Washer	1/4"	2
20	290-10620	Hex Head Screw	1/4"×5/8"	2
21	290-10621	Swing Arm Base		1
22	290-10622	Hex Head Screw	M10×50	4
23	290-10623	Flat Washer		8
24	290-10624	Bottom Swing Arm		1
25	290-10625	Flat Washer	M10×21×2	8
26	290-10626	Nylon Nut	M10×10×7	4
27	290-10627	Upper Swing Arm		1
28	290-10628	Lock Knob	M8×25	2
29	272-10620-1	Stud		1
30	290-10630	Knob	M8	1
31	290-10631	Swing Arm Bracket		1
32	290-10632	Screw	M8×130	1

Overhead Guard Assembly

Index No.	Part No.	Description	Size	Qty.
33	290-10633	Overhead Arm(680mm)		1
	272-30628	Overhead Arm(1260mm)	optional	1
34	272-30628-5	Lock Plate		2
35	290-10635	Lock Washer	M10	4
36	290-10636	Hex Socket Cap Screw	M10×70	4
37	290-10637	Hose Clamp	3-1/4"	2
38	290-10638	Air Hose	3"	1
39	272-30628-4	Overhead Guard Bracket		2
40	272-10640	Spacer		4
41	272-306A92	Air Hose Sleeve(L)		1
42	272-306A93	Air Hose Sleeve(R)		1
43	290-10643	Hex Socket Cap Screw	M8×25	1
44	290-10644	Lock Knob	M8×20	2

