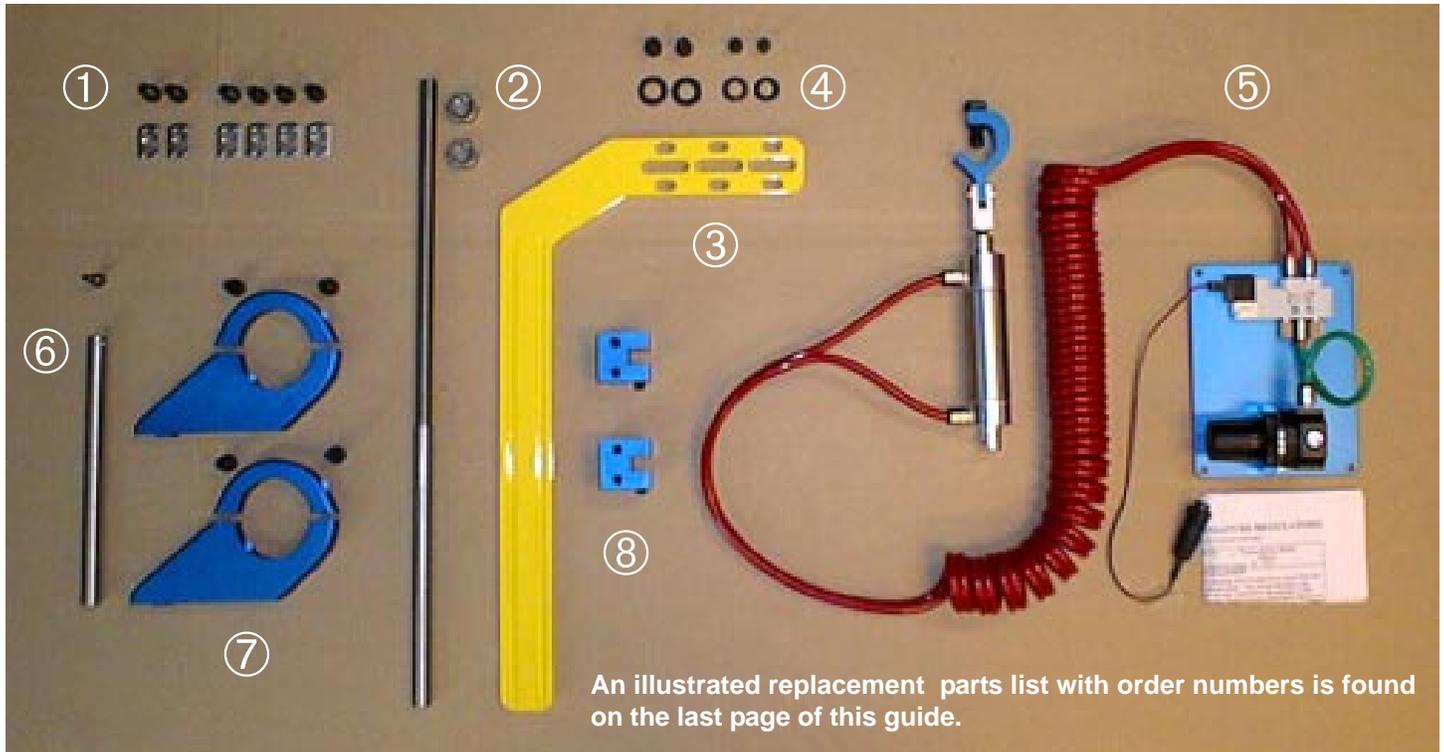


TigerRip Fence™

Universal Adaptor Kit

Guide

Version 2.30



Illustrated Accessory Parts List

- ① (6) F1500 Cap Screws and (6) F0405 Weld Nuts.
Only four of each are needed to fasten down the suspension brackets. The extras are for spares.
- ② (1) M0435 Pusher Shaft and (2) F0420 Nuts.
- ③ (1) SA9130 Fence Bracket.
- ④ (2) F1500 Large Cap Screws, (2) F1300 Small Cap Screws,
(2) F1677 Large Washers, (2) F1670 Small Washers.
These may be used to fasten the fence bracket to the existing rip fence.
- ⑤ (1) SA0999 Pneumatic End Plate with coiled Air Line, Cylinder, and Handle Shackle.
- ⑥ (1) M0424 Cylinder Adjustment Shaft and (1) F1099 Shoulder Bolt.
- ⑦ (2) Universal Suspension Brackets and (4) F1500 Cap Screws.
- ⑧ (2) SA9140 Bracket Blocks with (8) F0820 Set Screws inserted.

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Convert your rip fence into a TigerRip Fence™ in 8 easy steps!

