

# Eagle Router Conversion Service Kit Instructions 110VAC w/Neutral

#### **Purpose:**

This is intended to replace the obsolete 220VAC routers with the 110VAC alternative.

#### Preconditions:

The kit requires a neutral wire be run to the Eagle control cabinet from the building's electrical supply. This neutral must be supplied from the same transformer that the 3 phase power is supplied to the Eagle's control cabinet.

Confirm that there is 110 to 120 volts between each leg of the 3 phase power and the neutral leg. (Note some 3 phase power has a "stinger leg" and will only supply 110VAC between phase #1 & neutral and phase #3 & neutral.)

## Before carrying out any maintenance work, be sure that the main power supply has been disconnected and that there are no live circuits in the machine main panel.

#### Contents:

Qty.	Part#	Description
2	11-960	AB Terminal Anchor, AB 1492-EAJ35
5	11-2163	Circuit Breaker, AB1489-M1C150
1	11-2218	AB Power Distribution Block
5	11-2235	120v Female Socket
1	8800-421	Schematic, Eagle 110V Router Upgrade
5	8806-704	Modified Router Motor
84 ft.	CABLE,14-3 SJO BLACK	Cable, 14/3 SJO, Black
10 ft.	WIRE 14-1B	Wire, 14 ga., 1 Strand, Black

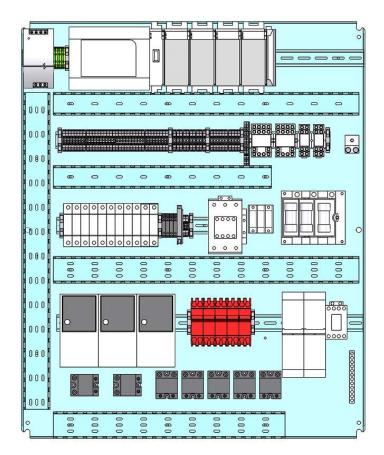
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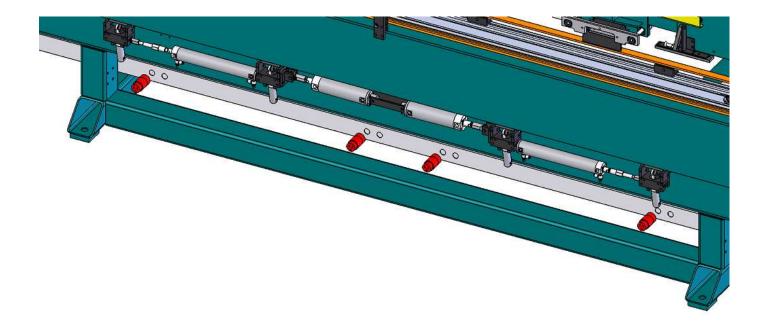
#### Old Component Removal:

(Red items in diagram will be replaced with new items)

- Remove electrical connections at the five 2 pole circuit breakers
  - Remove wires connecting circuit breakers to the power distribution block.
- Remove cables and 220v plug sockets from wire way. (4 for the hinge butt routers and 1 for the latch face plate router.)

*TIP:* Use these cables to determine the require lengths for the new replacement cables.

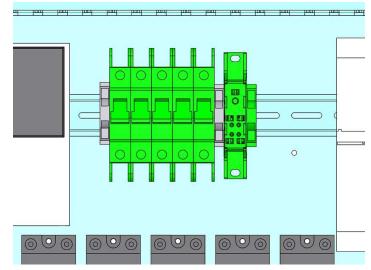




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#### Install new components:

- Install the 5 new 11-2163 single pole circuit breakers where the old circuit breakers were. Keep the left terminal anchor in its original position. Move the other terminal anchor to hold the circuit breakers together on the DIN rail.
- Install the 11-2218 power distribution block for the neutral connection to the right of the circuit breakers. Use one of the supplied terminal anchors to hold its position on the DIN rail.
- Using the 14 ga. black wire (WIRE 14-1B), connect the circuit breakers to the power distribution block (5TB) and to the power relays (1SSR thru 5 SSR) per the 8800-421 schematic.
- Install the three conductor, 14 ga. cable (CABLE,14-3 SJO BLACK) into the wire way. *TIP:* Use the old cables to determine the necessary lengths of each cable run.



- Connect cables to power relays, neutral power distribution block, & ground block and plug sockets (11-2235) per the 8800-421 schematic.
- Install new router motors, 8806-704, into butt router assemblies and the drill section assembly.
- Restore power to the machine main panel and check that there are the correct voltages (110VAC to 120VAC) between the circuit breakers and the neutral distribution block.
- Plug the new router motors into their appropriate plug sockets.
- Test run the machine to determine that the routers are turning on correctly and that the router bits are set to the correct depths.

Machine should be operational at this point