Rip Fence Assembly



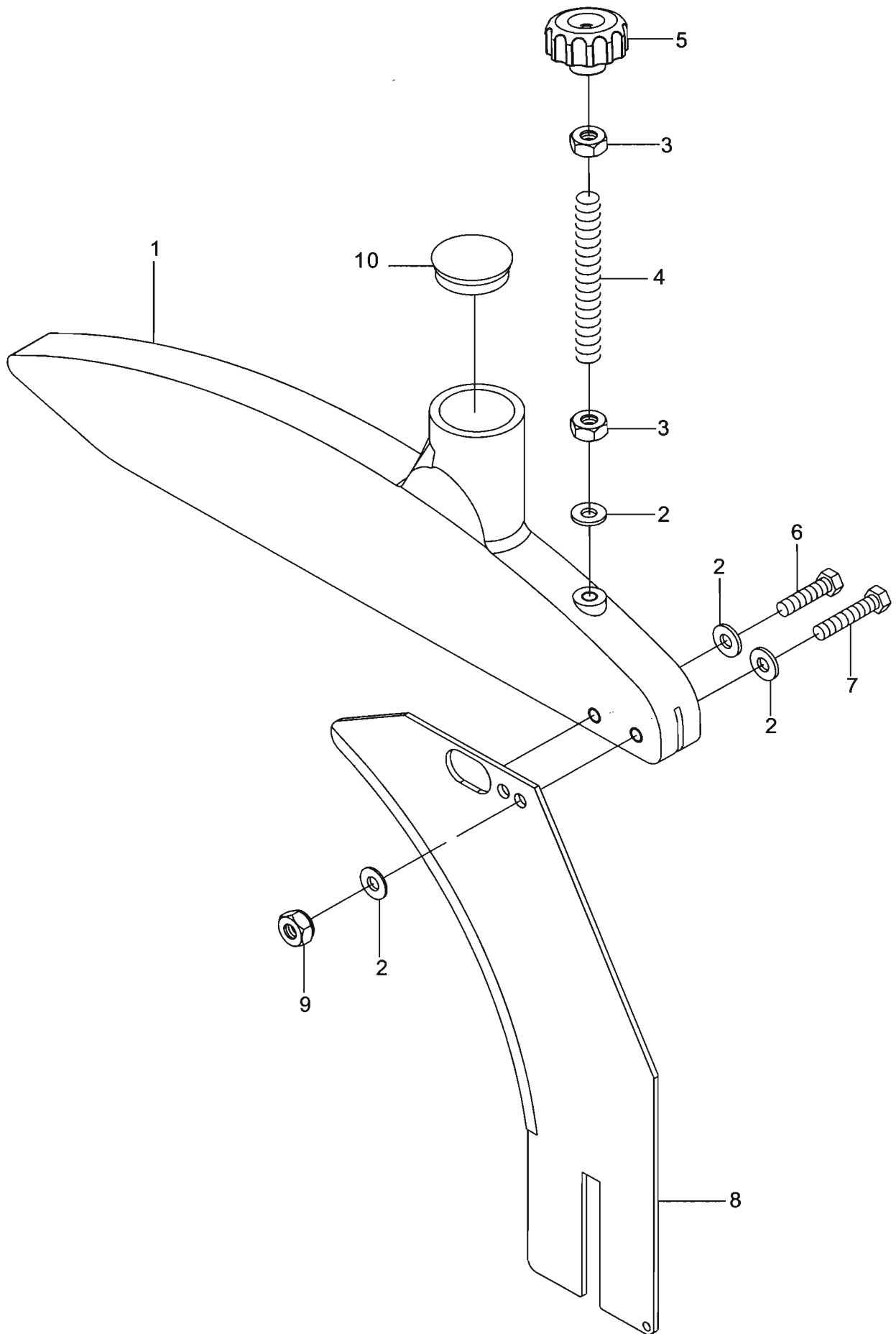
Rip Fence Assembly

Index No.	Part No.	Description	Size	Qty.
1	231-1111	Rip Fence Bracket		1
2	231-1112	Clamping Block		1
3	290-1113	Nylon Nut	M10	1
4	290-1114	Flat Washer	M10	1
5	231-1115	Knob		1
6	290-1116	Fiber Washer	M10	1
7	231-1117	Knob		1
8	231-1118	Handle		2
9	231-1119	Eccentric Arbor		1
10	290-11110	Round Head Screw	M6x16	5
11	290-11111	Lock Washer	M6	9
12	231-11112	Eccentric Wheel (Left)		1
13	290-11113	Round Head Screw	M4x16	2
14	231-11114	Spring		1
15	290-11115	Hex Nut	M4x7	2
16	231-11116	Eccentric Wheel (Right)		1
17	290-11117	Hex Socket Cap Screw	M8x16	1
18	231-11118	Eccentric Wheel		1
19	231-11119	Handle Bar		1
20	231-11120	Sticker		1
21	290-11121	Flat Washer	M6	8
22	290-11122	Round Head Screw	M6x12	2
23	231-11123	Push Board		1
24	231-11124	Spring		1
25	290-11125	Hex Nut	M6	4
26	231-11126	Lock Block		1
27	231-11127	Eccentric Nut (Short)		1
28	231-11128	Eccentric Nut (Long)		1
29	290-11129	Set Screw	M5x8	2
30	231-11130	Screw		2
31	231-11131	Fence Clamp		1
32	231-11132	Plastic Wheel		2
33	290-11133	Ball Bearing	6200zz	2

Rip Fence Assembly

Index No.	Part No.	Description	Size	Qty.
34	290-11134	Stop Profile		1
35	231-11135	Sticker		1
36	900-21	Cursor Base		1
37	290-11137	Flat Washer	M4	2
38	290-11138	Lock Washer	M4	4
39	290-11139	Round Head Screw	M4x10	4
40	900-22	Cursor Housing		1
41	31C64	Cursor		1
42	231-11142	Push Stick Base		1
43	231-11143	Round Head Screw	M6x10	2
44	231-11144	Push Stick		1
45	290-11050	Guide Bar		1
46	290-11146	Length Scale		1
47	290-11147	Flat Washer		1
48	290-11148	Hex Socket Cap Screw	M8x20	3
49	290-11149	Screw		2
50	290-11150	Hex Nut	M12	4
51	290-11151	Flat Washer	M12	4
52	2901-1052	Support Bracket		1
53	290-11153	Set Screw	M6x6	4
54	290-11154	Lock Washer	M8	2