The new TigerRip Fence™ kit includes our new patent pending bracket system. This system ensures that your TigerRip Fence™ is installed perfectly parallel to your existing fence guide bar.

0

Check your existing rip fence for misalignment.

Before beginning the installation, inspect your existing saw for any misalignment between table and rip fence that might impede the movement or impair accuracy of the TigerRip Fence™. A tell-tale sign of an out of alignment rip fence is abrasion marks on the saw table where the ripfence is hitting. If your saw table shows signs of abrasion, it is necessary to line up and level the table and existing rip fence to eliminate this problem before going on to install your TigerRip Fence™.



1

Unpack your TigerRip Fence™ and its accessory parts.

The TigerRip Fence™ is shipped clad in styrofoam and stretchwrapped. The accessories are shipped in a separate box. You will find all the parts pictured in the accessory box. If any part is missing, contact us immediately, and we will ship you the missing part at no charge.

Parts & Quantities

See the enlarged photo of the contents of the accessory box on the front page.



2

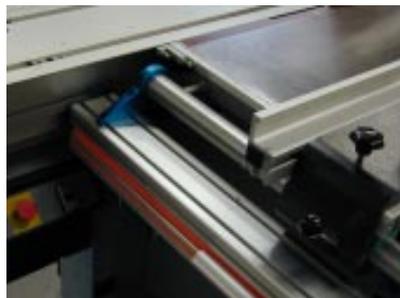
Mount the Suspension Brackets on the TigerRip Fence™ extrusion.

Insert two weld nuts into the u-channels on the top side of the extrusion. Slide one pair to the idle (far) end of the extrusion. Slide the other pair to about 7" from the motor end.

The brackets have raised ridges designed to locate them relative to the u-channels.

Position the first bracket over the pair of weld nuts at the idle end (nearest the saw blade). Position the second bracket over the other pair of weld nuts at the motor end of the extrusion. Insert the socket head bolts and thread them into the weld nuts until they just catch.

Position the suspension brackets so they will be flush with each end of the rip fence bar when installed, as shown in the pictures below. Carefully measure the distance and try to be accurate, because it is difficult to reposition the brackets on the extrusion after the unit is installed. When the brackets are in position, fully tighten the bolts.



3



Robland specific:

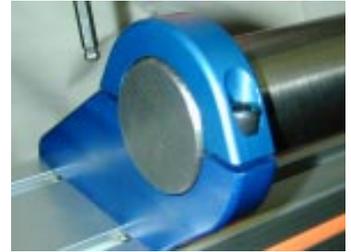
On the left end of the 50mm guide bar there is a set collar. Loosen this collar and slide it to the right. Later, after mounting the TigerRip Fence™, you will use this to provide a physical stop to prevent accidental contact between the saw blade and the rip fence.



Mount the TigerRip Fence™ on the Guide Bar.

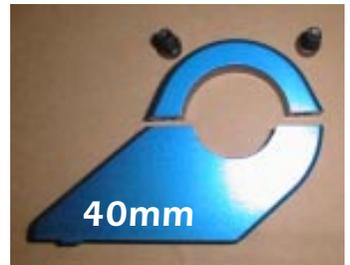
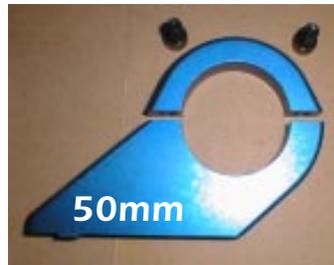
With an assistant, raise the TigerRip Fence™ and hold it against the guide bar. Place the locking half of each bracket over the support half, insert the bolts and firmly tighten them. The TigerRip Fence™ can still be pivoted around the guide bar but will hold its position when moved.

(The final positioning of the TigerRip Fence™ may not be at right angles to the floor.)



40mm Guide Bar specific:

Some saws have a 40mm guide bar instead of the more usual 50mm. The universal suspension bracket has two types of support base for 50mm and 40mm guide bars. The locking half of the bracket is the same for both types. Installation procedure on a 40mm guide bar is exactly the same as for the 50mm shown in this guide. There will be a visible gap between the bar and the locking half when used on a 40mm guide bar.



4

Install the Pneumatic End Plate.

Remove the motor box end plate and substitute the replacement end plate with the pneumatic components. The red air line should be pointing left towards the saw blade. Make the air connection. The regulator requires a 1/8" npt fitting.

It is very important that the air supply is filtered dry air.



If water gets into the air lines, the equipment cannot function correctly and will prematurely fail.

5

Attach the Fence Bracket.

Remove the fine adjustment bracket from the existing rip fence, and set it aside. There are various types depending on the make of saw.

Using the bolts and washers from the fine adjustment bracket or the bolts and washers provided in the accessory hardware pack, attach the L-shaped Fence Bracket through the appropriate slot(s). Firmly tighten down the bolts. (One bolt is sufficient as shown in the picture.)