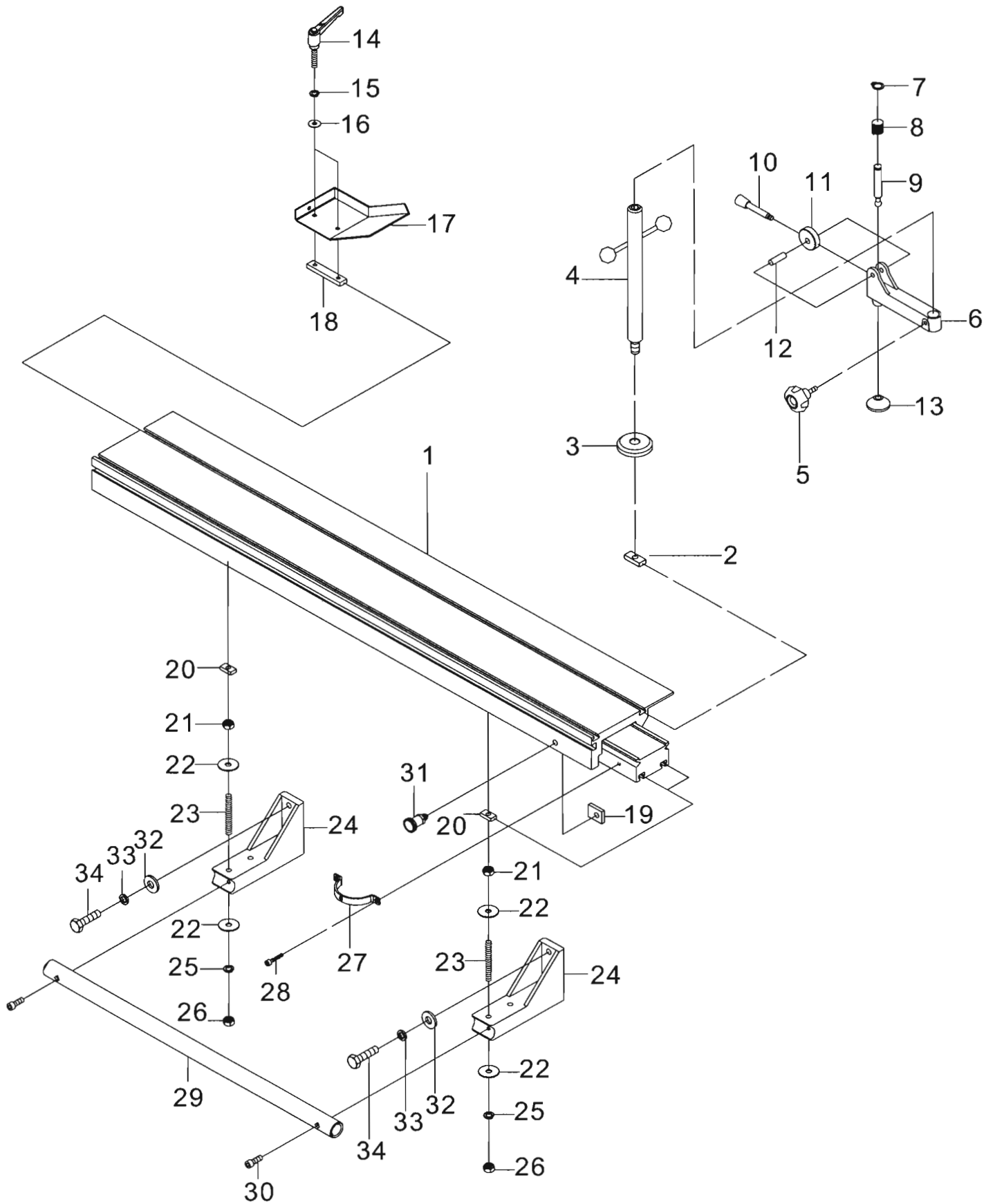
Blade Guard Assembly (Optional)



Blade Guard Assembly (Optional)

Index No.	Part No.	Description	Size	Qty.
1	290-1031	Saw Guard		1
2	290-1032	Flat Washer	M8	4
3	290-1033	Hex Nut	M8	2
4	290-1034	Set Screw	M8×90	1
5	290-1035	Knob	M8	1
6	290-1036	Hex Head Screw	M8×30	1
7	290-1037	Hex Head Screw	M8×40	1
8	290-1038	Riving Knife		1
9	290-1039	Nylon Nut	M8	1
10	290-10310	Plastic Cap		1

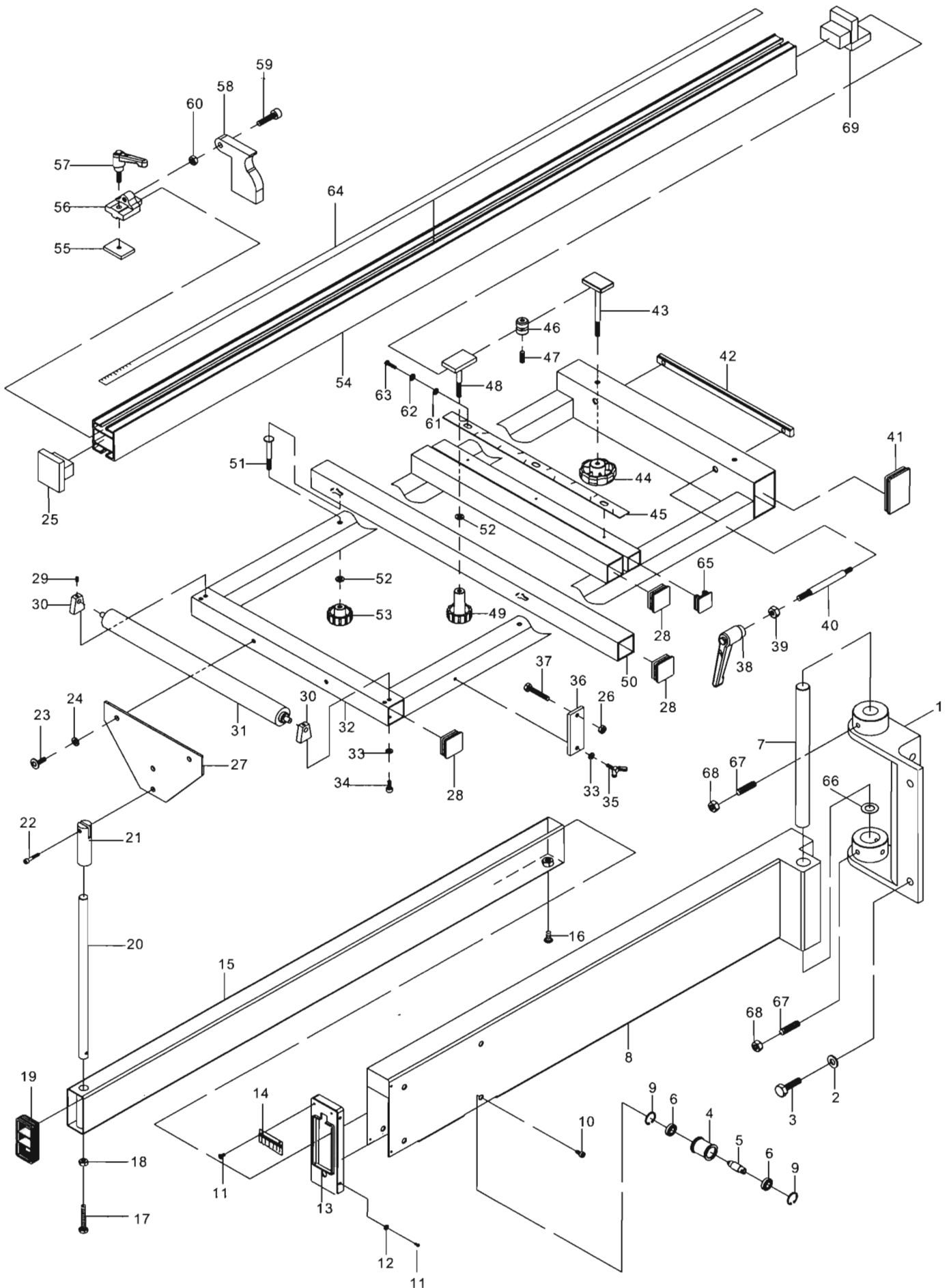
Sliding Table Assembly-Optional



Sliding Table Assembly-Optional

Index No.	Part No.	Description	Size	Qty.
1	290-1051	Sliding Table Assembly		1
2	290-1052	Glamp Plate		1
3	290-1053	Flat Washer		1
4	290-1054	Push Plate Arbor		1
5	290-1055	Lock Knob	M8×20	1
6	290-1056	Clamp Body		1
7	290-1057	C-Ring	S12	1
8	290-1058	Spring		1
9	260-10554	Push Plate Arbor		1
10	290-10510	Lock Knob		1
11	260-10553	Crank Wheel		1
12	290-10512	Ping		1
13	290-10513	Push Plate		1
14	290-10514	Lock Handle		2
15	290-10515	Lock Washer	M8	2
16	290-10516	Flat Washer	M8	2
17	290-10517	End Stop		1
18	290-10518	Guide Rail		1
19	290-10519	Lock Plate		1
20	290-10520	Lock Nut		4
21	290-10521	Nylon Nut	M10	4
22	290-10522	Flat Washer	M10	8
23	290-10523	Set Screw	M10×90	4
24	290-10524	Sliding Table Bracket		2
25	290-10525	Lock Washer	M10	4
26	290-10526	Hex Nut	M10	4
27	290-10527	Plate		1
28	290-10528	Hex Socket Cap Screw	M6×20	2
29	290-10529	Lock Bar		1
30	290-10530	Hex Socket Cap Screw	3/8"×1"	2
31	290-10531	Stop Pin		1
32	290-10532	Flat Washer	7/16"	2
33	290-10533	Lock Washer	7/16"	2