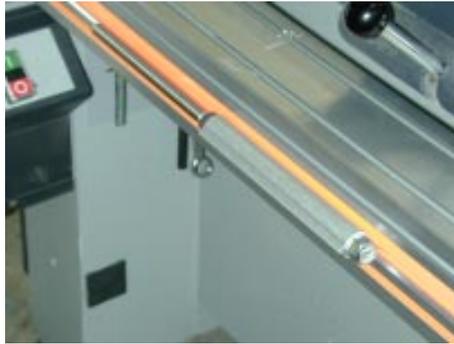
6

Install the Pusher Shaft and connect the Fence Bracket.

Thread one of the nuts on to the 1/2" pusher shaft until it cannot be threaded any farther.

Insert the unthreaded end of the shaft into the carriage hinge from the right until the nut stops it. Thread the other nut on to the shaft until it stops. Firmly tighten the nuts to hold it in position.

Slide one blue bracket block over the long end of the pusher shaft until it contacts the nut, and tighten it down using the set screws. Push the carriage left until the bracket block can intersect the fence bracket. With the fence bracket inserted into the slot in the bracket block, tighten down the set screws to secure it. At this point it may be necessary to pivot the TigerRip Fence™ in order to achieve the right angle to create a viable link.



7

Install the Pneumatic Cylinder assembly.

Install the second bracket block, which serves as the cylinder bracket, by tightening it down to the outside edge of the fence bracket. Slide the cylinder adjustment shaft into the hole in the bracket block, and tighten down the set screws. Mount the pneumatic cylinder to this shaft, with the air lines leading to the right.

Rotate the pneumatic cylinder to upright position and link the shackle to the existing rip fence locking handle. Be sure that the locking handle and the shackle intersect at the correct angle to provide effective and secure linkage. As shown in the picture, the TigerRip Fence™ may have to be pivoted to achieve this.

The rip fence locking handle must be able to reach its locking position when pulled down by the pneumatic handle shackle as shown in the picture. If the long end of the pusher shaft interferes with this, disassemble the brackets from the shaft, mark the shaft where it must be cut off, and hacksaw the excess length. Then reassemble the brackets to the shaft and the pneumatic cylinder, and make sure the handle can now lock down.

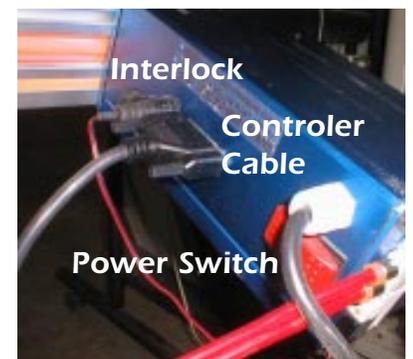


8

Initialize the TigerRip Fence™ and make final adjustments.

Make sure that the red Power switch is OFF. Make sure the air supply is connected to the regulator. Plug in the controller cable to the motor box and to the controller (plug with RED dot to the controller). Plug the interlock into the round port next to the controller cable port. Plug the TigerRip Fence™ into a surge-protected 110 outlet.

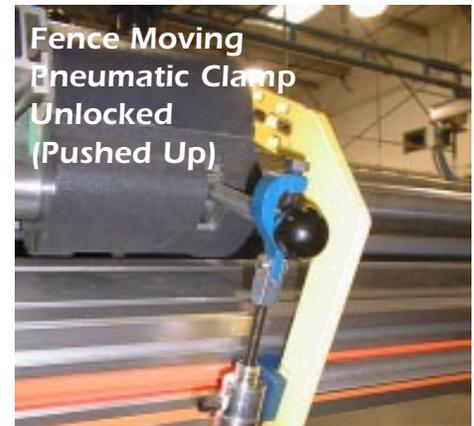
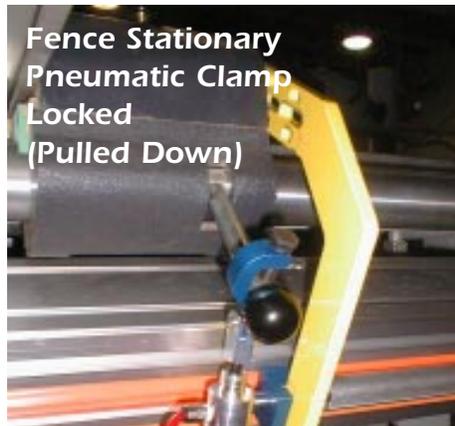
**DO NOT POWER UP UNTIL ALL CABLES
ARE PLUGGED IN!**



8 CONTINUED

Initialize the TigerRip Fence™ and make final adjustments.