34	290-10534	Hex Head Bolt	7/16"×1-1/2"	2

Cross Cut Slide Assembly-Optional



Cross Cut Slide Assembly-Optional

Index No.	Part No.	Description	Size	Qty.
1	290-1101	Swing Arm Bracket		1
2	290-1102	Flat Washer	7/16"	4
3	290-1102	Hex Screw	7/16"×1-1/2"	4
4	31C057	Guide Roll		4
5	31C058	Axis	7/16"	4
6	290-1106	Ball Bearing	6003zz	8
7	290-1107	Swing Arm Bolt		1
8	290-1108	Swing Arm		1
9	290-1109	Snap Ring	R35	8
10	290-11010	Screw	M10×16	8
11	29011011	Screw	M5×10	5
12	290-11012	Flat Washer	M5	4
13	31C055	Square Plug		1
14	31C051	Brush		1
15	290-11015	Telescopic tube		1
16	290-11016	Screw	M10×20	1
17	290-11017	Hex Bolt	M10×60	1
18	290-11018	Hex Nut	M10	1
19	31C048	Square Plug		1
20	31C047	Support Rod		1
21	31C046	Rod Housing		1
22	290-11022	Screw	M10×30	1
23	290-11023	Hex Screw	5/16"×3/4"	2
24	290-11024	Lock Washer	5/16"	2
25	290-11025	Rear Cap		1
26	290-11026	Hex Nut	5/16"	2
27	CE12SS-M43	Plate		1
28	290-11028	Square Plug	38.1mm	6
29	290-11029	Set Screw	M6×6	2
30	CE12SS-M41	Roll Base		1
31	CE12SS-M42	Roll		2
32	290-11032	Cross Slide Frame		1
33	290-11033	Flat Washer	M6×14	5