When initializing your TigerRip Fence™ for the first time, disconnect the handle shackle and lift the locking handle to unlocked position. When the fence is stationary (not moving), the pneumatic clamp should pull the shackle down (locked position); when moving, the clamp should be expanded to unlock position. If the opposite happens, unplug the air lines at the clamp and reverse them. If the fence does not move smoothly, apply graphite or wax to the table and the guide bar.

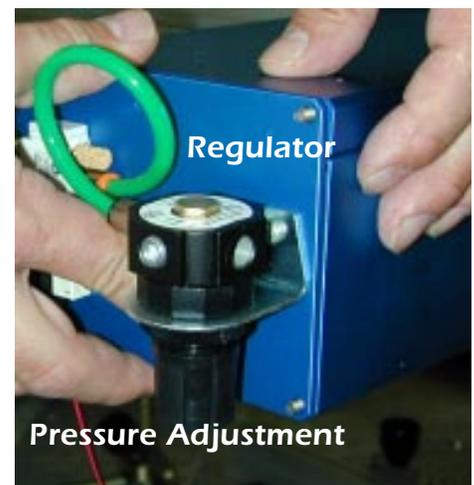


When you are satisfied that TigerRip Fence™ is moving your existing fence, reconnect the handle shackle, and try it again. When stopped at a target value, manually try to lift up on the locking handle. It should be very difficult to do. If it lifts easily, you must increase air pressure at the regulator.

Adjust the Air Pressure at the Regulator.

Pull down on the dial at the bottom of the regulator to unlock it, and revolve until you hear the air pressure increase. Repeat this process until the locking handle is being pulled down securely enough to prevent drift. The regulator comes with an instruction sheet of its own, shown in the picture on page 1.

When everything is operating correctly, make sure that all fasteners are properly tightened down, and then you are ready to use your new TigerRip Fence™!



The Precision Automation TigerRip Fence™ Universal Adaptor Kit is designed to easily automate an existing rip fence with a minimum of modification. However, for certain models of saws there may be some on-site modification necessary such as, but not limited to, drilling and tapping of holes in the existing equipment or the TigerRip Fence™ components.

Never drill and tap holes in the TigerRip Fence™ extrusion (the fence beam) itself, as this may damage the drive system.

TigerRip Fence™ must be installed in accordance with all local, state, and federal regulations, as well as common sense safety requirements. Use only trained professionals when installing TigerRip Fence™ with existing equipment to ensure a safe and proper work station that will in no way endanger the operator or any other personnel. Do not operate TigerRip Fence™ without proper training, both in TigerRip Fence™ operation, and in the operation of the saw itself.

TigerStop™



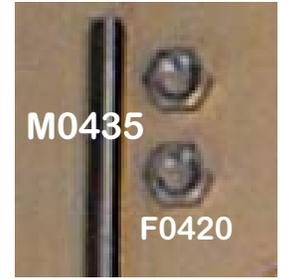
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Replacement Parts

Photo illustrations are excerpted from picture on page 1.

Fasteners

- F0110 3/8-16x1, hex head bolt
- F0405 5/16-18 weld nut, width .620
- F0420 1/2 UNC, Gr5, nut
- F0820 1/4-UNCx3/8" set screw
- F1099 1/4x3/8,10-24 shoulder bolt
- F1300 1/4-28x1/2 socket cap screw
- F1500 5/16-18x5/8 socket cap screw
- F1670 5/16, black oxide washer
- F1677 3/8, black oxide washer



Mechanicals

- M0424 Cylinder Adjustment Shaft
- M0435 Pusher Shaft



SubAssemblies

- SA4350 Handle Shackle with Bolt
- SA9110 Suspension Bracket Cap
- SA9120 Suspension Bracket Base 50mm
- SA9121 Suspension Bracket Base 40mm
- SA9130 Fence Bracket
- SA9140 Bracket Block with Set Screws

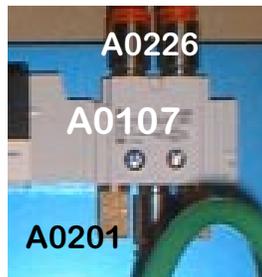


Electronics

- AMP2C Amplifier Board
- CON2C-L1 Controller Keypad
- CC2-20 20ft controller cable
- IOC TigerRip Fence™ I/O cable
- SW2 On/Off switch

Pneumatics

- A0107 24VDC, 4-way, 5mm, solenoid valve
- A0155 1/8NPT to 1/4OD tube fitting
- A0201 5mm exhaust muffler
- A0226 5mm thread to 1/4 tube fitting
- A0269 Regulator
- A1000 1-1/16IDx1.5 Strk air cylinder
- A1600 1/4OD PVC (green) air line
- A1610 1/4OD Coiled (red) air line



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