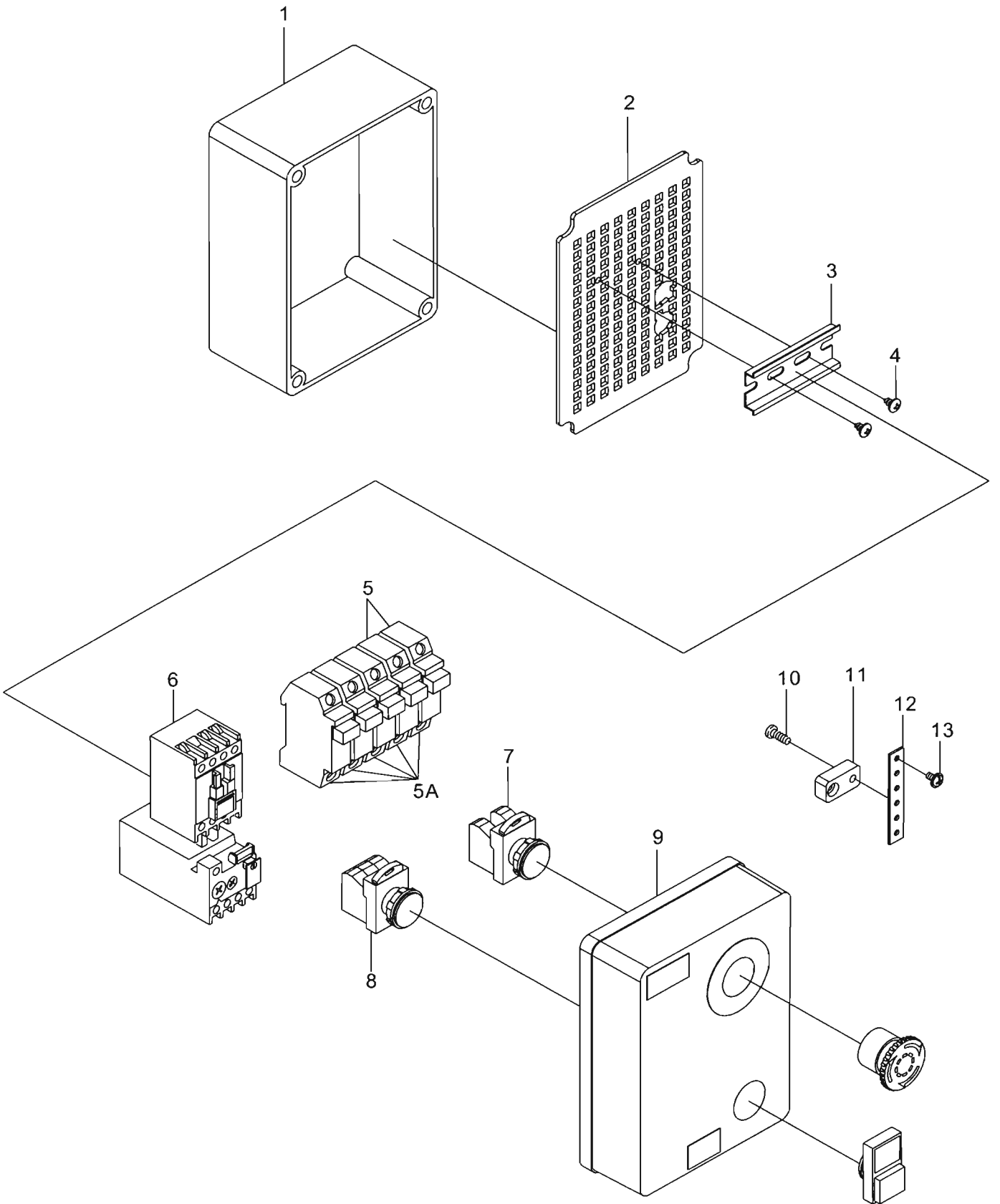
Cross Cut Slide Assembly-Optional

Index No.	Part No.	Description	Size	Qty.
34	290-11034	Socket Cap Screw	M6×14	4
35	290-11035	Wing Bolt	M6	2
36	290-11036	Plate		2
37	290-11037	Hex Bolt	5/16"×1-3/4"	2
38	290-11038	Lock Handle	M10	2
39	290-11039	Hex Nut	M10	2
40	31C076	Clamping Shaft		2
41	UF35-3	Tube Plug		2
42	CE12SS-M23	Guide Bar		1
43	CE12SS-M45	T-Bolt		1
44	290-11044	Knob	M8	1
45	272-11020	Angle Scale		1
46	272-11044	Stop Block		1
47	290-11047	Set Screw	M8×20	1
48	31C018	T-Bolt		1
49	290-11049	Lock Knob	M8	1
50	272-11049	C-Profile		1
51	290-11050	Carriage Bolt	M8×60	2
52	290-11051	Flat Washer	M8	3
53	290-11052	Knob	M8	2
54	UST48-14	Fence		1
55	UST48-12	Fix Block		1
56	UST48-32	Clamping Bracket		1
57	290-11057	Lock Handle	M8	1
58	UST48-31	Clamping		1
59	290-11059	Hex Socket Cap Screw	3/8"×1-1/2"	1
60	290-11060	Hex Nut	3/8"	1
61	290-11061	Flat Washer	M4	3
62	290-11062	Lock Washer	M4	3
63	290-11063	Screw	M4×10	3
64	UST48-13	Length Scale		1
65	290-11065	Square Plug	30mm	2
66	290-11066	Flat Washer		1

Cross Cut Slide Assembly-Optional

Index No.	Part No.	Description	Size	Qty.
67	290-11067	Set Screw	M8×30	5
68	290-11065	Hex Nut	M8	5
69	290-11069	Front Cap		1

Operating Controls Assembly



Operating Controls Assembly

Index No.	Part No.	Description	Size	Qty.
1	290-102-1	Switch Box (Bottom Base)		1
2	290-102-2	Assembly Plate		1
3	290-102-3	GUIDE Rail		1
4	290-102-4	Tap Screw	M5×10	2
5	290-102-5	Fuse Housing (1 Phase)		4
5A	290-102-5A	Fuse Housing (3 Phase)		5
6	290-102-6	Magnetic Switch		1
7	290-102-7	Emergency Stop Switch		1
8	290-102-8	ON/OFF Switch		1
9	290-102-9	Switch Box (Top Cover)		1
10	290-102-10	Round Head Screw	3/16"×5/16"	1
11	290-102-11	Wire Bracket		1
12	290-102-12	Brass Plate		1
13	290-102-13	Flange Head Screw	3/16"×5/16"	5

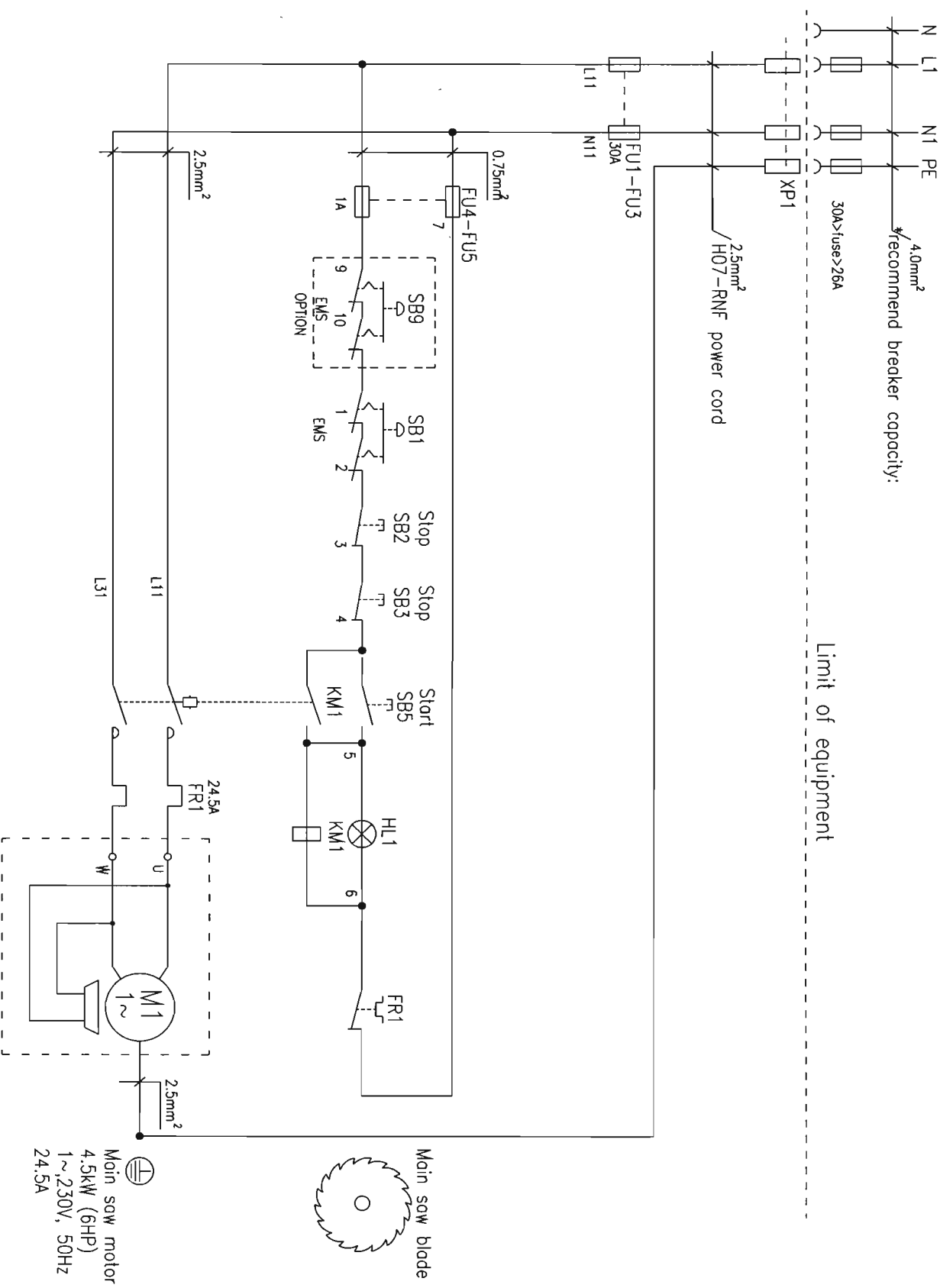
Wiring Diagrams

TSCE-400R/450R 1Phase

Document: AL4001

*Electrical power supply:
 3~+PE, 415V, 50Hz
 4.0mm²
 *recommend breaker capacity:

Limit of equipment



Main saw motor
 4.5kW (6HP)
 1~230V, 50Hz
 24.5A

Main saw blade

Wiring Diagrams

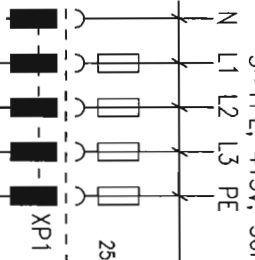
TSCE-400R/450R 3Phase

*electrical power supply:
3~+PE, 415V, 50Hz

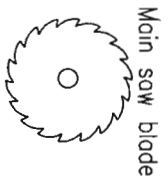
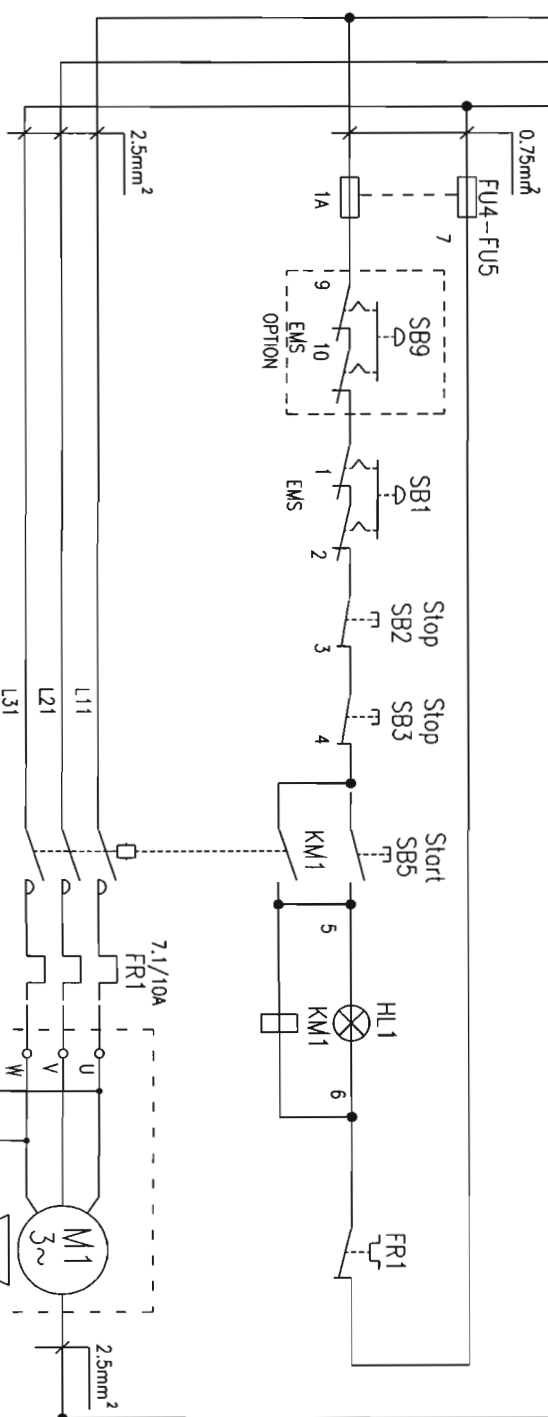
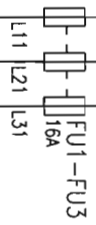
4.0mm²
*recommend breaker capacity:

25A>fuse>20A

Limit of equipment



2.5mm²
/H07-RNF power cord



Main saw blade

Main saw motor
3.75kW/5.6kW (5HP/7.5HP)
3~, 415V, 50Hz
7.1A/10A

Serial number of the machine

Agent or relevant supplier



Advanced Machinery Services



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